

**LESSON STUDY APPROACH IN RELIGIOUS EDUCATION: A CASE OF SELECTED
SECONDARY SCHOOLS IN KABWE DISTRICT OF ZAMBIA**

by

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DEDICATION

This work is dedicated to my late mother, Jane Kagoba Mweemba; my late husband, Titus Mwesa Lupapulo; my children: Hastings, Jim, Paul and Milambo, and my entire family for their unwavering support.

DECLARATION

I, Eunice Mweemba hereby declare that the work herein is my own, and that all the works of other persons used have been duly acknowledged, and that the work has not been presented to another institution for similar purposes.

Signature.....

Date.....

APPROVAL

This dissertation of Eunice Mweemba has been approved as partial fulfillment of the requirements for the award of the degree of Master of Education in Religious Studies by the University of Zambia.

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ACRONYMS AND ABBREVIATIONS

AIEMS – Action for Improving English Mathematics and Science

ASEI – Activity Students Experiments and Improvisation

CBI – Cluster Based INSET

CEMESTA- Center for Mathematics, Science and Technology in Africa

CIDA – Canadian International Development Agency

COMESEC – Commonwealth Secretariat

CPD – Continuous Professional Development

DANIDA – Danish International Development Agency

DTST – District Teacher Support Teams

GES – Ghana Education Service

GOJ – Government of Japan

HOD- Head of department

HoS- Head of section

HT – Head Teachers

HTC – Higher Teachers’ Course

INSET – In-service Education Training

JICA – Japan International Cooperation Agency

MoGE – Ministry of General Education

NISTCOL – National In-service Training College

ODA – Overseas Development Agency

PDSI – Plan Do See Improve

PRP – Primary Reading Programme

PSSPE – Professional Support Structure for Primary Education

SBCPD – School Based Continuous Professional Development

SBI – School Based INSET

SHAPE – Self Help Action Plan for Education

SIDA – Swedish International Development

SMASSE – Strengthening of Mathematics and Science in Secondary Education

SMASTE – Strengthening of Mathematics, Science and Technology Education

SPRINT – School Programme of In-service for the Term

SPSS – Statistical Package for Social Science

STM – Science, Technology and Mathematics

TTC – Teacher Training College

ZPC – Zambia Primary Course

ABSTRACT

The strengthening of Mathematics, Science and Technology Education (SMASTE) in secondary schools in Zambia was in response to the poor performance in Mathematics and Science and was meant to improve teaching and learning activities in the classroom. The programme was implemented in central province in 2006 as SMASTE/CPD. By 2011, the focus of the programme was extended to all subject areas including Religious Education and was made available to all serving teachers in the country. The ASEI, through PDSI approach in SMASTE, was meant to improve dissemination of knowledge to the learner. The purpose of this study was to establish the effectiveness of the Lesson Study Approach in Religious Education. The descriptive research design was employed and the target population was Religious Education Heads of section, teachers and learners in Kabwe district. The sample constituted of fifty nine participants from three selected secondary schools in Kabwe district comprising three heads of section, twenty teachers and thirty six learners. Data was collected from Heads of section through interviews which were conducted with the aid of an interview guide. Using a focus group guide, data was collected from teachers and learners using focus group discussion. Class observations were also conducted using observation checklist. The data was analysed using content analysis for descriptive results.

The findings of the study showed that the Lesson Study Approach, which is learner centered in nature has been loosely implemented by Religious Education teachers who applied it occasionally in their daily lessons. However teachers with a more positive attitude towards the Lesson Study Approach tended to apply it regularly in their daily lessons yielding good results. The researcher recommends that the MoGE should involve teachers in the revision of curriculum to ensure careful selection of content and concepts to be taught for life-long learning advocated for in the Lesson Study Approach. MoGE, through Curriculum Development Center and schools should consider using continuous assessment rather than summative tests and examinations in Religious Education. Additionally, the MoGE should address the many obstacles encountered by teachers in the implementation process. Challenges like inadequate teaching and learning materials, inadequate classroom space, over-enrollment and heavy workloads. Future research with a wider sample should be considered in other social science subjects.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

In this chapter the researcher explains the background to the study, statement of the problem, purpose of the study, objectives and research questions; it also explains the significance of the study and conceptual framework.

1.1 Background

The Lesson Study Approach whose purpose is to improve teaching and learning activities in the classroom is widely used in Japan. It was rolled out into Eastern Africa, - Kenya and Uganda as a project to assist in the teaching of Science and Mathematics. It later spread to Southern Africa, including Zambia. Here in Zambia the programme was implemented in Central Province from 2006 as 'Strengthening of Mathematics, Science and Technology Education/Continuing Professional Development Programme' (SMASTE/CPD). According to the Ministry of Education (2010) as the programme's effectiveness on the improvement of the teaching skills and sustainability as a framework of school based CPD were recognised, the focus of the programme was extended to all subjects, including Religious Education. By 2011, the programme had been implemented in all the provinces in the country. This marked phase three of the implementation process of the project.

The Lesson Study Approach provides teachers with opportunities to improve skills in effective lesson delivery. It is a continuous reflection process, which allows a teacher to improve a particular lesson, subsequent lessons and lesson delivery skills in general. Matachi (2012) asserts that the Lesson Study Approach consists of four stages, namely: 'Plan,' 'Do,' 'See' and 'Improve' (PDSI). Through the reflective discussions in the 'See' (or lesson study) stage, teachers do not only improve the particular lesson, but also learn general instructional skills and knowledge which can be applied to other lessons in all subjects. The Lesson Study Approach also encourages learner centered teaching and learning through 'Activity,' 'Student,' 'Experiments' and 'Improvisation' (ASEI) principle. However, although the Approach seems to have been successful in improving teaching and learning in Mathematics and Science, no studies

have been undertaken to find out how successful it has been so far in Social Science subjects like Religious Education. This gap was the main concern of this study.

1.2 Statement of the problem

The Lesson Study Approach is a form of professional development for teachers now widely used in Zambia. The programme has proved to be effective in Mathematics and Science where it was initially launched as SMASTE, hence its extension to all subject areas including Religious Education and indeed to all provinces of Zambia. However, no studies have been carried out to find out the effectiveness of the Lesson Study Approach in Religious Education teaching and learning. It is this knowledge gap that prompted this study.

1.3 Purpose of the study

The purpose of the study was to find out the effectiveness of the Lesson Study Approach in the teaching and learning of Religious Education in secondary schools in Kabwe District.

1.4 Objectives

The specific objectives of the study were to:

- i) find out the teachers' perceptions of the Lesson Study Approach
- ii) establish the applicability of the Lesson Study Approach to Religious Education
- iii) assess the effectiveness of the Lesson Study Approach in Religious Education teaching and learning

1.5 Research questions

- i) What are the teachers' perceptions of the Lesson Study Approach?
- ii) How applicable is the Lesson Study Approach to Religious Education?
- iii) How effective has the Lesson Study Approach been in Religious Education teaching and learning?

1.6 Significance of the study

The study is significant in that its findings might help the teachers who are using the approach to implement it more effectively. The study will also provide a feed-back to the policy makers (i.e. MoGE) on any challenges encountered in using the approach in Religious Education so that they may put in place possible interventions. In addition, the study and its report is likely to contribute to the existing knowledge and literature on the Lesson Study Approach in Zambia. Furthermore, the findings may lead to more research on related issues.

1.7 Delimitation

This study was confined to Kabwe, one of the districts in central province which pioneered the SMASTE programme in Zambia. The three selected secondary schools were among the pioneer schools in the district.

1.8 Limitations of the study

The study was restricted to three selected secondary schools in Kabwe town, a factor that might limit the generalization of the research findings. Non availability of literature of the Lesson Study Approach in Religious Education was another limitation. So far little or no research has been undertaken on the topic as the approach has only been in use since 2011. Teachers were also skeptical about being interviewed and to be observed teaching. These factors may subtract something from the generalisability and validity of the study. However, the researcher did everything possible to ensure that the findings of the study would remain valid.

1.9 Conceptual framework

According to Chalmers (1982), a conceptual framework contributes to a research study because it identifies research variables and clarifies relationships among the variables. It is also valuable in that it sets the stage for presentation of the research questions that drive the study. In Zambia the major yardstick for measuring educational output is good performance in examinations. This is achieved as a result of various inputs. The Lesson Study Approach whose purpose was to improve teaching and learning activities in a classroom is one such input. The Lesson Study Approach was part of the Strengthening of Mathematics, Science and Technology Education / Continuing Professional Development (SMASTE/CPD) programme. As its effectiveness on the

improvement of the teaching skills of teachers (and sustainability as a framework of school based CPD) was recognised, the focus of the programme was extended to all subjects including Religious Education.

In the Lesson Study Approach teachers are encouraged to conduct an intensive study of instructional materials before lessons. This is done in order to deepen the understanding of the subject content and to improve instructional skills bearing in mind the learners' developmental stages, instructional methods, types of learning activities and the goals of each subject. In order for learners to construct knowledge and for conceptual change to occur in a lesson, it is necessary for teachers to provide the learners with the necessary opportunities to express their views and opinions, especially their pre-instructional conceptions. It is important to pose a problem that motivates learners to think, to predict solutions, and to formulate hypotheses. In order to develop such a motivating problem, it is very important for teachers to make well thought preparations of lessons by studying instructional materials from a child's viewpoint. The study of instructional materials is considered as key to a successful lesson.

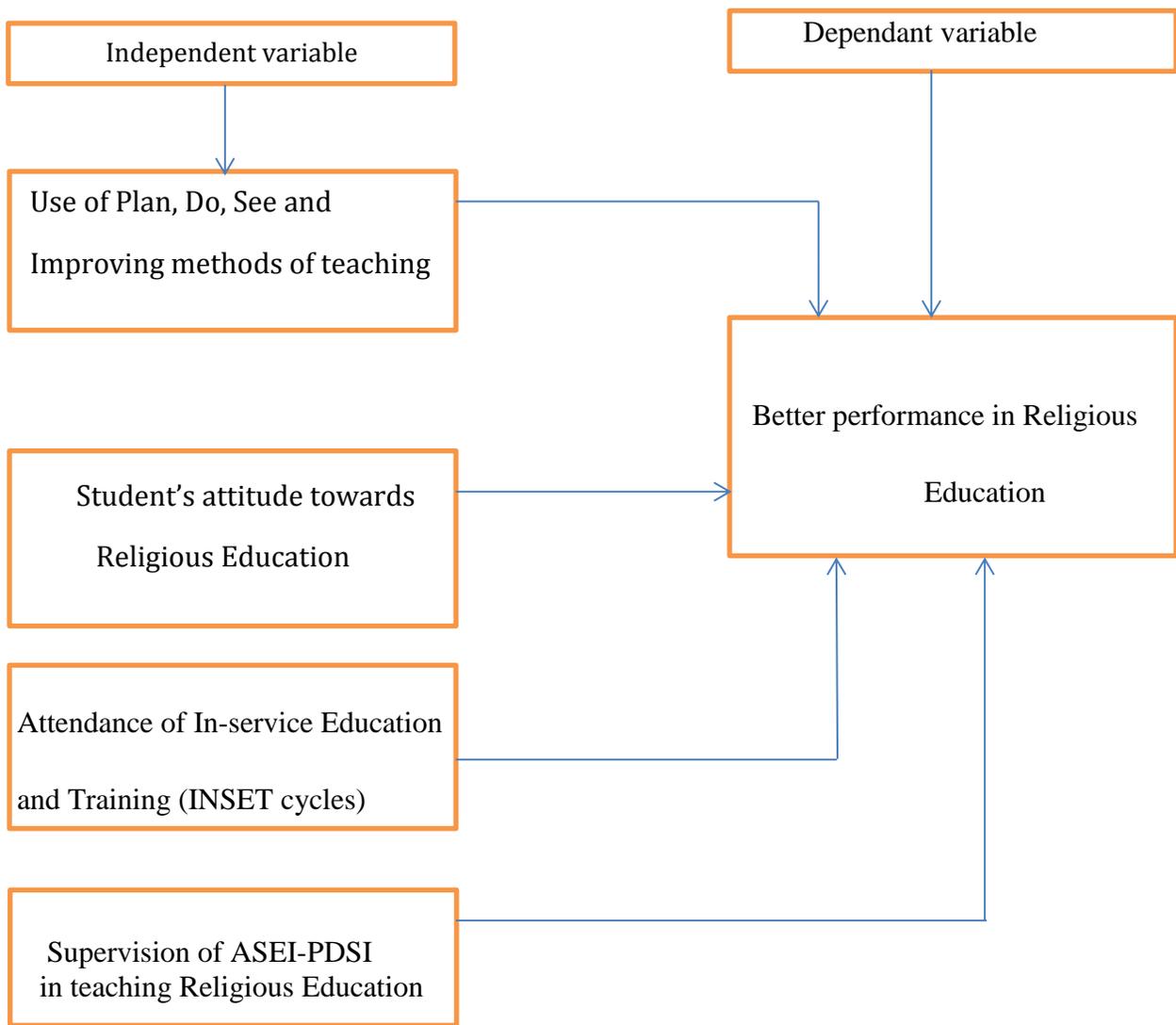
The Lesson Study Approach basically consists of four steps: 'Plan', 'Do', 'See' and 'Improve' (PDSI) which call for participation and practical activities of learners in the lessons. Similarly 'Activity', 'Students' 'Experiments' and 'Improvisation' (ASEI) advocates for learner centeredness. The outcome should be that activities need not only be hands-on but also minds-on in order to bridge practical activities with conceptual understanding. Teachers should only guide learners to arrive at conclusions but the process should be owned by learners themselves. Simuchimba (2012) observed that such an approach will promote the exercise of the learners' personal autonomy and independence, and enable them to develop various abilities and skills such as interpersonal relationships, decision making, critical thinking, self-expression and literacy.

Currently the view in most schools is that Religious Education and other Social Science subjects are taught using the lecture method which is teacher centered. This is despite teachers having the knowledge of other teaching methodologies. The lessons are mostly content based and theoretically approached. Demonstrations and experiments are teacher oriented with minimal learner participation

In using the Lesson Study Approach, lessons need to be learner-centered and experience-based. Teachers need to deliver activity-based type of lessons. They also need to practice learner focused teaching with an experiment/research approach. Where there is scarcity of material improvisation can be employed, or alternatively experiments can be done on a small scale. If the Lesson Study Approach is effectively implemented, it will result in high quality of learning as well as making Religious Education responsive to current challenges in pupils' lives and being relevant to modern society.

The conceptual framework described above may be diagrammatically presented as in figure 1.1

Figure 1.1 Conceptual framework for the study



1.10 Operational Definitions

The following key words and phrases were used in the study. In order to make the rest of the dissertation clear, their working definitions are given below.

Activity based or Hands-on lesson – A phrase used to describe a lesson that involves learners in having practical activities during the lesson.

Content based lesson – Is a lesson that involves less of learners, the teacher gives the information.

Conventional materials – These may include teaching and learning materials usually industrially produced that are used during lessons.

Improvised materials – These are learning and teaching materials not industrially produced but are familiar to the learners and developed from local materials collected from the learner's immediate environment for use in their lessons.

Instructional materials – These are lesson instructions that a teacher needs to thoroughly read through before delivering a lesson in order to deepen his/her understanding of the subject content and improve his/her teaching skills.

Jugyokenky Nyumon – Japanese phrase meaning introduction to Lesson Study.

Kenkyu kyogiki – This is post lesson discussion held to assess the strengths or weaknesses of the lesson, application of the teaching techniques and the response of the learners.

Kyozai Kenkyu – This is one basic component of the Lesson Study Approach which facilitates for the success of a learner centered lesson. This is a Japanese term describing the study of instructional materials by teachers before lessons.

Koshi- These are outside specialists who play an important role of advisor to the study group and as commentator who summarises the post lesson discussion.

Lesson Study Approach – An approach that considers the teacher as a dynamic person and one that should be developing the entire time of his/her career. This is a problem solving process for

the learner. It also improves the teachers' teaching skills and enhances their professional development.

Minds-On – Encourages learners to do the actual practical work during the lesson. This is an activity strategy for solving problem.

1.11 CONCLUSION

In conclusion, this chapter provided and explained the introductory part of the dissertation. It discussed the background to the study, the research objectives, research questions, conceptual framework and definition of terms. The next chapter will deal with literature review.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

As indicated at the end of the last chapter, in this chapter the researcher will review literature on the topic of lesson study. Since there was no literature on the Lesson Study Approach in Religious Education, related literature on the Lesson Study Approach in Science and Mathematics and existing methods and approaches in Religious Education were reviewed. This was done in order to provide adequate theoretical background to the study. The chapter, therefore, discusses the literature under the following headings: the Lesson Study Approach in Science and Mathematics outside Zambia, the Lesson Study Approach in Science and Mathematics in Zambia and existing teaching methods/approaches in Religious Education.

2.1 The Lesson Study approach in Science and Mathematics outside Zambia

Itakura (1967) asserted that Science was introduced comparatively earlier in Japan, just at the very beginning of modernizing its education system. After the Meiji restoration in 1868 a school ordinance was promulgated and in 1872 the modern education system was introduced to Japan. It was urgent then for Japan to quickly assimilate scientific knowledge from the west for her modernization. At that time the Japanese government put premium emphasis on science education which resulted in the allocation of almost 50% of the eight year primary education curriculum hours to Mathematics, Science and technology related subjects.

Itakura further notes that in 1886 there was change in the nature of the science curriculum as all Natural Science subjects at primary school level were integrated into 'School Science' or *Rika* in Japanese. Emphasis was placed on the relationship between Science and the natural phenomena that children could find in their daily life. School Science in Japan also put strong emphasis on hands-on activities such as observations and experiments.

In 1941 School Science which mainly dealt with the observation of nature was introduced for the lower grades 1-3. Tsukuba Association for International Education Studies (1998) reports that since then and until 1991, school science had been taught from the first grade. In this way, the Japanese government paid special attention to Science education at the primary level even before the 1960s while many other countries reformed and strengthened their science education at this

level during and after the 1960s. This explains why Japan is technologically well advanced. According to Allen and Tanner (2004) in Japan, Lesson Study is principally used at the elementary school level. However, its replication outside Japan has extended to include the secondary level or high school level. While Odani and Marsight (2007) observe that in Japan Lesson Study is used for all subject areas, it has rather gained popularity as a professional development strategy in Mathematics and Science outside Japan.

Takahashi (2004) stated that Lesson Study did not follow a uniform system in Japan. It is more like a cultural activity. As a result Lesson Study takes many different forms, including school based Lesson Study, district wide Lesson Study and cross school or district Lesson Study. Therefore, there are neither clear definitions nor specified criteria of Lesson Study in Japan. Its process differs across schools, districts and types of Lesson Study. Lesson Study groups can be formed by all the members in a school or by study group members in a district, or by teachers who are interested in a specific subject matter.

This information by Itakura, Allen, Tanner, Odani, Marsight and Takahashi is important to this study because it provides an important background to the current study on the Lesson Study Approach which started in Science and Mathematics.

Matachi (2012) explained that basically, a lesson study is conducted by a teacher (often in collaboration with peer teachers who will prepare a lesson by conducting *Kyozai-kenkyu* or a study of instructional materials. According to Watanabe (2002) outside specialists or *koshi* (or so called “knowledgeable others”), may also play an important role in the Lesson Study for example bringing in new perspectives to the Lesson Study group. They are typically invited as advisor for the lesson planning team and as an outside commentator who summarises the post lesson discussion. Some schools engage them to continuously support their Lesson Study over a number of years. One key aspect of the lessons in the Lesson Study Approach is the rationale. The four basic components of a rationale are: Content – which is an outline of what is to be taught and learned in a lesson; Concept/value – an outline of why a lesson should be learned; the direct relevance of the lesson to our everyday life/experiences or the misconceptions the lesson is intending to correct; Methods are approaches or strategies that will be used to deliver the lesson and how the lesson objectives will be attained through those approaches; Location of the period-

out of the total number of planned periods for teaching a particular unit where ‘is this lesson located?’

After planning together as teachers, the lesson is conducted in the actual classroom, which is observed by peer teachers. After the lesson, the teacher who conducted the lesson and the peer teachers who observed the lesson get together to discuss the lesson delivery also referred to as *Kenkyu-kyogiki*, considering the following: whether the way the teacher encouraged the learners to express their opinions was effective; whether all learners understood the key questions posed by the teacher; how the learners reacted to the key questions; how the ideas of each learner changed; and how effective the measures taken by the teacher were. Additional areas of interest may also be discussed.

This explanation of the Lesson Study by Matachi is important to this study because it partly explains what is to be done in Religious Education when using the same approach.

Matachi (2012) further reported that learning from mistakes and respecting learners’ opinions and ideas are considered as one of the most important things in the Japanese classroom. Learners’ ideas and opinions that seem to be incorrect are carefully discussed and challenged by other students so as to arrive at a correct solution through a consensus building process. Opinions and ideas of learners are well respected and consequently they are motivated to think more deeply through a problem solving approach. Teachers in Japan well recognize that it is important for students to understand how they have made a mistake and how to correct it on their own as one of the most important core skills in learning. Matachi also explains that curriculum contents and concepts to be taught are carefully selected so that teachers can concentrate on a few essential concepts. This denotes flexibility in curriculum design which allows careful choice of topics, work scheming and lesson planning.

The foregoing explanation on how to conduct the lesson study is essential to this study as it provides more background information on how the approach should be used in a Religious Education classroom situation.

Mutisya (2010) observed that The Lesson Study Approach has borrowed other important practices in the classroom like the Climbing Learning Approach. The later was developed by Saito of Naruto University, Mathematics Department, Japan. This method utilizes a concept map,

table of reason for arrow lines and the research card during the lesson instructions just like in the Lesson Study Approach where ASEI-PDSI are used.

Learners are supposed to fill in the space of the concept map the explanation of the learning elements, the formula, the examples and self-made problems and answers. In the process the teacher makes the learner understand the content and meaning of each learning element tightly. Hence having the student extend the existing knowledge and reconstruct it. The other teaching tool in this method is the table of reason arrow lines, where the learners write the reason for arrows in the concept map. This activity is to enhance the student's understanding of interrelation of learning elements. The third tool is the research card where the students write any questionable issues such as how, why and what issues.

The explanation above by Mutisya is important to the study as it guides the teacher on how to use the climbing Approach in a classroom situation.

The Climbing Approach is relevant to the impact on SMASTE project on learning. The use of the concept map is similar to the ASEI-PDSI methods of teaching. The concept map uses the technique of planning and ensures active learning. This encourages innovation on the side of the learner as well as the teacher. The table of reason tests cognitive abilities of the learner. The arrow lines presents the lesson in interesting ways which arouses the learners' interest e.g. role play.

The climbing approach is therefore similar to the PDSI techniques of teaching as applied in ASEI-PDSI. The approach is important for this study as it enables the teacher to see the good practices in a lesson and strengthen them, see mistakes made by learners and avoid further mistakes. This is very true in science and mathematics hence the researchers' desire to establish if the ASEI/PDSI or Climbing Learning Approach principles articulated above would bear the same results when applied in Religious Education

According to Weston in Hargreaves (2000) the Lesson Study is a process of teacher enquiry, originally from Japan, which is being used across England to improve teaching and learning, Dudley (2011) asserts that the Lesson Study was introduced to the United Kingdom (UK) by him when he conducted his first Lesson Study in 2001. He later ran the national Lesson Study pilot project from 2003 to 2005. This was a cross phase and funded by the ESRC teaching and

learning research programme and the National College for school Leadership. There is growing interest particularly from Teaching Schools and other collaborative school groups in using the Lesson Study for sharing and developing improvements in learning across and between schools.

Hargreaves (2000) reported that the Lesson Study had been used successfully in the UK to improve teaching techniques and pupil progress in core subjects in primary and secondary and to develop broader pedagogic approaches such as assessment for learning. The Lesson Study technique in the UK sees three voluntary teachers working collaboratively to tackle specific barriers to learning. He uses the term Joint Professional Development (JPD) rather than CPD. Dudley (2011) added on that the triad plan a lesson together and address each activity to a specific learning goal as well as predicting student reactions. Before the observation three *case pupils* are picked from the class for closer observation. The lesson is taught by one teacher while the others observe, paying particular attention to the *case pupils*. Thereafter the learners are interviewed. Then the triad will reflect on how each elicited the sought after change i.e. were the predictions correct? Why? The process is repeated based on the reflections. The study of instructional materials is same as in the case of Japan. What makes it different from many other models is that throughout the process, the triad focuses on the three carefully chosen *case pupils* than the whole class. This allows them to explore in much greater detail the effect of their teaching on students learning.

According to Dudley (2011) the act of planning a lesson together means that there is much more trust between participants when it comes to delivering the lesson. Meanwhile, the flow of analysis needs to start with the observations made on *case pupils*; the focus on them means that the observation is of the pupils' work rather than the teacher's practice. This preserves the focus on pupil learning and reduces the tendency for lesson observation discussions becoming feedback on teaching which is not conducive for teacher learning. Lesson Study groups often interview the *case pupils* after the research lesson to gain their perspectives on what worked for them, what they felt they learned and how they think the lesson can be changed if it were taught again to another class in order to make it work even better.

The Lesson Study technique applied in the UK model is essential to this study as it points out diversities included in the Lesson Study model in order to contextualize it to the country's needs;

at the same time maintaining the core of the Lesson Study which is study of instructional material and learner centeredness.

According to Stigler and Hiebert (1999) many United States of America (USA) educators have recently become interested in the Lesson Study as a promising source of ideas for improving education. This was after the third international Mathematics and Science study brought to public attention in 1999. Within the last several years Lesson Study has become highly visible in many state, national and international conferences, open houses, high profile policy reports and special journal issues in America. As of September 2, 2003 at least 29 states, 140 cluster groups, 245 schools, 80 districts and 1100 teachers across the USA were involved in the Lesson Study. Lewis (2000) reported that the whole state of Florida is trying out Lesson Study after receiving a federal grant in 2010 to encourage its teachers to adopt Lesson Study. Lesson Study interest in the USA has emerged across grade levels i.e. from preschool to university and across subject areas including Science, Mathematics, Language Arts, Art Education, Social Studies, Special Education and many more.

Takahashi (1999) reported that among the pioneers of the Lesson Study in America was Catherine Lewis, the American researcher in Japan who got interested in Lesson Study back in the 1990s. She has been helping teachers in the USA to learn Lesson Study for fifteen years. Akihiko Takahashi is a professor of Mathematics Education at DePaul University, he came to the USA in the early 1990s. He helps in running an organisation called Lesson Study Alliance which helps American teachers mostly in Chicago, learn Lesson Study. He started the alliance with a former American teacher, Tom McDougal, who was frustrated with the lack of good professional development in the USA. Since 2010 the dual has worked with more than 20 schools in Chicago area.

According to Lewis (2000) inquiry based teaching is an approach supported by research that begins by posing questions to the learners rather than presenting them with facts or knowledge. She further gives an illustration on differences between a traditional professional development and Lesson Study.

Table 2.1 Differences between Traditional Professional Development and the Lesson Study Approach

TRADITIONAL PROFESSIONAL DEVELOPMENT APPROACH	LESSON STUDY APPROACH
Begins with answer	Begins with question
Driven by outside ‘expert’	Driven by participants
Communication flow – trainer to teachers	Communication flow – among teachers
Hierarchical relations between trainer and learners	Reciprocal relations among learners
Research informs practice	Practice in research

(Adapted from Lewis, 2002:12)

Liptak (2000), a principal who is pioneering Lesson Study in the USA argued that because Lesson Study is a teacher led approach to professional development, teachers can be actively involved in the process of instructional change in contrast with traditional professional development methods.

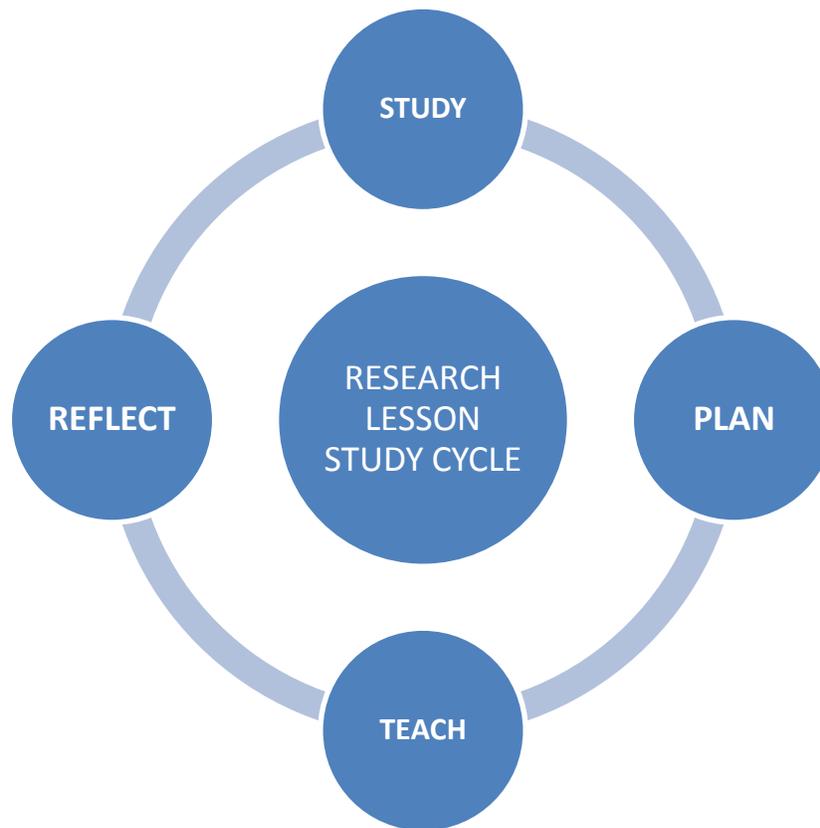
Lewis (1998), Yoshida (1999) and Takahashi (1999), the pioneers of the programme in the USA’s implementation of the Lesson Study, report some challenges they encountered during the implementation process. First, the USA had a history of educational faddism in which many promising innovations had been discarded before being thoroughly understood or implemented. Secondly, the non-existence of professional development programmes similar to Lesson Study. Thirdly, it was difficult to establish a school based Lesson Study group because many teachers did not have experience working with other teachers in the same school as a group to accomplish a shared goal. To overcome these challenges Takahashi and Yoshida (2004) reported that a cross school volunteer model was adopted by some Lesson Study groups noting that an effective model of Lesson Study is often one that is started as a grass root movement of enthusiastic teachers rather than as a top-down formation. Therefore, starting a Lesson Study group as a cross school volunteer group was found to be more appropriate in the USA setting. Lewis (2002) explains that the programme of activities for a volunteer Lesson Study group usually consists of

two components; a series of study groups concerned with improving the teaching and learning of Mathematics. The group usually meets regularly after school throughout the year. Then they have several public research opportunities each year to examine the work of the study group by inviting a wide variety of individuals to participate in its sessions.

America adopted Research Lesson Study whose cycle takes the following format as explained by Lewis and Perry (in press). A group of volunteer teachers comes together and identifies a teaching problem they want to solve. They go on to research on why students are struggling in that area. They have an outside adviser or *koshi* who is usually an expert or researcher who does not work at the school but who is invited to advise the group and help them with things like identifying articles and studies to read. Long term goals for student learning and development are also considered. After that the group designs a lesson plan together out of the selected research topic; which is like a hypothesis. Anticipated learner thinking is also considered at this point together with the means of data collection during the lesson. One teacher teaches the lesson, while other teachers observe including those who are not members of the group and educators from other schools. This is called a Public Research Lesson. The lesson is discussed soon after teaching by the group and any other observers who wish to do so. They will reflect on what pupils learnt, the implications for the unit and what new questions need to be carried forward to the next lesson. This data is shared among members of the study group and other interested parties.

During a public research lesson, the observers do not focus on the teacher, but on the learners. How are they reacting to the lesson? What are they understanding or misunderstanding? Why? The purpose is to improve the lesson and not to critique the teacher.

Figure 2.1 Research Lesson Study Cycle



The explanation on Research Lesson Study by Lewis and Perry is important to this study as it gives direction on how to conduct this type of lesson study in Religious Education.

According to Matsumoto (2009) Lesson Study has been conducted in Japanese schools traditionally as an in service training method. It's featured with observation of live classroom lessons by colleague teachers and discussion on data collected from observation. Recently this collaborative training was introduced to developing countries to change pedagogical paradigms, to create collegiality among teachers and to improve materials. Teachers are expected to improve their performance through these challenges and the final expectation is improved learner performance. Ghana is one of the recipient countries that has been implementing Lesson Study in some districts.

According to the Ghana Education Service (GES) (2005), INSET is a variety of activities and practices in which teachers become involved in order to enrich their knowledge, improve their skills in teaching and also enable them become more efficient on the job. From time to time, the

GES developed partners, NGOs and subject associations to organise workshops/seminars to update the knowledge and skills of teachers in basic schools. It was along this line of thought that the Lesson Study was adopted. Acquah and Adzifome in GES (2013) report that the (GES) adopted the Lesson Study through the GES/JICA science technology and mathematics (STM) INSET project in 2000 as part of their intervention to improve teacher professional competences and consequently to improve teaching and learning of mathematics and science at basic school level.

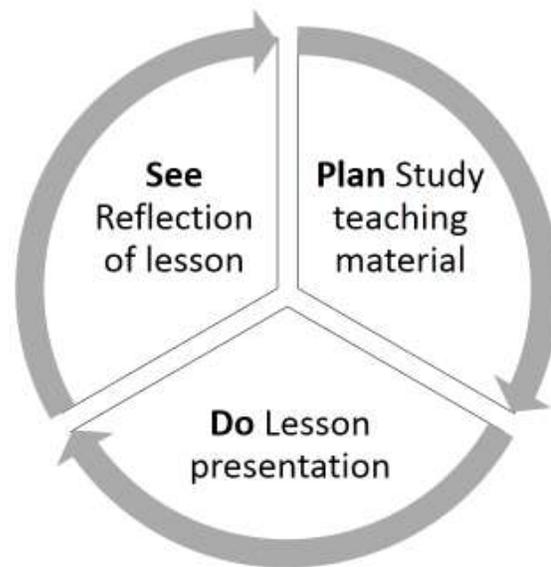
School Based INSET (SBI) is a type of INSET organised at school level in order to solve some special needs or deficiencies identified by teachers themselves or by lead teachers. Cluster Based INSET CBI is a type of INSET organised when a number of schools come together to form a cluster to share ideas or good practices. The Lesson Study was therefore, introduced into the already existing INSET though in a modified manner to suit the Ghanaian education system. Lesson Study is a device for lesson improvement based on the principles of Plan-Do-See which Ghana adopted.

According to GES Lesson Study guidelines (2005), the following constituted the Lesson Study cycle; *Plan* entails study of teaching content by a group of teachers either in a SBI or a CBI. It involves a succession of activities related to the teaching content such as selection of a teaching topic, detailed analysis of the content, evidence of deep understanding of the essence of the content. Then planning of a suitable lesson on the content to suit the real situation of the pupils concerned, and development of the lesson plan. *Do* or lesson presentation – a lesson is conducted based on the lesson plan prepared during the study of teaching content. During the lesson, colleague teachers and sometimes supervisors (such as HT, CS, DTST, and District INSET unit) may sit in and observe carefully every stage of the lesson so as to be able to give constructive feedback after the lesson.

See or reflection involves the exchange of opinions concerning the lesson. The meeting normally starts with an explanation of the lesson objectives given by the teacher who was presenting the lesson. Then all the participant-observers express their opinions or ask questions in turns, clarifying the lesson objectives, or commenting (on the basis of their own experience), about areas such as the experimental lesson, the role of the teacher, other teaching methods apart from the ones used in the presentation and so on, so that a lively discussion on a wide range of issues

ensues. A revised lesson plan is then prepared bearing in mind all the points raised in the discussion, it is presented in another class and reflected on. Then the results are shared among interested parties. Richardson (2004) noted that through this format it is possible to see the Plan-Do-See cycle coming into being. Consequent refinement of the lesson is achieved through repetition of the cycle.

Figure 2.2 Diagrammatic representation of the Plan-Do-See Lesson Study Cycle



According to Lewis (2002) Lesson Study promotes collegiality amongst teachers. The GES (2005) also qualifies collegiality as another key concept which facilitates INSET as a way to improve upon the quality of teachers and lessons. Collegiality connotes respect for one another's commitment to the common purpose and ability to work towards it. Through collegiality, the teachers can share their teaching experiences, ideas and knowledge and can influence one another to employ good teaching practices. Finally they can improve upon their teaching competencies through interacting with one another.

The explanation on the Lesson Study according to the GES is important to this study because it shows the steps Ghana has undertaken to implement the Lesson Study in Mathematics and Science, and what differentiates it from the usual lessons is that a Lesson Study focuses on what teachers want students to learn rather than what teachers plan to teach. Meanwhile this study wishes to find out if the same can be applicable in Religious Education.

Matachi (2012) reported that the first JICA supported project aimed at strengthening Mathematics and Science Education in Africa was started in Kenya in 1998. Makwe, Role and Biego (2011) explain that the Strengthening of Mathematics and Science Education in Secondary Education (SMASSE) initiative in Kenya was in response to the continuous poor performance in Mathematics and Science despite the effort of employing qualified teachers, increasing salaries, providing equipment and constructing laboratories and mathematics classrooms. The changes put in place were that Mathematics and Science should be compulsory in all public schools. In 2003, the INSET was made available to the whole nation of Kenya and in 2008 SMASSE in secondary schools became a programme under the MOE. It is worth noting that the Lesson Study Approach in Japan comprised of three stages namely *Plan, Do* and *See*. The *Activity, Student, Experiment and Improvisation (ASEI)* and *Plan, Do, See and Improve (PDSI)* approach was developed in Kenya specifically to transform teacher-centered teaching and learning methods into learner-centered ones. Since then, the approach has been used in other African countries, including Zambia, which had similar problems of poor performance in almost all subjects.

This information is important to the study as it provides background information relevant to this study, more so that Zambia took after the Kenyan model of the Lesson Study Approach.

Kibe (2008) asserted that according to the 2007 National Development Policy, Kenya was aiming at becoming an industrialised country by 2030 and yet industrialisation relies on mathematics and science. Assistance for Development of Education in Africa (ADEA) (2005) equally observes that mathematics and science education, especially at secondary school level, is a prerequisite for industrial and technological advancement. To achieve high performance in mathematics and science, four perspectives designated as ASEI were embraced in the INSET curriculum. Takemura in Matachi (2012) reported that there was an agreement by Kenyan teachers to make the following changes which would be helpful to teachers in delivering student-centered lessons:

- Lessons to change from content based to activity-based,
- Lessons to change from teacher-centered to student-centered,
- Lessons to change from lecture/theory-based to practice/experience-based, and
- From using conventional materials to improvised materials.

Tekamura (2009) explained that the above changes meant that lessons should have practical activities that allowed the learners to be engaged in, to think, and to construct knowledge and concepts. Minds-on activities during the lessons would include: to predict, to develop strategies for solving a problem, to identify commonalities and/or differences, to distinguish evidence from opinions, and to identify the relationship between causes and effects. Learners should construct knowledge by themselves with the guidance of teachers. Thus learners would be at the center of the lessons.

The Kenyan scenario described by Kibe and Tekamura provides data on the Lesson Study Approach in mathematics and science but does not talk about Religious Education. This is the point of departure with this study and that is what it will dwell on in order to fill this knowledge gap.

According to Mutisya (2010) student-centeredness is a pedagogical paradigm shift that is currently attracting immense attention. Student-centered learning does not necessarily imply a particular methodology of teaching just like constructivism and inquiry learning, from which it borrows or relates heavily. Student-centered learning uses the existing methods of teaching except that it has student responsibility and activity at its heart. This is in contrast to a strong emphasis on teacher control and coverage of academic content found in much conventional, didactic teaching.

Kenya developed the Activity, Student, Experiment and Improvisation (ASEI) movement to upgrade the various aspects of teaching and learning. To achieve the ASEI condition SMASSE came up with the Plan, Do, See, and Improve (PDSI) approach to teaching and learning. Zambia also adopted the same approach. These were meant for use in science and mathematics but were also extended to Religious Education. Gacochi, Sang and Ngesa (2014) contend that the main focus of the SMASSE/INSET programme is the ASEI/PDSI principle which is emphasised across the subjects. The PDSI approach targets the teacher and emphasizes on early preparation of the lesson in order to ensure that the lesson is conducted effectively and making the necessary improvement during or after the lesson. The JICA report (2000) adds on that the teachers' role should be that of a facilitator, guide, counselor, motivator and researcher. This entails that the teacher moves from the center position to the side, from being the dispenser of knowledge to advisor and resource person.

The literature above is important to the study as it explains the background of the Lesson Study Approach and what the teacher should do as he/she implements the approach.

CEMASTEIA (2008) explained PDSI as follows: *Plan* – of lesson activities and flow based on learners' needs and abilities. Apart from schemes of work and lesson plans, the teacher carefully plans and tries out the teaching/learning activities, materials and examples before the lesson. Emphasis is on how instructional activities will enable learners to: understand concepts and connections among them, get the rational/value for the lesson, retain the learning and apply it in real life situations, get rid of learning difficulties and misconceptions and have more interest in the lesson.

Do- the teacher carries out the planned lesson/activity systematically and ensures learners' growth in knowledge, skills and attitudes at all stages of the lesson. At the same time the teacher is expected to improve on instructional processes basing on evaluation results. As planners teachers are encouraged to: be innovative in lesson presentation; present lessons in varied and interesting ways to arouse interest e.g. role play, story-telling; ensure active learner participation; be a facilitator of the teaching/learning; deal with the learners' questions and misconceptions effectively and finally reinforce learning at every step.

See-(or Lesson study) the teacher evaluates the teaching and learning process during and after the lesson using various techniques and feedback from learners. Teachers also allow their colleagues to observe their lessons and offer a feedback. This enables the teacher to: see the good practices in the lesson and strengthen them; see the mistakes made in the earlier lesson and avoid them in future lessons. In the process teachers become more open to evaluation by fellow teachers, learners and to Senior Education Standard Officers (SESOs). The teacher will make use of the evaluation reports to plan for the next lesson; this will enhance performance and student learning. *Improve* refers to reflection on the performance, evaluation report and effectiveness in achieving the lesson objectives. These enable the teacher to see the good practices in the lesson and strengthen them as well as mistakes made and avoiding them in preceding lessons.

This literature is important to this study in that it explains the steps the teacher of Religious Education should observe while applying the Lesson Study Approach to Religious Education.

ASEI is a way of thinking about teaching/learning that emphasise student responsibility and activity in learning rather than content. An ASEI lesson plan merges lesson notes with plan of activities. Tekamura (2008) explained ASEI as follows: *Activity* which refers to lessons being activity based. The activities should allow the learners to be engaged in, to think, and to construct knowledge and concepts. Activities are not limited to hands-on activities only but also minds-on which should bridge practical activities with conceptual understanding. Minds-on activities include to predict, to develop strategies for solving a problem, to identify commonalities and/or differences, to distinguish evidence from opinions, to identify the relationship between causes and effects and to explain phenomena.

Student: Students should construct knowledge by themselves with the guidance of teachers. Teachers should guide learners to arrive at conclusions. The process should be owned by student themselves. Hence, students must be at the center of lessons. *Experiment:* Scientific knowledge is generated and/or discovered through experiments and observations. An experiment is one of the most effective tools for scientific inquiry. Through experiments and observations, hypotheses are tested to find scientific truths. Thus, science should include experiments where necessary.

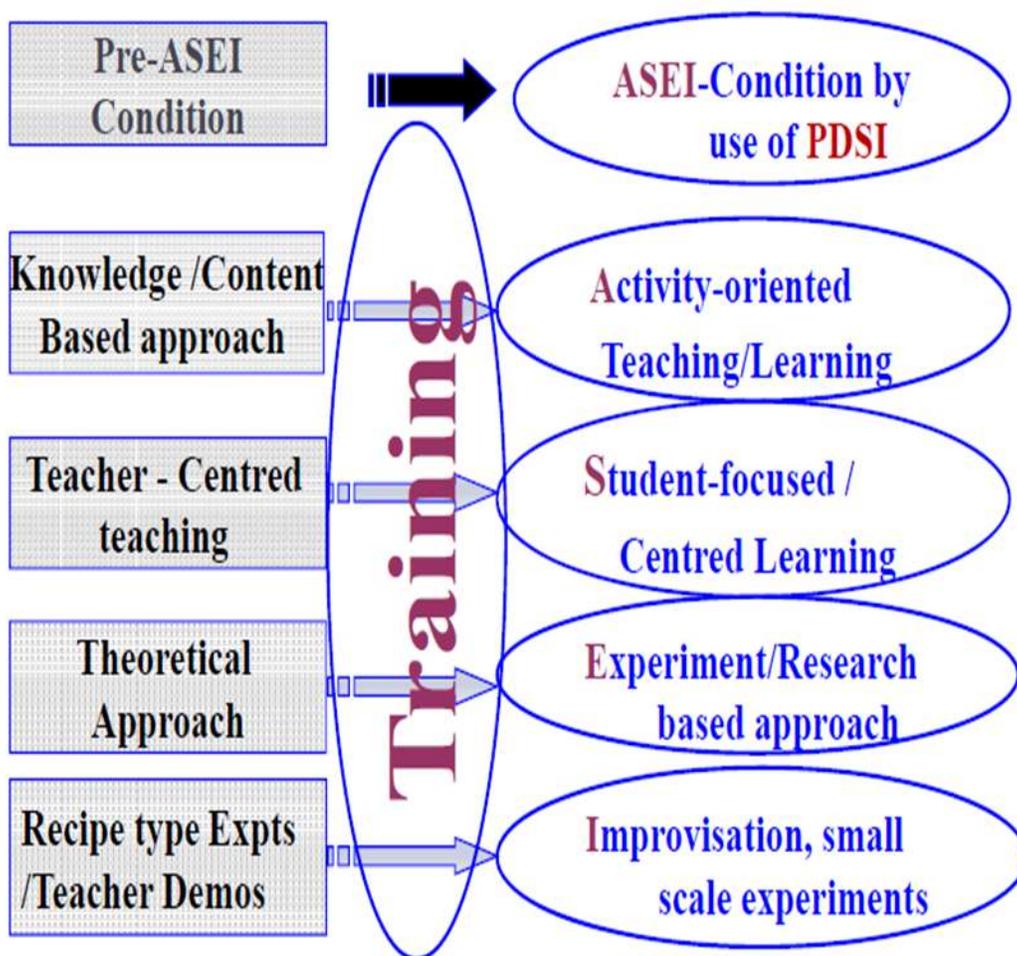
This component of the approach creates a difference in this study in that it best suits the natural science subjects and not a social science subject like Religious Education where experiments are rare or hardly done.

Improvisation: One of the reasons for using improvised materials is based on the necessity. Even when conventional science apparatus and/or learning materials are not available, students can still carry out small scale experiments with improvised apparatus and materials that are developed from local materials collected in learners' immediate environment. Another reason is to raise interest and curiosity of students by using materials that are familiar to learners. It also promotes participation of many pupils in a given lesson. As such, it is recommended that there must be as many activities during any one lesson as possible. These must be student centered activities involving a lot of improvisation in the experiments. According to Stigler (1999) the ASEI movement emphasizes teaching the student and not the subject. In the ASEI lessons, a bridge is created to enable learners to relate and integrate practical activities with theoretical knowledge.

This component of the Lesson Study Approach is important to this study because it gives a guide on what is expected of the learner as the approach is being applied to Religious Education and indeed in all the other subject areas.

Kibe, Odhiambo and Ogwel (2008) conclude by stating that ASEI principles and PDSI approach enables the teachers to explore ways of creating opportunity for learners to take responsibility for their own learning. They also employ inquiry-based approach as opposed to recipe-type experiments. It also allows them to use interactive learning methods, to improvise not only to augment conventional equipment, apparatus/materials but also to arouse interest and curiosity among learners. It affords teachers the opportunity to draw content and examples from the learners' real life experiences in order to capture interest and imagination, it also helps them enhance ability and appreciation for work planning with specific reference to sequencing learning concepts, activities and events. It further assists them in systematic execution of learner-centered teaching/learning experiences. It also facilitates evaluation of the teaching/learning process against lesson objectives and outcomes. Higher application of ASEI-PDSI principles and high quality of lesson delivery ought to result in high quality learning.

Figure 2.3 Conceptual model of transformation by application of ASEI-PDSI pedagogy



The above articulated literature is important to the study in that it gives an outline of what is expected of the teacher after undergoing training in the use of PDSI/ASEI concept.

Apart from Kenya, the Japan International Cooperation Agency (JICA) has assisted more than ten African countries in strengthening Mathematics and Science Education in Africa. These countries include Zambia, Burkina Faso, Ethiopia, Ghana, Malawi, Niger, Nigeria, Rwanda, Senegal, South Sudan, Uganda and Swaziland.

2.2 The Lesson Study Approach in Science and Mathematics in Zambia

According to the Ministry of Education (1996), teacher education is a continuing process that must be extended throughout the individual's years of actual service. The Ministry of Education believes that in-service teachers and lecturers need on-going training for them to deepen their knowledge, extend their professional skills, and keep themselves up-to date on new developments in their profession. This is because education is not static but dynamic. According to Moraga (1983), teacher training is one of the most important aspects of curriculum development and implementation for any education system. Ideally, the training of teachers should be in two phases: pre-service training followed by in-service training.

The observation by Moraga that teacher training is an important aspect of curriculum development and implementation agrees with the MOGE ideology on teachers' in-service programmes. The Lesson Study Approach which is the main concern of this study was incorporated in the already existing in-service training programme within the education system as a way of developing teachers' professional skills.

Although western education in Zambia goes as far back as 1883, Manchishi (2007) observes that the missionaries who prepared the first curriculum designed it with Christian motives – to convert the African. Each missionary society trained its own teachers in its own way, mostly in an informal manner with no examinations at the end of training. There was no CPD as we know it today. Between 1924 and 1964 the country was directly ruled by the British government, which set up a commission (the Phelps-Stokes Commission) to examine the education systems in its colonies and advise government accordingly. Among the recommendations made by the commission was the establishment of teacher training colleges and in-service training for village school teachers (which were provided for by 1925). A Higher Teachers Course (HTC) was offered in 1942 and later, more in-service courses were included.

After independence, the change to using English as a medium of instruction in schools, through the Zambia Primary Course (ZPC) brought about drastic change in the primary curriculum and it became necessary to organise short in-service courses to acquaint teachers with the use of new materials. Adhoc in-service programmes were usually organised by subject associations during holidays to cater for special training needs through national and provincial workshops and seminars. According to Chelu in Manchishi (2007), a good number of donor agencies also

participated in the provision of in-service training to either teachers or education managers. Some of the donors involved were: Swedish International Development Aid (SIDA), the Overseas Development Administration (ODA), the Commonwealth Secretariat (COMESSEC) and the Canadian International Development Agency (CIDA).

According to the Ministry of Education (1985) Self Help Action Plan for Education (SHAPE) was a field based programme launched in the 1980s by Ministry of Education in collaboration with SIDA. A considerable amount of school based self-help professional development and support activities occurred at the school, zone and district levels with important positive effects on the teaching cadre and limited amount of teaching and learning materials being developed through these activities. The programme wound up in the early 1990s. Since it was not possible to in-service many teachers through workshops, in 1994 the Ministry of Education Vocational Training and Early Education with the help of ODA launched the Action for Improving English, Mathematics and Science (AIEMS) programme for both primary and secondary schools. This was the largest in-service training programme for teachers in Zambia, carried out through the building and equipping of fourteen provincial resource centres and the establishment of fifty seven districts resource centres (MOE/ODA, unpublished). This was the beginning of school based CPD.

The Ministry of Education (1998) reported that the Professional Support Structure for Primary Education (PSSPE) was launched in 2000 under the sponsorship of DANIDA and wound up in 2004. School Programme of In-service for the Term (SPRINT) was launched in 1998 and piloted in Lusaka Province schools. It proved successful and was spread to all the provinces in the country. Initially, it was meant for the then basic schools from grades 1-9, but was later extended to high schools (grades 10-12) under the name, Continuing Professional Development (CPD). Through SPRINT, in-service education has now been institutionalised in all the schools and in Teacher Resource Centres (MOE, 1996, 1998 and 2003). As the Lesson Study Approach took root, SPRINT/CPD was already in place in schools as in-service training for teachers. So it was only logical to incorporate the approach in SPRINT for effective implementation sustainability and cost effectiveness. With SPRINT in place, it was easy to introduce the Lesson Study approach to teachers of Religious Education although initially the approach was meant for Science and Mathematics teachers only.

The pieces of literature above are important for this study because they give the historical background to CPDs where the Lesson Study Approach got infused into in order to implement it. The workshops meant to equip teachers were now at school level and almost all teachers were able to attend the workshops and be equipped with the methodology advocated for. This study has been undertaken in order to assess the effectiveness of the Lesson Study Approach in Religious Education.

According to Stigler and Hiebert (1999) in SBCPD Implementation Guidelines, the Lesson study follows eight steps of activities which form a cycle. The first step is to define the problem or challenge in a particular subject area. The second step is to collaboratively plan a lesson based on the identified needs by teachers concerned. The teaching strategies and techniques employed should be learner-centered. Then a demonstration lesson follows which is carried out by one teacher while others observe and evaluate the lesson. After the lesson, teachers meet to discuss and reflect on the effects of the lesson. The critique at this point should not be centered on the teacher but on the lesson and suggestions for improvement.

Based on the critique and reflections, the lesson plan is revised and a new one is prepared in readiness for presentation to another class by the same teacher. This is done mainly to see how the teaching skills are improved through the discussion of the first lesson. After teaching, the lesson is again discussed; appreciating the improvements and if need be further suggestions are made. Teachers can adopt the lesson plan for future use. Finally, reflections are compiled and shared among the teachers and a report is forwarded to other relevant authorities like the school administration, standards officers and other stake holders

The stages of the Lesson Study Cycle described above by Stigler and Hiebert are important for this study because they show the steps to follow during CPD sessions which are baseline to the implementation of the Lesson Study Approach.

Some approaches have been recommended in order to achieve active learning. Each approach should have pivotal question/s related to the major objectives and followed by several emerging questions. According to SBCPD through Lesson Study teaching skills (2010) the approaches are: mastery learning approach – it is mostly used for explaining a particular topic or directing a certain activity. It allows learners to explain so that an assessment can be made as to whether they have mastered the topic properly. It also enables learners to have prediction and discussion

before an activity. Often times the gist behind this method is missed by teachers who will quickly drift into simple question and answer and go on with the rest of the lesson with further explanation. Pupil participation will only be at the end of the lesson to assess how much learners understood the teacher's explanation. The inquiry- discovery approach is another approach used meant to allow learners find new concepts through discussion or activity. It is intended to motivate learners on certain topics. The next is the ASEI/PSDI approach- which is used for making learners experience a series of practical works (hand-on and minds-on activities) and the problem solving approach- which involves giving a main problem to learners and letting them find out the better solution on it. During and at the end of the activity the learners interact with the teacher and among themselves and make conclusions on their findings.

The difference is that in Science and Mathematics examples and guide lines on how to apply all the Lesson Study technique are well tabulated while in Religious Education teachers have only been advised to get what is workable for the subject area. The study is undertaken to find out if the same approaches can be applicable to Religious Education.

2.3 Religious Education Teaching Methods and the Lesson Study Approach

According to Groove (1992), teaching strategies are referred to as methods or techniques of presenting the content to pupils in an effective manner so that their needs are met. Simuchimba (2012) categorises the teaching methods in Religious Education as follows; there are heuristic methods which include questioning, open forum discussion, interviews (in class/outside school), group work and work cards. There is the category of creative techniques which comprises brainstorming, codes, devil's advocate and project work. Then there are drama methods/techniques where there is drama, role play and half story. Transmission methods and techniques comprise lecture, cassette and CD/DVD audio/video playback, text reading and note taking. There are also critical methods and techniques which involve debate, panel discussion and note making.

The above stated teaching methods are important to this study as they are the ones currently used in Religious Education and will need to be used while applying the Lesson Study Approach in Religious Education.

Muzumara (2008) defined the Lecture Method as a way of teaching where the teacher does most of the talking. Despite being the most ineffective method in teaching, many teachers of Religious Education and others teaching different subjects commonly use it. It allows the teacher to precisely determine the aim, content, organisation and direction of a presentation. It is useful where there are large classes and the teachers are few but the materials need to be covered in a short time as is the case with most subject areas (including Religious Education). Large classes are a common scenario in most Zambian schools and the lecture method is regularly used by many teachers. Muzumara further explains that the method permits the greatest amount of material to be presented to a group in the least amount of time. At the same time it allows for the gradual development of complex or difficult concepts and theories. Depending on how it is used and who uses it, the lecture method has sometimes proved useful in capturing pupils' imagination, arousing their interest and prompting them to perform practical activities.

However, the author also cautions that the method is not suitable in secondary schools as it limits teacher pupil interaction. Pupils simply listen (or pretend to) and take down notes to go and study after the lesson. He notes that the method places pupils in a passive rather than an active role. Passivity can hinder learning and pupils' attention may be lost. The method does not encourage pupil activities that can help the teacher to know the capabilities, strengths and weaknesses of the pupils. The method is also not suitable for pupils with language problems, slow learners and those with less capability of long term retention of content. The lecture method encourages one way communication and therefore, the teacher must make a conscious effort to become aware of pupils' problems in understanding content. On the other hand, it requires the teacher to have effective writing skills

Muzumara (2011) further explained that in situations where lecturing cannot be avoided, it is necessary to take measures that would increase communication channels between the teacher and pupils and among pupils themselves. This could mean being as humorous and accommodative as possible during the lesson, incorporating some practical demonstrations, question and answer pauses and brief discussions within the lecture period in order to involve pupils fully. Additionally, devising a way of emphasising main points is important, for example spending a bit more time on them to sustain interest avoiding boredom on the part of pupils. Presenting the lecture in short sections, ensuring that each section has been understood before proceeding to the

next one is also important. To consolidate the lecture, role play or quiz maybe included. Lecture method is best used in combination with other methods in order to promote effective learning. However teachers tend to overuse the method neglecting other methods which would otherwise benefit the learners more. Even though, it still is a necessary method as it enables the teacher to teach through other methods more effectively.

Muzumara's work above is important to this study as it shows that the lecture method cannot be done away with completely despite being teacher-centered. This is because it has elements that can be used in the teaching and learning of Religious Education in conjunction with the Lesson Study Approach. The literature also gives guidelines to the teacher on how to effectively use the lecture method or encouraging learner participation in the lesson.

According to Simuchimba (2012), audio/video cassette and CD/DVD playback techniques of teaching Religious Education involving technology. The radio, TV, CD and DVD players belong to two groups of teaching aids traditionally known as aural and audio-visual aids. There are many discussion programmes on radio and television which may be relevant to what the teacher is teaching. These can be recorded and played back during the lesson. Alternatively already produced films, songs and discussion programmes may be used. Kasambira (1995) highlighted the following considerations in selecting audio-visual aids; visibility, clarity, level of understanding, ease of presentation and availability of materials. The teacher should select and playback the most relevant parts of such recordings only, then a question and answer session, group discussion or class exercise should follow immediately. These aids can be effective in promoting motivation to learn, capturing pupils' interest to learn and retention of what is learned. The skills and attitudes of comprehension and empathy are also developed.

Simuchimba's (2012) and Kasambira's (1995) works are important to this study as they complement each other in qualifying the use of technology in the teaching and learning of Religious Education. Through the techniques explained above, learners develop various skills which is one of the aims of teaching Religious Education. The development of skills is the ultimate concern of the Lesson Study Approach whose effectiveness in the learning and teaching of Religious Education is what this study is evaluating.

Text reading is used as a teaching technique in Religious Education. Often pupils are asked to read either from their text books or from the recommended Good News Bible and any other

materials that maybe necessary for the topic under discussion. According to Simuchimba (2012) the teacher should select the most suitable passage for the topic being covered and should go through the passage and select the most relevant parts for the actual lesson; He/she should also distribute the books and ask the class to turn to the relevant pages and read the passage either individually or appoint one pupil to lead the others in the reading. If the passage is long, different pupils should take turns in leading the reading or if the passage is in dialogue form, it can be read in a dramatic manner to make it interesting. The teacher should also ensure that the pupils chosen to lead the class in reading the passage have the ability to read fluently so that the passage flows smoothly and its understanding is enhanced. Henze (2000) added that interactive reading may also be employed by teachers in order to provide greater interaction with the text and among pupils.

With the poor reading culture prevailing in most Zambian schools, text reading would encourage learners to read. This is a learner centered activity which is why the method is important for a study like this one which has learner centeredness under the Lesson Study Approach as a focal point.

Farrant (1980) stated that questioning is a key technique used in teaching. It can be used for so many purposes though basically it is to test what has been learned and to stimulate thought and lead to deeper understanding. The question and answer method is effectively used in Religious Education teaching if it is combined with a variety of other techniques. In most cases this technique will act as part of the main method the teacher has chosen to use for a particular topic. Farrant further explained that questioning is key to many teaching methods; without it there would be no demonstrations, investigations or discussions in the lessons. Questions also allow the teacher to collect information about pupils' background, interests and abilities. They also allow identifying weaknesses and strengths in their instruction and monitoring pupil progress. Equally pupils ask questions which are sometimes challenging and lead to investigations.

Sands and Hull (1987) also observed that teachers ask questions during lessons in order to revise previous work, motivate pupils, find out what pupils already know or can remember, monitor teaching and gain feedback on learning. Questions also encourage problem-solving skills in pupils, encourage pupils to participate in the lesson, help pupils learn from one another, help pupils evaluate themselves, encourage self-criticism and promote willingness to work towards

the answer. Bearing in mind all the above stated reasons for questioning, it is clear that the use of questions requires careful planning. The teacher needs to know the questioning techniques in terms of stimulating and motivating learners of all ability levels, focusing on the lesson objectives, handling pupils' responses and questions and encouraging problem-solving activities.

The contributions on questioning by Farrant, Simpson, Anderson, Sands and Hull are important to this study because they explain the benefits of questioning in the teaching and learning process in all subjects including Religious Education. Questioning encourages learner participation which is one of the key components in the Lesson Study Approach. Therefore, questioning as a teaching technique can be successfully used under the Lesson Study Approach. However, this is part of what this study seeks to find out.

Muzumara (2011) explained that eye contact is one of the important skills in the questioning technique. After posing a question, the teacher should look a pupil in the eye and listen to the answer while trying to see the other pupils who are close. Timing is also important. Pupils should be given a chance to think through and answer questions before moving to other pupils or before providing the correct answer. Prompting is also cardinal. It is always important to encourage pupils who say they do not know the answer to try again. It might be that the question is not clear to the pupils and so there is need to rephrase it or simplify it for everyone to understand. Provide some clues and allow pupils to rethink through the question. There is no harm in asking for a second opinion even though the first answer was correct. This will help the teacher to know whether or not the pupil genuinely does not know the answer or is just not interested in the answering the question. Reinforcement through praise and reward to pupils who make good attempts or give correct answers is important. It is good practice to avoid rejecting pupils' responses completely; instead they should be encouraged by using their responses positively. Avoid belittling, being sarcastic, threatening, punishing or laughing at a pupil when the answer he/she has given does not make sense or is out of topic.

The tips on the questioning technique explained by Muzumara are important and are used by teachers in the teaching and learning of Religious Education. The use of these tips in questioning technique promotes life-long learning as learners are able to retain knowledge especially if they gave a correct answer to a given question in a classroom situation. Life-long learning is one of

the important components of the Lesson Study Approach hence the importance of the questioning technique to the study.

Farrant (1980) also explained that the vocabulary used and clarity needs to be taken into consideration in the use of the questioning technique. The language used should be simple and straight forward. Difficult religious terms should be introduced using simple and clear language suitable for the grade and ability level of the learners. Non-verbal cues should also be taken into consideration as pupils tend to watch out for and act on non-verbal cues from the teacher indicating encouragement, understanding, enthusiasm, puzzlement and other emotions. These cues are necessary as they help pupils in searching for answers to the questions asked.

The Lesson Study Approach encourages effective communication between the teacher and the learner. Therefore Simpson and Anderson's explanation above shows that if properly used by teachers, the questioning technique can help to achieve the educational objectives which the Lesson Study Approach stands for.

About the quality of questions, Callahan and Clark (1998) stated that questions should not be so simple that only a single correct answer can be given. Rather questions should be broad enough to require pupils to think and provide original answers. It helps to broaden the scope of religious learning and stimulates interaction and involvement among pupils. About a good question, Henze (2000) added that it is an invitation to think, or to do. It stimulates because it is open-ended, with possibilities and problems. A good question is productive; it seeks a response and will generate more questions.

Questioning as explained by Callan, Clark and Henze above is an important teaching technique in this study because it is key in teaching many subjects; it actually is almost a must component in the teaching and learning of Religious Education where, if effectively used, it encourages active learner participation. Active learner participation is an important component of the Lesson study Approach.

Cruickshank (1995) explained that the discussion method is utilised by a teacher and students when they converse to share information, ideas or opinions or engage in resolving a problem. This is a method where all members of the group actively participate in the topic being discussed. Lierop (1992) added that group discussion is disciplined and purposeful thinking and

speaking for the purpose of solving some problem, and with the intention of arriving at some mutual understanding regarding that problem. Discussion in Religious Education provides an opportunity to exchange religious and other ideas on a co-operative basis by trying to find a solution to a problem of common interest. Matsaung (1999) asserted that the success of this method is vindicated in the form of open conversation and interaction as each participant can comment, ask questions and respond to comments made by other participants.

Since Religious Education is naturally a controversial subject, discussions help pupils to know other people's views and opinions and learn to respect them. The Lesson Study Approach emphasises life-long learning which can be achieved through discussion implied above. As such the discussion method in Religious Education can go along with the Lesson Study Approach. However, this is what this study will try to find out.

According to Henze (1995) panel discussion is one in which a limited number of pupils engage in critical discussion while the rest of the class listens. The teacher should ensure that panelists chosen have adequate knowledge of the topic being discussed from either an individual's previous experience or previous preparation. Usually the teacher is the chairperson and asks the questions. The questions should be thought provoking, bring out alternative or contradictory views and lead the speaker on or get another pupil on the panel to respond. A variation of the panel discussion method might be to invite panelists from outside the school, professionals with expert knowledge on the topic under discussion. The teacher moderates before pupils are asked to agree, disagree, add or comment on the points raised by the panelists.

Panel discussion is good as learners' views are expressed at the same time bringing out relevant information on the topic under discussion. It also encourages pupil participation. The study would like to find out if these outcomes are attainable while using the Lesson Study Approach.

Henze (1995) stated that interviewing is a method of information gathering based on prepared questions. It gives the pupils direct contact with the person who has useful knowledge, experience or expertise. It is a very useful teaching technique in Religious Education because the subject deals with important cultural and religious beliefs and values in society, some of which the teacher may not understand very well and may need to invite assistance from outside. Additionally, the teacher may not be able to competently explain certain religious and moral concepts, especially those from religions to which he/she does not belong; in which case they

might want to call on a religious insider to talk to their classes. Often it is easier for the interviewee to come to the school to be interviewed by pupils in the classroom. However, it might not be possible in some cases for the resource person or expert to come to school, so a small group (or whole class if small) has to go and interview him/her at their workplace or home.

The Lesson Study Approach encourages learners to discover knowledge on their own and interviewing resource persons in Religious Education is one way of doing so. Therefore the interviewing technique is important to this study whose focus is on the effectiveness of the Lesson Study Approach in Religious Education.

Cruickshank (1995) defined co-operative learning (also known as group work) as instructional procedure whereby learners work together in small groups and are rewarded for their collective accomplishments. In this method the information flow takes three dimensions namely teacher pupil communication, pupil teacher communication, and pupil to pupil communication. Teacher pupil communication is where the teacher poses questions, sets a practical activity or gives a specimen to groups of pupils for identification and analysis. Pupil teacher communication is where pupils ask the teacher questions, give their own findings or argue their points out to the teacher. Pupil to pupil communication is where pupils share ideas when answering questions, performing a practical activity, finding a solution to a problem, or comparing their findings in order to arrive at the best solution to a given problem. The method promotes inter-learning as both teachers and pupils are able to learn from each other. One pupil learns from the knowledge, experience, attitudes, insights and ideas of other pupils in the same way as they learn from the teacher. Learners are encouraged to exhibit what they know, what they are able to do and what they feel in class.

Cruickshank's analysis above is important to the study because it gives an insight to group work and the type of information flow which the teacher will choose from as he/she plans for group work. Learner centeredness, which is central in group work, is also key to the Lesson Study Approach. Therefore this study will try to establish the effectiveness of the Lesson Study Approach in Religious Education.

Simuchimba (2012) explained that work cards can be used as a strategy in teaching Religious Education. They are pieces of paper on which there is a piece of work to be done or questions to be answered by the learners. Work cards could be prepared for groups or individuals. The work

can be the same on each card or there can be different, connected or interlocking pieces of work. Clear questions/tasks should be written on the cards as well as explained to the learners where need be. These cards can be for five to thirty minutes or for a whole week's work. At the end of the exercise on work cards, individuals or group representatives should report to the whole class the answers found. With the help of the teacher, a summary of acceptable answers can be written on the board. Work cards encourage learners to work on their own and to develop self-confidence as they tackle given questions.

Work cards are a good example of individual or group learner centered activities which are directly linked to what the Lesson Study Approach encourages. Learners are expected to build self-confidence as they present their findings to the class. This makes the work cards strategy relevant to what this study aims to find out.

Simuchimba (2012) described debate as a teaching technique where two small groups of two to four pupils are formed, one group proposes and the other opposes a motion by bringing forward their points of argument. The rest of the class can equally be shared into two groups to either support the proposers or the opposers. The speakers should be encouraged to raise good arguments in support of and in opposition to the motion. Once a reasonable number of points have been raised on both sides the debate must be halted by the teacher. If there is enough time, the floor can be opened to the rest of the class to debate the motion briefly. Finally, with the help of the teacher, the class can write a summary of the best 'for' and 'against' points raised during the session in their notebooks. The success of this technique lies in adequate preparation by the teacher before the lesson and choice of a very provocative motion that arouses debate.

As a teaching technique, debate is important to the study because it helps to bring out the learners' experiences as well as broadening their knowledge horizons through various ideas brought onto the table by different pupils. This entails incorporating the learners' experiences which are an important component in the teaching and learning of Religious Education as well as in the Lesson Study Approach to teaching any subject.

According to Muzumara (2008), brainstorming is a lateral thinking process. It needs formal rules for it to work smoothly as it asks that pupils come up with ideas and thoughts that seem at first to be a bit shocking or crazy. The teacher can change and improve them into useful ideas, and often stunningly original which may eventually add to the existing body of knowledge and skills being

imparted. During brainstorming sessions there should therefore be no criticism of ideas. Judgments and analysis at this stage will stunt idea generation and stifle creativity and cripple the free running nature of a good brainstorming session. Ideas should only be evaluated at the end of the brainstorming session and solutions can then be explored further using conventional approaches.

According to Simuchimba (2012), brainstorming involves using co-operative thinking to find solutions to specific problems. It can be done either as a class activity or in groups. The teacher aims at getting as many suggestions as possible in the shortest possible time about how a particular problem could be solved. The topic and objective should not be too general; it has to be focused in order to get possible solutions. This is likely to generate a lot of discussion which is healthy for a subject like Religious Education which constitutes diverse religions. Brainstorming makes use of pupils' involvement in coming up with creative ideas on a particular topic and provoking creative thinking and enquiry and also developing highly creative solutions to a problem. When used in class, brainstorming helps to bring experiences of all pupils into play during problem solving. It prompts active involvement and participation by class members. As a teacher, ensure that every pupil is given an opportunity to bring out what he/she has and knows in relation to the topic at hand. Given opportunity every class member has potential to bring out highly thought out ideas born out of their creativity and imagination which would contribute greatly to the learning process and benefit other members in the class. Once the ideas have been exhausted the contributions or suggestions can be analysed or the class can put the contributions into a list of priorities like most profound, most useful and the most practical.

Muzumara (2008) added on that brainstorming can be at individual level where pupils are asked to examine certain concepts, theories, generalisations or topics. Individual brainstorming tends to produce a wider range of ideas than in a group as one does not have to worry about other people's egos or opinions and can therefore be more freely creative. On the other hand group brainstorming can be very effective as it uses the experience and creativity of all members of the group. When individual members reach their limit on the idea, another member's creativity and experience can take the idea to the next stage. Group brainstorming tends to develop ideas in more depth than individual brainstorming. There is however a risk of crushing down valuable but strange suggestions by uncreative members of the group which may humiliate and discourage

creativity. As a teacher, guard against such and ensure provision of good leadership, give clear direction for the class and lay criteria to be met.

Muzumara and Simuchimba's explanation on brainstorming gives an insight of the technique. Embracing learners' ideas and bringing on board their experiences is one of the components of the Lesson Study Approach which is also an attribute of brain storming. This method is very appropriate for Religious Education as religion has a lot of areas to consider for brainstorming and this study is endeavoring to establish if the same is applicable in the Lesson Study Approach.

Codes are under creative techniques of teaching Religious Education. According to Henze (2000) a code can be a role play, a drama, a poem or picture which presents a problem about which people feel strongly. Codes are usually used to begin a topic and code should focus on something topical and present it in a way that causes strong reactions. A picture code asks a question and shows the problem in pictorial form, usually it has no words. Good codes encourage discussion, analysis and judgment. To support the code, questions are needed to take the group through the various levels. After the presentation, there should be questions to bring about discussion.

Codes are useful in Religious Education because learners will think in order to bring out their feelings and emotions on the matter under discussion. This study, however, stands to find out how successful the Lesson Study Approach is in the teaching of Religious Education.

Katz (1994) defined a research project as an in-depth investigation by pupils of a topic that is worthy of their time, attention and energy. It is work which focuses on completing a given task and it normally involves a lot of resources, time, people and materials while learners practice a range of skills and language systems. Katz and Chad (2008) asserted that including project work in the curriculum promotes pupils intellectual development by engaging their minds in observation and investigation of selected aspects of their experiences and environment. According to Katz (1994) a project involves three phases, phase one engages the teacher and pupils in selecting and discussing a topic to be explored. In phase two the pupils conduct first hand investigations and present their findings. Phase three includes culminating and debriefing events. In addition to the three phases of a project, there are three components to consider when undertaking a project namely content, processes and products. Muzumara (2008) observes that in project work teachers usually change the content of their instruction to include real life topics

and have pupils undertake new kinds of representations (products) of the information they have obtained. He adds on that the project approach is more effective than classical teaching as there is development of individual skills and knowledge. Project based learning is a great opportunity for team work where tolerance is cultivated in learners, sharing of knowledge, learning self-management and organisation and establishing social contacts. Learners also practice knowledge and skills acquired in class.

The introductory remarks by Katz, Chad and Muzumara give us background information on project work which helps to understand the method as it incorporates the Lesson Study Approach. The method is important to the study in that Learner centeredness is undoubtedly the main idea of project work, which is also the major component of the Lesson Study Approach.

Annie-Marie (2008) explained that as pupils make careful observations and inquiries through their project work, they are likely to have a reason to use literacy and numeracy symbols to represent and communicate to others. They may also use sketches and maps for easy illustration. As such, the project approach can serve as a useful and meaningful complement to a more typical, systematic or direct form of instruction. Katz (2000) added that a further advantage of the project approach lies in the context it offers for pupils to develop desirable dispositions or habits or mind towards learning, towards themselves and towards others. If arranged and organised correctly, the project approach has the potential to provide pupils with the right conditions under which to develop these dispositions. Additionally Katz and Chard (2000) stated that the use of project approach may promote pupils self-motivation, excitement, interest, willingness to work hard and display a great deal of creativity and problem solving abilities.

Unit teaching draws heavily on the project approach in that those group activities are often central to a unit. Teachers also prepare pupils for project work by instructing them on how to organise information, define roles, plan, develop time lines and work with peers on routine assignments. Project work may provide many opportunities to meet a variety of learning aims but it requires strong classroom management skills. Learners need independence in planning and realising the work but they also need the teacher to act as a driver in ensuring it is carried out in a way that meets learning aims.

The piece of literature above is important for the study as it explains the benefits of project work to the learner. Just like the project approach, the Lesson Study Approach is one method that

encourages the development of investigative dispositions. The difference is that the project method is hardly used by most teachers of Religious Education despite it being a very effective way of teaching and learning Religious Education. However, this study is trying to establish if project work can be effective in the Lesson Study Approach.

Simuchimba (2012) defined drama as an exciting or unusual situation in which two or more people act out an event or set of events, usually according to a written and memorised script. Drama is not done for entertainment or as a novelty but to provide an enriching educational experience for learners. Lefever (1985) asserted that the primary aim in using drama is not to cram knowledge into pupils' heads, but to help them apply and use what they have learned. According to Henze (2003) drama can be used in two ways in Religious Education; as a feedback mainly for the teacher while it can be a form of revision for the learners as they dramatise what they learnt. Secondly, it can be used as a means of communication especially when introducing a new topic. Actors may rehearse well in advance with the teacher before acting in the presence of the whole class. In this way information is communicated to the class in a more interesting and effective way than the teacher telling the story or pupils reading about it in the textbook. Henze (2003) concluded that drama has often been used in Religious Education as an activity to reach out to pupils and that it is one of the more relevant methods of learning in Zambian schools.

Henze and Simuchimba's views are important to this study because they highlight application and use of what has been taught in a classroom situation. Application is important because it provides some rate of assessment for the learner as well as for the teacher. This study wishes to establish if the method can be effectively implemented in the Lesson Study Approach.

Role play is another method used in the teaching of Religious Education. Though similar to drama it is open ended and often without a written script. Ford (1983) defined role play as the unrehearsed, dramatic enactment of a human conflict situation by two or more persons for the purpose of analysis by the group. It gives an opportunity to the learners to practice interacting with others in certain roles. It is also used to clarify and demonstrate various attitudes and concepts as well as preparing for real life situations. Henze (2007) contended that role play has proved to be very powerful and highly motivating. It enables pupils to put themselves in situations they have never experienced before. It also helps them to understand their own

feelings, accept them and gain control of them. Learners will also practise responsibility and other skills, test out hypothetical situations to problems and trying out strategies for resolving problems. At the end of a role play session there is debriefing in which observers may comment on the way in which the characters behaved and the lessons to be drawn from this. The players themselves will always take an important part in this debriefing.

The observation by Henze that role play is highly motivating is important to this study which is considering learner centeredness. In role play learners do not only analyze but they also develop cognitive skills which are essential in a child's development. The study stands to find out if role play can be used successfully in the Lesson Study Approach.

According to Simuchimba (2012), half story is a simple but effective dramatic teaching technique in Religious Education. The teacher prepares a short half story on the topic to be taught and asks a fluent pupil to narrate the story to the class. The story should be left hanging preferably at crisis point to allow pupils to suggest their own ending to the story. The teacher may encourage by asking follow up questions.

Simuchimba's description of the half story teaching technique is essential to this study as it brings out the technique's strength in encouraging creativity in the learners. This study wishes to establish if the technique can be applied effectively in the Lesson Study Approach.

Cruickshank (1995) defined discovery learning as learning that takes place when students are presented with different experiences from which they are asked to derive meaning and understanding. The notion that learning is more meaningful, more thorough, and therefore more usable when pupils seek out and discover knowledge rather than just being passive receivers of knowledge is very important in the learning process. The advantage of this method is that it offers good motivation to the pupils as they discover things for themselves. It also challenges the pupil and gives opportunity to learn and practice intellectual skills, to learn to think rationally, to see relationships and disciplinary structures, to understand the intellectual process and to learn how to learn.

The Lesson Study Approach recommends this method hence its importance to the study. The method is very effective in that learners will remember very well information they personally discovered. It is indeed learner centered in nature which is the focal point of this study.

According to Ford (1983) a case study is an account of a problem situation, including sufficient detail to make it possible for pupils of diverse religious backgrounds, to analyse the religious problems involved. It may be presented in writing, orally, dramatically, on film, or as a recording. After doing their research, pupils can share their findings and conclusions with others during class discussion time. This may enhance learning in Religious Education.

The method is important to this study in that it gives learners an opportunity to study in-depth various religious issues pertaining to their lessons. Through case studies, learners will also understand, accommodate and tolerate religious beliefs other than their own.

Orlich (1990) reported that problem solving was advocated by John Dewey who stated that a syllabus should be based on educational problems. He defined a problem as anything that gives rise to doubt or uncertainty. The problem that Dewey promoted had to meet two rigorous criteria: the problem to be studied had to be important to the culture and relevant to the students. In problem-solving is the concept of experience. This concept assumes that the religious activities suggested in the Religious Education syllabus will produce certain desirable traits or behavior in the pupils so that they are better able to function in their multi-religious society. Furthermore, the religious experiences provided by Religious Education should articulate the religious content and the process of knowing. Both knowing what is known and knowing how to know are important objectives for pupils in Religious Education.

Observations brought forward by Orlich on problem solving may not only apply to Religious Education but indeed to all subject areas that have embraced the Lesson Study Approach. Problem solving is important to Religious Education learners as they will learn to handle issues even in real life situations. It is, therefore, essential for this study which also encourages application of knowledge to real life situations.

According to Kitshoff (1991) field/educational trip gives the learners of different religious faiths and the teacher an opportunity to visit a church, mosque, synagogue, or mission station where pupils will be able to see, hear and ask questions about religious tradition, liturgy, or the role of holy men/women. After the visit pupils should report their findings including what they liked and disliked. Suttan (1973) contended that it is important to realize that pupils learn a great deal when out on a field trip. A well planned trip encourages pupils to develop and apply knowledge, skills and attitudes that have direct link with real life situations and promotes co-operation

among pupils through their group discussions on their findings. The method also provides pupils with basic research skills as they observe, collect data and make their own analysis and conclusions, and also it helps pupils to relate what they learn in class to what goes on in the field of work. Additionally it will help pupils to realize that they can contribute to their own learning with the teacher acting as a facilitator at the same time widening their learning environment from the classroom. Above all, the method allows pupils to take an active part in the lesson and become responsible for what they have done and achieved.

Suttan (1973) stated that a successful field trip depends on how well the teacher plans for it and consideration of the educational value it has for the topic under study. Plans may include advance survey of the place to be visited, proximity to the location and number of pupils. The teacher needs to know what questions to ask pupils before the trip so that they know in advance the purpose of the trip. Clear guiding questions are very necessary during field work as they will guide pupils on what to focus on. The activities should be clearly defined and explained so that pupils have no doubt as to what the purpose of the trip is and what is expected of them. Field trips are essential to Religious Education learners because they will be able to see actual places and meet people involved in the topics under discussion. In this way knowledge retention is better because learners remember more of things they see than just hearing.

The literature above is an important component to this study as it gives guidelines to the teacher on how to conduct a field trip successfully. The method also gives an opportunity to the learners to contribute to their learning and to experience life-long learning. This study will establish if this is attainable in Religious Education through the Lesson Study Approach.

Griffith (1985) mentioned some of the traditional methods that may be adapted to the teaching and learning process of Religious Education especially in Africa. These are proverbs and folktales, music and dance and stories.

Proverbs and Folktales are very important methods used by older people to transmit or communicate knowledge, attitudes values and beliefs to young people. A lesson would be given about a special occasion or experience through a proverb or folktale. Any incident in life was turned into a lesson and resulted in telling a proverb or a folktale. The learner did not easily forget the lesson given in this way.

Folktales enhance the effective learning of religious issues by Zambian pupils as it makes use of the pupils' known context like teaching from the known to the unknown. The study desires to find out the effectiveness of the technique in the Lesson Study Approach.

Music and dance play a vital role in a pupil's religious education. In African tradition a child was taught the history, tradition and religion of the family and clan through music and dance. The older children received much of their social and religious education by image and ritual, the rhythm of the dance and the words of the ceremonial practices.

Story-telling is a very important teaching tool in Africa where most of the informal learning takes place. Using story-telling in Religious Education helps to communicate religious information to pupils from diverse religious groups. Lefever (1985) stated that the story-telling method is important because it influences a learner's attitude, values, outlook, and beliefs and conduct which are part of Religious Education.

Story-telling, music and dance play a major role in African tradition as it enhances effective communication, and creativity of both the teacher and the learner. Teaching through it can bring in new and creative approaches of teaching Religious Education. This study wishes to find out if these techniques can be applicable in the Lesson Study Approach.

All subject areas are encouraged to use Information and Communication Technologies (ICT) in combination with all the above mentioned teaching and learning methods. Mutisya (2010) added on that in order to improve performance of subject areas in secondary schools, there is need for teachers to be trained in ICT integration in all subjects. While Muzumara (2011) observed that the use of ICT has developed in different ways to meet the needs of pupils in different subject areas. Using ICT helps pupils to be curious, creative and improve the quality of presentation of their work. ICT can be useful aid to problem solving as well as providing ready access to a world of knowledge and research.

Of late ICT has been encouraged in the education system and Religious Education is no exception to the call. ICT is important to this study because it is an aid that can help learners to access knowledge on their own. This study will establish if ICT can be effectively used in the Lesson Study Approach.

Muzumara (2008) defined the eclectic method as one that employs two or more teaching methods for a given topic or lesson in order to maximize learning. It uses different instructional strategies and methodologies that combine the good aspects of other methods to facilitate effective teaching and learning. This is best achieved when the teacher puts in a lot of planning and preparation. In the eclectic method the teacher uses a combination of the lecture method, demonstration, question and answer, brainstorming and a series of practical activities in order for his/her class to benefit from a particular lesson. The Lesson Study Approach equally encourages this combination of methods. It is the teacher's responsibility to help each pupil understand the material. The teacher assumes the role of facilitator and guide. He/she remains in control of the class, maintains order, provide insight into the information and topics, explains difficult concepts, theories and laws, presents new materials and be a resource for answers through the use of a variety of methods well blended to facilitate effective learning. The teacher also should be a learner in order to continually improve on the methodologies he uses. Muzumara (2008) noted that as pupils learn, the teacher also learns new ways to help them spread their mental wings.

Minton (1991) added on that teachers should strive to utilise whatever teaching methods necessary to accomplish the learning and teaching objectives. In order to accommodate pupils' diverse learning needs, the teacher is expected to employ an eclectic variety of teaching methods in class. In terms of methodology, it is important to realize that there is no single method of teaching which suits the needs of all pupils in class whatever the size. The ultimate goal is to maximize learning through the combination of these methods which is what the Lesson Study Approach is all about. The utilization of these strategies depends on individual teachers. The use of various strategies by teachers is the essence behind the Lesson Study Approach.

The eclectic approach expounded by Muzumara and Minton is important to this study as it actually comprises of what the Lesson Study Approach advocates for in mathematics and science and now Religious Education. It is therefore in the interest of this study to verify if this method can be applied in Religious Education through the Lesson Study Approach

Cockcroft (1982) summarised teaching methods by stating that teaching at all levels should include opportunities for exposition by the teacher, discussion between the teacher and pupils and between pupils themselves, coupled with practical work. Additionally, there has to be

consolidation and practice of fundamental skills and routines, problem solving, investigational work and the application of knowledge acquired to everyday situations.

It is evident from the outlined teaching methods in Religious Education that they encourage learner centeredness. Simuchimba (2012) pointed out that *Educating Our Future*, Zambia's third major educational policy document, addresses the entire field of formal education and recommends learner centered lessons. Simuchimba further recommends taking the learners' experiences seriously and utilising them fully in the teaching and learning process. These experiences should not only provide a base for the new topic, but should also determine the pace of the lesson, the methods the teacher uses and the knowledge and skills to be taught. Such an approach will promote free expression of learners own views and beliefs and also enhance their self-awareness as individuals and awareness of others. Teachers should facilitate learning by allowing learners to search for knowledge and answers rather than providing or imposing answers on the learners. Such are also educational aims of Religious Education in our Zambian schools and are well aligned with SMASTE goals.

The teaching methods in Religious Education are of great value to this study as they reveal the methods currently used in Religious Education which need to integrate learner centered activities for effective implementation and application of the Lesson Study Approach to Religious Education.

2.4 Conclusion

In conclusion, the researcher has reviewed studies relevant to the topic of the study by discussing the development of the Lesson Study Approach in Mathematics and Science outside Zambia, the development of SMASTE/Lesson Study Approach in Mathematics and Science in Zambia and teaching methods and techniques applicable to Religious Education and how they may be used with the Lesson Study Approach. In the next chapter, the researcher discusses the methodological approaches used in this study.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

The researcher will discuss the methodology of the study under the following headings: research design, population of the study, sample size, sampling procedures, methods and instruments of data collection, data analysis and ethical considerations.

3.1 Research Design

Orodho, in Kombo (2013), defined research design as the scheme, outline or plan that is used to generate answers to research problems. While Kerlinger (1973) defined it as a plan and strategy of investigating a problem and seeking to obtain answers to questions. In this study the researcher used the descriptive design. Awoniyi, Aderanti and Tayo (2011) explained that the descriptive design is concerned with practices that prevail, points of view, collection of data for the purpose of describing and interpreting an existing condition. Thus the use of the descriptive design enabled the researcher to establish how effective the Lesson Study Approach has been in Religious Education. It was used to get the section heads, teachers' and pupils' opinions or view on the effectiveness of the Lesson Study Approach in Religious Education. The design enabled the researcher to describe and explain the respondent's views and opinions in detail for purposes of understanding.

3.2 The Population

Kasonde (2013) defined population as a group of individuals, objects or items from which samples are taken for measurement e.g. a population of students. This could be an entire group of persons or elements that have at least one thing in common. Sidhu (2013) also explained that a population in a study is the group that has the common characteristics which are of interest to the researcher. The population for a study should be that group whom the researcher would be able to draw conclusions from. In this study the population comprised of fifteen secondary schools in Kabwe District, with fifteen HoSs and one hundred and twenty teachers of Religious Education. The pupils who took Religious Education were about two thousand five hundred in the whole district.

3.3 Sample Size

Bless and Craig (1995) stated that a sample is a portion of the population. This is the number of participants selected from a population to constitute a desired sample. In this case, three secondary schools in Kabwe district were purposively selected. Three Religious Education HoSs were also purposively selected. Since not all teachers could be involved in the study, twenty teachers of Religious Education were randomly selected from social science departments. These were divided into eight male and twelve female. From schools X and Y six teachers comprising three male and three female were the respondents while eight teachers participated at school Z, (two male and six female). Thirty six pupils were randomly selected from classes that took Religious Education and they were eighteen male and eighteen female by gender. From each school, a focus group of twelve respondents, six male and six female, was constituted, making a total of fifty nine respondents. The breakdown of the sample size is as shown in the table below.

Table 3.1 Sample size by table

SCHOOL	HoSs	TEACHERS			LEARNERS		
		Male	Female	Total	Boys	Girls	Total
X	1	3	3	6	6	6	12
Y	1	3	3	6	6	6	12
Z	1	2	6	8	6	6	12
TOTALS	3			20			36

3.4 Sampling Procedure

According to Schumacher and McMillan (2006), sampling is a process by which a researcher gathers people, artifacts or places for study. In this study purposive sampling was used in the selection of participants. Therefore, three secondary schools in Kabwe District were purposively selected because of their disposition to Religious Education. According to Kombo and Tromp (2013), purposive sampling is where the researcher purposely targets a group of people believed to be reliable for the study. Similarly, Punch (2011) explained that purposive sampling means sampling in a deliberate way, with some purpose or focus in mind. Therefore, targeted were the classes that took Religious Education, teachers who offered Religious Education and their immediate supervisors, the HoSs as they were the group most likely to address the objectives of the study. Purposive sampling involves choosing participants considered to be knowledgeable and well informed or because of their rich background knowledge on the topic under study.

The participants sampled in this study suit the description above as SMASTE was piloted in Kabwe District with the schools selected being involved from inception. In addition, the respondents fitted well with each other as they had an internal consistence and a coherence since they belonged to the same department and they dealt with the same subject, Religious Education. This ensured that only rich and relevant information was gathered for the study, which would not be possible if the number of participants was large and diverse.

3.5 Research Methods and Instruments

Data was collected from Religious Education HOSs through interviews, and from teachers and learners through focus group discussion as well as through class observations. According to Creswell (2011), research instruments are the means by which primary data are collected. In this study the research instruments were interview guide, focus group interview guide and observation checklist. Wilson (2010) defines an interview as a conversation conducted between two people; it is also referred to as a personal interview conducted one on one. Interviews provide rich data that paint a broader picture by highlighting issues not currently or previously considered. Bearing this in mind, the researcher interviewed HOSs using the interview guide in order to get their opinions as implementers of the Lesson Study Approach on the ground. Punch (2011) stated that an interview is a very good way of assessing people's opinions, meanings and definitions of situations and constructions of reality. It is also one of the most powerful ways we

have of understanding others. Jones (1995) further explained that in order to understand other people's constructions of reality, we would do well to ask them. However, we need to ask them in a way that they can tell us what we need in their own terms and in a depth which addresses the rich content that is the substance of their meanings. Qualitative interviews assist us to understand the world from the subjects' point of view, to unfold the meaning of peoples' experiences, (in this case the teachers' experiences) in executing the Lesson Study Approach in Religious Education. Additionally, interviews are most often used to gather qualitative descriptions of phenomena and how social actors perceive them. In order to get the 'rich content' referred to above the researcher used semi structured interviews which allowed for further probing where necessary.

Wilson (2010) defined focus group discussion as a conversation conducted in small groups. Focus group discussion was employed to collect data from learners and teachers who were homogeneous members of the population. The learners were peers taking the same subject while teachers belonged to the same profession and offered the same subject. A different focus group discussion guide was used for the two categories of respondents. The researcher perceived interviews and focus group discussions as ideal for the study as they are most often used to gather detailed qualitative descriptions.

Focus group discussion makes an important contribution in educational research as it usually produces a lot of information quickly, while at the same time testing the new concept (Lesson Study Approach) as well as improving on the already existing CPD. Morgan (1988) pointed out that the hallmark of focus groups is the explicit use of the group interaction to produce data and insights that would be less accessible without the interaction found in a group. Well facilitated group interaction can assist in bringing to the surface aspects of a situation that might not otherwise be exposed. Multiple meanings are revealed as different participants interpret topics of discussion in different ways. The group situation can also stimulate people in making explicit their views, perceptions, motives and reasons. Focus group is also useful for revealing, through interaction, the beliefs, attitudes, experiences and feelings of participants. It also gives an insight into multiple and different views and on the dynamics of interaction within group context, such as consensus, disagreement and power differences between the participants. Additionally, small groups may increase the comfort level of participants. All this makes group interviews an

attractive data gathering option. To crown it all they are inexpensive, data rich, flexible, stimulating, recall-aiding, cumulative and elaborate. Wilson (2010) summarises both interview and focus group as being communication that aims to consult respondents about their points of view, interceptions and meanings.

Furthermore, in personal interviews with HOSs and focus group with teachers and pupils, a voice recorder and a notepad were used to record the interviews for reference and play back where need arose. According to Bryman (2004) these tools are useful as they are used when making corrections and modifications.

Wilson (2010) explained that observations are often done when looking for changes or responses in a student and teacher presentation of lessons after an intervention programme. The behaviour is observed as the stream of actions and events as they naturally unfold. Observation evolves through a series of different activities like those in a classroom situation and in a more natural open-ended way (though it is difficult to maintain a natural classroom situation as it changes immediately learners notice a new person in the class). The method was ideal for the study because the observer is also able to see the various activities conducted during the lesson either by the teacher or the learners. Therefore, using non-participating observation also known as direct observation, the researcher conducted class observations in order to observe actual situations where the Lesson Study Approach was being applied. This assisted the researcher to determine the use of the Lesson Study Approach in a classroom situation. An observation checklist was used to gather required data.

3.6 Data Collection Procedure

According to Kombo and Tromp (2006) data collection is gathering of specific information to prove or refute some facts. Hence, permission from the school administration was sought before any steps were taken towards data collection in all the three selected secondary schools. At Schools X and Z, interviews of HoSs were conducted first followed by focus group discussion with the teachers then learners. In all the three selected schools class observations were done last and after the schools reopened for the first term of 2015. One class was observed per school. At school Y, a focus group discussion with the teachers was conducted first followed by one with

the learners. The HoS for Religious Education was interviewed after the school break when she came back from studies.

3.7 Data Analysis

Kerlinger (1973) defined analysis as categorisation, ordering, manipulation and summarising of data to obtain answers to research questions. Kombo and Tromp (2013) also referred to data analysis as the critical examination of coded data and making inferences. Similarly, Sidhu (2013) explained that data analysis means studying the tabulated material in order to determine inherent facts and meanings. In order to attain this, content data analysis was employed for qualitative data in order to have descriptive results in the area of interest. Content analysis is used to determine the presence of certain words, concepts, themes, phrases and characters or sentences within texts or sets of texts and to quantify this presence in an objective manner. It is equally a research focused on the actual content and internal features of the media.

In content analysis, a classification system is developed to record the information. Data collected is coded (or shortened while still preserving the core) into themes and later categories, which is a group of content that shares a commonality. In interpreting results, the frequency with which ideas or concepts appear may be interpreted as a measure of importance, attention or emphasis or as a measure of direction bias. In this study data was classified according to groups of respondents that is HoSs, teachers and learners. It was later grouped according to research questions and the frequency with which the concept of using the lesson study appeared was interpreted as a measure of importance.

3.8 Ethical Considerations

Sekaran (2006) defined ethics as a code of conduct or expected behavior while conducting a research. The ethics govern the research right from instituting the study to collecting, analyzing and interpreting the data to report writing. It also guides the researchers on how to relate to the respondents and handle the data. With regard to ethical considerations, Creswell (2003) cautioned researchers that they have an obligation to respect the rights, needs, values and desires of the informants. Therefore, in this study respondents were firstly informed about the purpose of the research and secondly, they were assured of confidentiality and anonymity. Consent was sought from the school administrators where the respondents were drawn from and the consent

of the respondents themselves was sought. It was made clear that their participation was voluntary. (See appendices i, ii and iii)

3.9 Conclusion

To conclude, in this chapter the researcher considered the methodology of the study which comprised of research design, population of the study, sample size, sampling procedures, methods and instruments of data collection, data analysis and ethical considerations. In the next chapter I will present the findings

CHAPTER FOUR

PRESENTATION OF FINDINGS

4.0 Introduction

In this chapter the researcher will present the findings of the study. The data is presented according to the main research questions stated in chapter one. These were: - i) What are the teachers' perceptions of the Lesson Study Approach? ii) How applicable is the Lesson Study Approach to Religious Education? and iii) How effective has the Lesson Study Approach been in Religious Education teaching and learning? These will also be used as the main headings under which data are presented using different categories of respondents as sub-headings.

4.1 What Are the HoSs' And Teachers' Perceptions of the Lesson Study Approach

In order to establish respondents perceptions of the Lesson Study Approach the researcher conducted interviews with three HoSs, and focus group discussions with twenty teachers. Presented below are the responses by the HoSs and teachers and learners.

4.1.1 Hoss for Religious Education

The HoSs from the three secondary schools sampled were asked what their perception of the Lesson Study Approach was. The HoS from Schools X and Z said that the approach was good not only for teachers but for them as middle management also because it had helped in encouraging teachers to prepare for their lessons. This was one of the areas of supervision that had been enhanced through the approach.

The HoS at School Y said the approach was good though challenging in implementation because of its Mathematics and Science background and biasness. She felt that the approach was not very ideal for Religious Education. Asked how she would improve on the current Religious Education, she responded: "Revising the outdated syllabus, varying the teaching methods, and acquiring adequate teaching and learning materials would improve the teaching and learning of Religious Education."

The HoS at School Z said: "The Lesson Study Approach is very ideal for Zambia as it highly involves pupils in their learning; what they learn is not only for academic purposes but also for their daily life."

The Heads of Section in all the three secondary schools sampled acknowledged that the Lesson Study Approach was beneficial to the teachers of Religious Education. The lesson demonstrations conducted helped the teachers understand how to apply the approach, and vary lessons with learner activities as well as how to handle difficult topics in the subject.

4.1.2 Teachers

Twenty teachers from the three sampled secondary schools were asked in their groups what their perception was of the Lesson Study Approach. One teacher from School Y fully praised the effectiveness of the Lesson Study Approach. With reference to her former school she said:

There was commendable involvement of the administration which provided for most of the teaching and learning materials and close supervision, hence implementation was easy. This is not the case here and individual teachers choose whether to use or not to use the approach.

One teacher at School Z responded to the question that he perceived the Lesson Study Approach to be helpful in areas where they needed to improve i.e. through lesson demonstration they would acquire skills needed for life-long learning which they would implement in class. Another teacher from School X responded that:

The approach is good and the education authorities did well to adopt it as it enabled teachers to plan together and consider the best teaching methods and approaches in Religious Education. As teachers it can be good if we fully utilised it.

Still in response to their perception of the Lesson Study Approach; all the teachers spoken to from the three secondary schools sampled said lesson demonstrations, which are a component of the approach have been very beneficial to them especially when handling difficult topics in Religious Education e.g. religious rituals and liturgies in non-Christian religions like Islam and Muslim. Apart from improving in teaching topics they may not be conversant with, the lesson demonstrations helped the teachers to recall and continue using appropriate methods in their teaching. Another aspect of the lesson demonstrations was the planning together of the lesson to be delivered. This had encouraged team work and at the same time assisted teachers to always remember to plan for their lessons. Notably, in the Lesson Study Approach was the rationale of the lesson which states what is to be taught, how it will be taught, the aim and the position of that

particular lesson as well as the life-long skill or knowledge the learners will acquire from the lesson. At school Y not all the components of the rationale were included in the lesson plans, while at schools X and Y teachers were at liberty to choose whether to include a rationale in their lesson plan or not.

4.1.3 Learners

The twelve learners drawn from each school were asked to describe a Religious Education lesson in order for the researcher to establish if the Lesson Study Approach was applied during teaching and learning. At School X one pupil described a lesson involving role play which was her favourite way of learning; she said: “This makes it easier for me to understand and to remember the facts in the lesson.”

Learners may not be aware of the Lesson Study Approach but did acknowledge witnessing lesson demonstrations where either their class teacher or another teacher offering the same subject delivered a lesson while other teachers from the same department observed. A pupil from school Z said:

At the end of the lesson we also write on pieces of paper how the lesson was, but we don't write our names. The only problem is that we don't learn during lesson demonstrations because all teachers in that department will be observing the lesson.

The planners of the programme did not want to lose teaching time during lesson demonstrations but the researcher noted that the aspect of loss of learning time had not been adequately addressed during the time of planning and conducting the lesson demonstrations.

The HoSs and teachers perceive the Lesson Study Approach to be helpful to the Zambian Education system despite HoSs having divergent views on it. The researcher also noted variations in the formulation of the rationale by different schools

4.2 How Applicable Is the Lesson Study Approach to Religious Education?

The researcher held interviews with three HoSs and focus group discussions with twenty teachers and thirty six learners to find out how applicable the Lesson Study Approach was to Religious Education.

4.2.1 HoSs

When asked how applicable the approach was to Religious Education, the HoS at School X said the approach was applicable to Religious Education though with challenges. She further explained that:

Teachers oppose lesson demonstrations; they think that it is time wasting for both teachers and learners as they are done during classes. They feel that there is no need of having lesson demonstrations as much as twice in a term when the syllabus is the same and most of the challenges have so far been tackled in the previous lesson demonstrations. Lack of teaching materials like text books and bibles has also negatively affected the approach which encourages learner centeredness. Choice of methodology to apply in a particular lesson is heavily centered on teaching materials available.

The HoS at school Y was of the view that the Lesson Study Approach was best applicable to Science and Mathematics only. It was difficult to follow what would be applicable to Religious Education and that the approach was not ideal for the subject. Unlike her counterpart at School Y, the HoS at School Z said the approach was applicable to Religious Education despite the challenges encountered in accessing appropriate learning materials and teaching in line with requirements. She said:

These challenges can be worked around; that is why we have lesson demonstrations where we plan and either source or improvise teaching and learning aids; it only needs some seriousness on the part of teachers.

When probed further as to whether learner centeredness had been effected during the lessons, HoS at School Z said: “The lessons are at times learner centered though not all the time.”

At School X the HoS said:

Learner centeredness is what makes the approach difficult to implement because of the need for individual attention which is impossible in large classes. This is worsened by lack of teaching and learning materials

4.2.2 Teachers

From the three selected secondary schools, focus group discussions were held with six teachers from schools X and Y, and eight teachers from school Z bringing the total to twenty teachers. They were asked how applicable the Lesson Study Approach had been to Religious Education.

In response, a teacher at School X said:

Practical information on what exactly is to be done has not been effectively communicated to us compared to our colleagues in Science and Mathematics. Even when we attend the SMASTE workshops, all problem solving activities and experiments are Mathematics and Science oriented. When the initiators of the programme (JICA representatives) came to this school, their area of interest was Science and Mathematics only; so why involve us in a programme that was initially not intended for us?

At school Y, like at School X, classroom space was mentioned as a limitation to the performance of learner-centered activities in class. Initially these classes were meant to accommodate 30-35 pupils only, but currently the number of pupils per class ranges from 45-70.

Teachers at all the three sampled secondary schools acknowledged that the Lesson Study Approach can be applicable to Religious Education but noted that learner-centered activities which are the main component of the approach were time consuming, especially where they had a bulky ‘must teach’ syllabus to cover. If the syllabus was not fully covered they would be answerable to the administration as well as to the pupils who would feel let down, especially if some examination questions came from the omitted topics.

Teachers at School Z said the approach was applicable but was avoided because, according to one teacher:

Grade ten pupils report late for school after selection and they do not immediately start to learn optional subjects like Religious Education, instead they learn core subjects only. We normally start teaching Religious Education in the second term; time is short and so the approach is avoided. Besides that, time for final examinations has been brought forward to October and they start with written papers. This makes us panic in trying to cover the syllabus.

Another teacher from School Z added that from the pupils' book, learners were able to tell that they were tackling first term's work in the second term. This had often discouraged learners who either dropped the subject or developed a very negative attitude towards it. Some parents and learners had further exacerbated the situation by looking down on the subject as one to be taken by those who were not very intelligent. They also regarded the subject as one which had no future professional relevance to the learner.

While Schools X and Y had active CPDs in Religious Education, School Y had less activity. In response to the question on how often CPD meetings were held, a teacher at the school reported:

To be sincere with you, we have had no CPD in Religious Education for a while now though it is on paper that we had. It is only through active CPD that we can be reminded of the Lesson Study Approach. Though applicable the approach seems far-fetched as it is not practiced.

Learner participation is another cardinal aspect of the Lesson Study Approach. In response to the question on how the pupils' response has been to the approach, teachers at school Z revealed that Religious Education was often given to 'average or slow learners,' which led to very poor class participation in learner centered activities; this tended to discourage the teachers from using the approach. One teacher said: "In order to make progress we use teacher exposition, question and answer or lecture methods, which may not be good enough for the approach."

In further responding to the question on how the pupils' response had been towards the Lesson Study Approach, teachers at schools X and Y bemoaned the poor response by pupils to the approach especially when using research methodology. Pupils rarely carried out their research whenever they were assigned to do so. Even simple assignments such as reading a bible passage would not be done. Despite encouragement from their teachers, the learners' response had been poor. At School Y, one teacher reported: "I gave homework yesterday which called for research, this morning I only collected five books from a class of forty five; the rest have not done their work."

4.2.3 Learners

In order to establish if the Lesson Study Approach had been used by their teachers, thirty six learners from the three sampled secondary schools were asked what activities they were given

during Religious Education lessons. At School X one pupil said research work was given and he liked it because: “It helps me to know in advance about the topic and it broadens my knowledge.” In all the three secondary schools sampled, some learners stated that they performed activities like reading from the bible, text study from Religious Education pupils’ books, acting, research, working in groups, and answering questions. When probed further, with a bit of hesitation one pupil from School Z said:

At times teachers just send notes for us to copy and do not even explain them in the next lesson, especially on other religions like Islam. This discourages us and some of our friends have dropped Religious Education even though it is a good subject.

This indicates some weakness in the application of the PDSI principle in the classroom situation. Arising from the teacher’s report after giving homework, the researcher noted that this was a research or discovery method in the approach which had proved a failure at the implementation stage. The researcher also noted that efforts to use the approach were sparsely made by the teachers of Religious Education and that inappropriate methods of teaching which are teacher-centered were still employed by most teachers.

In order to find out and verify what both teachers and pupils said about whether the Lesson Study Approach was used in class, there was need to observe actual Religious Education lessons. Therefore, the researcher observed lessons in the three sampled schools.

Figure 4.1 Grade nine class at school Y.



At School Y a Grade Nine class was observed; question and answer was used to revise the previous lesson on ‘Freedom and the Community.’

The new lesson was on the topic ‘Individual good versus good of the community.’ The Lecture method was used to explain good things an individual can do which would benefit the community. Occasionally questions were asked to pupils. Class was then divided into groups of six to seven pupils and ten groups were formed. Each group was given one pupils’ book. Teacher instructed the class to turn to page seven of Grade Nine Religious Education pupils’ book and asked one pupil to read while the rest of the class followed. Using question and answer, a class discussion then followed based on the picture in the text book. Pupil participation was minimal; those who saw the picture in the book endeavored to answer the questions while those who did not see the picture could not answer any of the questions asked. The lesson concluded with an explanation of the terms ‘conflict,’ ‘freedom’ and ‘pollution.’

The researcher observed that the teacher did not involve the whole class in the lesson. There were only ten pupils’ books. The groups the pupils got into were not meant for the usual group work

but for the sake of using the one pupils' book available per group. The approach was partially employed.

The researcher also observed a Grade Eleven class at School Z.

The lesson started with recapitulation of the previous lesson. The teacher asked the class what they had learnt about in the previous lesson. In response learners said they had learned about 'temptation and sin.' Temptation was defined as 'the desire to sin or do wrong,' while sin was defined as 'rebellion to God or failing to reach God's standard.'

The day's lesson was on Jesus healing the sick. A number of bible passages were given and chosen pupils read the passages. Some learners had personal bibles and were able to follow the readings which were followed by questions from the teacher. Most pupils provided correct answers

Role plays of Jesus healing the leper, the blind man and the paralytic followed and were well done. The class was then instructed to get into their groups and two questions which were written on the board were given as tasks for discussion in the groups. The source of reference was the bible text on healing. Bibles were not enough. The few available belonged to individual learners. Presentations were done after twenty minutes. Although the questions were the same, different views emerged. The Lesson ended with the teacher asking questions on the main points of the lesson, which were Jesus' ability to heal and the response of the persons healed. The main points were written on the chalk board by the teacher and were later written down by pupils in their note books.

Figure 4.2 Grade Eleven class at School Z.



The researcher's conclusion was that the teacher used the Lesson Study Approach well as she employed learner centeredness with a variety of activities in one lesson. The class was large; it had ten groups of six to seven members each, yet she managed them well. The learners already knew their groups and the actors in the role plays quickly volunteered, an indication that it was not the first time the class was engaged in this type of activity. However, the researcher also noted that giving notes to pupils was still being done instead of letting learners formulate their own notes.

Figure 4.3 Grade ten class at school X having group discussion.



A Grade Ten class was observed at School X. The Lesson started with revision of previous lesson using question and answer. Pupils provided answers to the questions ‘What is temptation, what is sin? How can you tell that this is temptation?’

New topic: Temptation. The day’s lesson was introduced- teaching on temptation in Christianity and other religions. Brief introduction was done then the class was divided into nine groups of 8 members per group. Classroom space was not enough. Eight photocopied extracts from pupils’ books were given per group and each group had one question to answer. At the end of fifteen to twenty minutes group representatives presented their answers to the rest of the class and the teacher took note of the answers by writing them on the board. She later summarized the lesson from the notes on the board together with the class.

The researcher observed that classroom space was not enough, there were no pupils' books and one extract copy was not enough for a group of eight to read from. Not all pupils fully participated in the group discussion. It took long for the class to settle down despite the class having already been divided into groups.

4.3 How Effective Has the Lesson Study Approach Been in the Teaching and Learning of Religious Education?

The researcher held interviews with Heads of Section for Religious Education, focus group discussions with teachers and the learners so as to establish how effective the Lesson Study Approach had been in the teaching and learning of Religious Education.

4.3.1 HoSs

When asked how effective the approach had been in the teaching and learning of Religious Education, the HoS at School X said the approach had not been hundred percent effective as the application of the approach depended on the availability of teaching materials which are either too few to go round or not available at all. At School Y also lack of teaching and learning materials was given as reason for non-effectiveness of the Lesson Study Approach in Religious Education. The HoS at school Y added:

For example here, there are only ten copies of grade 10 pupils' book for Religious Education to be shared by more than two hundred pupils; this retards development.

A further revelation was that pupils were unable to acquire bibles partly because the books were not available in schools despite our Zambian Religious Education syllabuses being Christian dominated. Other scriptures from other faiths were equally scarce. In fact some teachers confessed not having seen the Koran before.

The HoS at School Y further explained that the Lesson Study Approach was Science and Mathematics oriented. She complained that:

The approach is not ideal for Religious Education as it is difficult to follow what is applicable for the subject. Instructions of problem solving and carrying out experiments are clearly tabulated for Mathematics and Science whereas in Religious Education teachers have to find ways and means of applying the approach.

The HoS at School Z felt that the approach can be effectively applied by choosing from it what is applicable to the subject area (Religious Education). She said: “The approach cannot be hundred percent learner-centered but when employed with appropriate learner activities it enhances learning.”

When asked what these activities were she said:

These should be activities that involve the learner like role play, group work, drama or dialogue. This however, does not rule out the lecture method (or teacher exposition) which can be used to explain bible passages and any concepts that learners need to know.

4.3.2 Teachers

When asked the same question on how effective the Lesson Study Approach had been in Religious Education teaching and learning, teachers at School X reported that the approach had not been effective. One teacher advanced the following reasons: “It is the implementation part which is difficult; practical application of what is to be done has had lapses as it has not been effectively communicated to us.” Another observation by one teacher from School Y was that learner-centered activities were challenging to organise in large classes because classroom space was limited.

Asked if the approach had been effective in Religious Education, a teacher from School Z responded that the approach had not been effectively implemented because of:

Lack of teaching and learning materials, lack of resources for improvisation, lack of adequate time for improvisation and indeed lack of teaching time as the syllabuses are bulky but have to be covered in order to adequately prepare learners for examinations. All these reasons have led to ineffectiveness in the implementation of the approach.

One teacher from School X said “Learner centered activities like group work or role play take long to organise in a crowded class and this makes us avoid the approach.”

Owing to the responses above, the researcher asked teachers how often they used the Lesson Study Approach in their daily lessons. The responses were as represented in the table below.

Table 4.1 Frequency of using the Lesson Study Approach by teachers

Schools	Daily	Occasional	Not used
X	1	4	1
Y	1	5	0
Z	1	7	0
Totals	3	16	1

From the data in the table above it is clear that the approach was occasionally used by most of the teachers or 80% of the sampled population.

At School Z one teacher said the approach can be effectively implemented as she had been able to successfully use most of the learner-centered methods and to cover most of the syllabus. She further said: “Pupils have been involved in the lessons and learning had been enhanced.” Probed further on methods that had worked for her, she mentioned group-work, research/discovery, class discussions, text reading and role play.

4.3.3 Learners

Thirty six pupils (twelve from each school) were asked what activities they were given during Religious Education lessons. In response, a pupil at School X said: “We are asked to come with the Bible and note book, to write summaries of notes or exercises given at the end of the lesson.” When asked who prepares the notes, another pupil said they were prepared by the teachers. When asked what activity interested them most, one pupil at school Y answered “Dialogue, it makes me create a picture of what is happening --- that way it sticks in my mind.”

Learners were able to tell that lessons varied in methodology (or activity) mainly going by the topic under discussion. They also appreciated lesson demonstrations which enabled them to have a feel of how other teachers taught apart from their regular class teachers. They also attested to the fact that lesson demonstrations were different from other routine lessons because of the learner-

centered activities involved in the former. On the differences in activity during a routine lesson and a lesson demonstration, one learner at school Z said

The difference is that a demonstration had a variety of activities involving pupils while routine lessons at times had some activities and at times had none. The teacher explained or gave us notes to copy.

The researcher noted that the implementation of the Lesson Study Approach was inadequately executed. The researcher also observed that while some teachers dwelt on hindrances others were trying the Lesson Study Approach and it had worked for them; even though there were many challenges to be tackled before the approach could be effectively implemented.

4.4 Conclusion

In conclusion, the data above shows that the Lesson Study Approach is well known by the HOSs and teachers. It is also applicable and can be effective in the teaching and learning of Religious Education. However, the challenge is at implementation stage due to hindrances pointed out above by the HOSs and teachers. Also observable is the lack of uniformity in implementation due to teachers' attitude and levels of commitment to the change. Therefore, the implementation of the Lesson Study Approach in Religious Education has differed from one individual to another, from one school to another and indeed from lesson to lesson. It is also clear that teachers do not immediately implement acquired knowledge from the SMASTE/CPD sessions; instead they choose what to use preferably that which they are comfortable with, that which suits the learners' and the learning environment. In the next chapter the researcher will discuss the findings of the study.

CHAPTER FIVE

DISCUSSION OF FINDINGS

5.0 Introduction

In this chapter, under discussion are the findings of the study. The main purpose of the study was to establish the teachers' perceptions of the Lesson Study Approach, the applicability and the effectiveness of the approach in Religious Education. The discussion will be done under headings drawn from the objectives of the study namely; the teachers' perceptions of the Lesson Study Approach, the applicability of the Lesson Study Approach to Religious Education, and the effectiveness of the Lesson Study Approach in Religious Education.

5.1 The HoSs' and Teachers' Perceptions of the Lesson Study Approach

The HoSs' have appreciated the Lesson Study Approach as a methodology that has helped the teachers to improve on their teaching methods and how to handle difficult topics in Religious Education. However, the researcher noted that their attitude as middle management mattered as far as effective implementation of the approach was concerned. This is because the activities of the Lesson Study take place within their jurisdiction. SBCPD Guidelines (2010) tabulated the activities as; taking the initiative to conduct SBCPD, planning, scheduling of activities, preparing of logistics like venue, resources and learners, checking lesson plans for teachers before lesson demonstrations and assisting demonstrating teachers in preparing teaching/learning materials. Additionally, the HoS should prepare and submit reports to the immediate supervisor (the Deputy Head), keep records of CPDs and attend stakeholders' workshops. Often this is done in conjunction with the HOD Social Sciences.

Despite the heavy responsibility allotted to them, the HOSs attitude varies as could be detected from the responses in the findings. At school X the HOS faced opposition to lesson demonstrations, at school Y the HoS used CPD time for planning purposes, while at school Z the HOS was positive and made an effort to organise for lesson demonstrations and work around the difficulties encountered. Often times the success of SBCPD and indeed the Lesson Study Approach heavily depends on the support the school administration gives to the HoSs' and the teachers.

Teachers appreciate and recognise the Lesson Study Approach as a methodology that enhances life-long learning and that through the Lesson Study they have acquired more knowledge and

skills which are all aimed at improving teaching and learning activities in the classroom. Being the main actors in the SBCPD, teachers say they have been able to freely discuss their concerns in their groups. In agreement, Moraga (1983) and ADEA (2005) asserted that SBCPD provide opportunities for teachers to share their experiences mentor each other, update their skills and interact with innovative approaches and practices that create interest and inspire confidence in learners. This is the bases for existence of in-service education and training for teachers. Hopkins (1986) also noted that INSET is directly linked to improving teaching and learning. However, Mutisya (2010) argued that it has been documented in several studies that teachers asked to change features of their teaching often modify the features to fit within their pre-existing system instead of changing the system itself. The system assimilates individual changes and swallows them up. Hence even if surface features appear to change, the fundamental nature of the instruction does not. When this happens anticipated improvements in the students' learning fail and everyone wonders why.

Out of CPD meetings are individual professional developments that teachers gain. SBCPD Implementation Guidelines (2010) observed that it is a fact that the best professional development activities happen in a school which in itself is a place of innovation and change. Additionally, one of the strategic approaches for in-service teacher education outlined in the national education policy document (1996) stated that programmes shall include not only studies on subject content, but also methodologies, use of material and classroom management. Teacher knowledge, competences and skills are vitally important in enhancing pupil performance, hence the need for teachers to continuously improve their teaching methodologies and content delivery at school level. Equally of importance is an enabling school environment which allows teachers to continuously develop professionally throughout their teaching career.

Teachers know that the goal of SBCPD through the Lesson Study Approach is to realise a learner centered lesson by applying or using multiple teaching/learning approaches. In order to foster the development of these abilities teachers are expected to conduct lessons using a variety of teaching and learning techniques. SBCPD Implementation Guidelines (2010) noted that there is need for teachers to embrace approaches that will engage learners in activities which will make them be at the centre of the learning process. It, therefore, becomes imperative to continuously improve teachers' knowledge, skills and instructional competences to overcome this challenge.

Data indicate that teachers agree that Lesson Study is a good tool which will enable all teachers to engage in continuous learning at school level based on their actual teaching practice as a starting point. That is why SBCPD puts its focus on the classroom activities because that is where teachers experience problems and (and concerns on teaching) and naturally that is where educators should always focus their interventions since whatever is right or wrong educationally has reference to the classroom.

The Lesson Study Approach is an important intervention which has added value to the teachers' in service training, as such the teachers have embraced it. The education policy document, *Educating Our Future (MOE, 1996)* acknowledged this fact by stating that;

Teacher Education is a continuing process that must be extended throughout the individual's years of actual teaching. The foundation laid in initial teacher preparation may be sound and adequate as a start, but it is not sufficient for life. As with other professionals, teachers have a responsibility, to themselves and to their profession, to deepen their knowledge, extend their professional skills, and keep themselves up to date on major developments affecting their profession.

Most teachers in the study commended SBCPD as one of the large scale, country wide educational reforms, trends and innovations made to improve the quality of education through improving teacher quality and making them more effective in the way they teach. However, not all teaching and learning innovations will directly improve the subject situations in schools basically because the response anticipated and the actual happenings on the ground may not be the same. Baba and Nakai (2009) also acknowledged that SBCPD requires practical wisdom and that it is a long term approach which calls for patience. Not only that they further warn that some large scale innovations have had very weak or no effect at all; others have actually made things worse.

SBCPD's use of the existing SPRINT framework and resources and also its working in conjunction with subject associations has been appreciated by most teachers in that the implementation of the Lesson Study has reached many teachers on a continuous basis at minimum cost. It has also ensured that there is minimum disturbance of learning by pupils since training takes place in schools or resource centres nearby. However, it is on this very point that

there is opposition to lesson demonstration by some teachers. Although the planners thought that implementation of the Lesson Study Approach would not cause any loss of teaching time, actually there is some loss of teaching time because during lesson demonstration, apart from the teacher presenting the lesson, other teachers stay on to observe the lesson leaving their classes unattended to at that particular time because no one stands in for them. Dudley (2011) recommended that cover should be made available so that teachers can observe each other's practice. He adds that sufficient time should be set aside to enable teachers to meet regularly to reflect on observations and plan future lessons.

5.2 The Applicability of the Lesson Study Approach to Religious Education

The findings of the study show that the approach was inadequately applied by most teachers despite their responding positively to using it. According to Simuchimba (2012), pupil-centeredness has over the years been lost in the education system and teachers of Religious Education have reverted back to the traditional teacher-centered approach to teaching and learning of Religious Education. In agreement Mudalitsa (2016) explains that many lessons have the following pattern: explanation, recapitulation and written exercise. Pupils' activity consists mainly of listening to the teacher's explanation and answering his/her simple questions to prove to the teacher that the message transmitted has been received correctly. The pupils never question or criticize what the teacher has said. To disagree with the teacher is taboo.

SBCPD Guidelines (2012) have equally observed that teachers do not put into practice what is learnt in CPDs. Involving pupils in one or two activities during a lesson does not constitute an effective application of the approach. The PSDI/ASEI pedagogy requires the teacher to thoroughly read instructional materials, plan the lesson with learners in mind and determine in advance the lifelong skills or knowledge the learners will acquire from the lesson. Learners also need to participate in the creation of the activity to be done in class. Activities learners are involved in should allow them to come up with solutions to given problems and where mistakes are made learners should correct them. However, this has not been the case for most Religious Education lessons. SBCPD guide lines (2010) further noted that knowledge alone does not lead to the kind of thoughtful teaching everyone strives to maintain.

There is also the category of 'old timers' in the system who feel the old way of teaching is still better than the Lesson Study Approach. They also claim to produce more distinctions during

final examinations than those teachers deemed to apply the Lesson Study Approach. This earns them a better name than using the approach, not finish the syllabus and be labeled bad teachers. This finding is in agreement with Gacochi, Sang and Ngesa's findings who contend that older teachers who had been teaching in schools for a longer period of time were more likely to be reluctant in embracing new methods of teaching Mathematics and Science (as well as Religious Education) compared to their younger counterparts. This may be attributed to the level of receptiveness of new ideas and better way of service delivery. However, these findings contradict a study of experienced and beginning teachers by Luft and Roehrig (2007) which found out that beginning teachers were less likely to change their practices, while experienced teachers were more likely to change their practices after a professional development programme. They explained that the experienced teachers had beliefs about teaching that were established and consistent with the goals of the development programme, which in turn influenced their decision to even participate in the programme and therefore change their classroom practices. The contradiction in the findings may be attributed to apprehension on the part of the older teachers on the effect of SMASTE/INSET on the performance of their learners.

The teachers' negative attitude towards the approach has equally adversely affected its application. Gacochi, Sang and Ngesa (2014) observed that a great deal of the success of the SMASS/INSET programme had a strong dependence on the teachers' attitudes and beliefs. Studies done by Makewa (2011) also show that there is a significant relationship between the attitude of teachers towards SMASSE and the implementation of the resolutions. This is in line with previous studies by Mohanty (2002), Harris, Busher and Wise (2001), Johnson, Kahle and Fargo (2000). Simuchimba (2012) contended that in order to achieve the aims and skills for Religious Education, there is need for a radical change in the teachers' attitude and approach to the teaching of the subject in the classroom. Teachers with a more positive attitude towards the Lesson Study Approach tend to apply the ASEI/PDSI pedagogy better than teachers with a negative attitude. It is for this reason that the IDCJ and IC Net Ltd (2003) discussion paper stated that knowledge cannot simply be transferred by the donors but should be actively acquired by the recipients. In the three secondary schools sampled, the reception of the approach is fragmented, some recipients are active while others are passive due to reasons highlighted above.

The levels of professional commitment exhibited by teachers have naturally affected the application of the approach in Religious Education. Commitment coupled with attitude may uplift or hinder the application of the new innovation. Some teachers do not wish to be associated with the subject because it is looked down on as an inferior subject. They would rather be associated with their other teaching subject combination than Religious Education. This was experienced by the researcher as getting the required number for a focus group discussion in all the three selected secondary schools proved difficult because some teachers of Religious Education claimed not to be teaching the subject though they were trained for it. Meanwhile, others said it openly that they had nothing to do with the subject since they took it as a minor subject added on for training purposes only. Such teachers portray gross lack of professional commitment to the subject. Some teachers are affected together with the pupils by being intimidated that Religious Education was for 'weaker brains' as quoted from p17. Kindberg (2010) gave a similar illustration that teachers believe majority of students take Religious Education classes because it is seen as a 'booster' an easy subject to give them higher grades. A professionally committed teacher should not succumb to such intimidation instead he/she should provide encouragement to both teachers and learners with such a notion by expounding to them the advantages of having Religious Education as a school subject with not only academic knowledge but also lifelong skills.

The researcher observed that teaching for examinations and not lifelong learning has been encouraged especially in so called 'pure classes' where the supposedly brilliant pupils with higher grades are placed. Learners in these classes are breeding ground for high grade examination results which will determine the status of the school. The teachers who handle these classes are equally examination focused and have little or nothing to do with learning for lifelong skills. Mudalitsa (2016) observed that heavy emphasis on factual information simply for the purpose of passing examinations and rigid teacher-centered methodologies are indications of low educational quality of our schools. Teachers are awarded for producing distinctions regardless of whether they applied the Lesson Study Approach or not. One teacher said that if the syllabus was not fully covered one was answerable to the school administration as well as to the pupils who felt let down especially if questions were asked in the examination over a topic not covered. Religious Education is unheard of in such classes hence the intimidation and ridicule of fellow pupils not in 'pure classes.' Kelly (1999) pointed out that current Religious Education is heavily

geared for examinations. This has been further aggravated by the fact that the major yardstick for measuring educational output is performance in examinations. Carmody (2004) observed that in the 1960s, Religious Education was badly organized and taught for... while in the 1970s, there was lack of common agreement and proper dialogue, and today it is not taught for life skills but for examination. Matachi (2012) concluded that implementation of the ASEI/PDSI pedagogy is challenging in an educational system which is examination oriented.

The researcher observed that the Religious Education syllabus is bulky even the latest grades 8 and 9 syllabuses have been reported to be bulky causing coverage of content not to fully develop the learners as far as in-depth understanding of content is concerned. The huge content makes it difficult for both the teachers and the learners to identify where the examination questions would be drawn from. Svenssons (2006) says final examinations (and rating of schools due to the results) forced teachers to cover the content of the syllabus giving little room for flexibility or interesting detours. Obviously the many methodologies meant to be applied during lessons are waived off at the expense of lifelong learning, acquisition of knowledge and skills.

Apparently, here in Zambia the curriculum is still rigidly followed despite recommendations for flexibility and democracy in educational planning. In the case of Japan and Kenya there has been an encouragement of not moving on to new work before the previous work is fully comprehended by learners. Simuchimba (2012) added on that syllabuses are rigidly followed by classroom teachers in their schemes of work and lesson plans. Any deviation even in the order of topics or units is considered 'dangerous' because of the fear of pupils' failure in the final examinations. Also as examination safety, teachers give notes to pupils for them to study instead of encouraging them to make their own and in the process developing abilities and skills like self-expression, critical thinking, exercising personal autonomy and independence, decision making and indeed literacy. Notably is the fact that most learners have lost the reading culture rendering the effort of giving notes irrelevant.

Another critical area affecting application of the Lesson Study Approach in Religious Education is lack of teaching and learning materials as was the case in lessons observed. All the three selected secondary schools sampled alluded to lack of teaching and learning materials, lack of resources and time for improvisation. The Lesson Study Approach is not effective without the teaching and learning materials and failure to use them makes Religious Education boring

especially that much of the content is historical and abstract. While some teachers may do what is within their means to alleviate this problem, much needs to be done by administrators as most of the issues at hand are beyond individual teacher efforts. Harris, Busher and Wise (2001) observed that it is difficult to transfer teaching or management skills from INSET sessions to classroom settings without adequate support of colleagues and school managers.

The researcher observed that there was disconnection between intent and the result in that the learners who were supposed to benefit the most out of the Lesson Study technique have not done so especially in Religious Education. This is due to implementation hindrances highlighted above by the teachers. Another observation was that although the findings suggest that some teachers seemed to have adopted the learner centered approach in their teaching, there were still some aspects of the approach which they had not adopted. Such include consistent making of lesson plans, inviting other teachers to observe their lessons as they taught (apart from CPD lesson demonstrations) and involving students in project work. The absence of these approaches indicate some weakness in the application of the PDSI principle in a classroom situation. However, Newstrom and Davis (2000) contended that employees need time to understand and adapt in order to accept change. During this period, there are many problems to be worked out. Procedures are upset (like inviting a fellow teacher to observe a lesson), and communication patterns disrupted. Problems arise and time must be taken to resolve them. In fact things are likely to get worse before they get better.

5.3 The Effectiveness of the Lesson Study Approach in Religious Education

The effectiveness of the Lesson Study Approach has been hindered at the implementation level. Gacochi, Sang and Ngesa (2014) noted that after going through the SMASTE/INSET programme teachers were expected to implement and put into practice the principles, skills and knowledge they learnt but this has not been the case with most of the teachers of Religious education. Makewa, Role and Biego (2011) have observed that some teachers become ‘stuck’ in the process of implementation, unable to agree on direction or take action and they become frustrated. This is very true with teachers of Religious Education specifically in instances where they are unable to figure out how to use certain techniques which are scientifically and mathematically designed teaching techniques in a Religious Education lesson.

The researcher observed that implementation of the approach in Religious Education had been diverse, differing from one individual teacher to another, one school to another and indeed from lesson to lesson. A positive attitude towards the Lesson Study Approach is needed for effective implementation in the classroom and if fruits of the approach are to be realized in Religious Education.

Before implementing a CPD lesson demonstration, planning should take place. According to the response of one HoS teachers are opposed to lesson demonstrations hence shunned planning for them. This has been a challenge on the part of HoSs' such that there has been little emphasis on the use of the approach. The HoS at school Y said CPD meetings were more for planning purposes than to map out teaching strategies over concerns encountered by teachers in their daily lesson deliveries. If one has a concern, verbal guidance maybe offered yet the approach encourages observation of an actual lesson being taught. Matachi (2012) says that it is critically important for teachers to observe actual lessons because it is much more effective for teachers to change their belief than just understanding theories.

Bringing out learners' ideas is another important aspect of implementation in order to talk about effectiveness in the Lesson Study Approach. The researcher noted that teachers have often times missed this point either by not asking appropriate questions to bring out the intended answers or by not waiting for the learners to critically think and provide the answers. It seems that many teachers of Religious Education still do not understand the importance of bringing out the learners' ideas. Simuchimba (2012) also noted this and says that

Although Religious Education teaching often starts from the learners' experience or what pupils already know, these previous experiences are not seriously considered and utilized in the teaching and learning process. These experiences should not only provide a base for the new topic, knowledge, skills and attitudes the teacher would like to teach, but also determine the pace of the lesson, the rate at which new knowledge is delivered or learnt as well as the methods the teacher uses. Such an approach will promote free expression of learners' own views and beliefs and also enhance their self-awareness as individuals and awareness of others.

The lesson study approach requires teachers to use a variety of approaches to realize active learning of pupils. Chikering and Gamson (1987) say that learning is not a spectator sport. Students do not learn much just by sitting in class listening to teachers, memorising prepackaged assignments, and spitting out answers. They must talk about what they are learning, write about it, relate it to past experiences, and apply it to their daily lives. They must make what they learn part of them. Most teachers feel that if pupils are involved in an activity or pupils actively participating in class then active learning has taken place, yet not. Under the approach active learning means pupils having some responsibility for the development of the activity, purposeful interaction with ideas, concepts and phenomena and a reflection upon both action and results of an action. The approach requires learners to be self-motivated and self-disciplined for learner centered activities to be effectively carried out. (Unfortunately this has not been attained as far as Religious Education lessons are concerned). If consistently implemented active learning promotes problem solving skills, promotes development of process skills, autonomous learning, high order skills, cooperative and not competitive learning and builds confidence in the learner to question some statements or seek clarification.

The Lesson Study Approach is guided by a rationale. SBCPD Teaching Skills (2010) stated that

Rationale or background is a justification or the significance of the lesson. It is the general statement that broadly emphasizes the applicability and the usefulness of the contents of the lesson to the learner either in the present or in the future. The rationale, therefore, affords the teacher an opportunity to see why the lesson must be taught. It further shows how the teacher understands the knowledge and skills to be taught in the lesson.

Once the rationale has been modified it alters the focus of the Lesson Study Approach. In fact learners tend to ask ‘why are we learning this?’ could be in silent or overt ways. The rationale should address this question in a reasonable way. Since schools were encouraged to do what was workable for other subject areas like Religious Education some schools have chosen to skip certain parts of the rationale like one teacher responded from school Y that she was discouraged by the HoS to write the rationale in full because that was what the school had adopted. The researcher wondered how the approach would be fully implemented and be effective in Religious Education if some components were removed from the rationale. It is evident that the Lesson

Study Approach has not been effective in Religious Education though it is applicable. However, Gacochi, Sang and Ngesa (2011) observed that teachers' not applying what they learnt in the INSET is therefore not necessarily an indication of their disagreement with the INSET course content but what they said were hindrances to the implementation.

5.4 Conclusion

In conclusion the researcher has discussed the findings of the study in the chapter. It is evident that the Lesson Study Approach is well known by HoSs' and teachers, and that it is applicable to Religious Education, Also that if well implemented it can be effective in the teaching and learning of Religious Education. Dudley (2011) concluded by stating that the Lesson Study Approach is a very intensive process and it needs a strong commitment from school leaders if it is to work successfully. While Hargreaves (2012) added on that Lesson Study is not an easy process to implement, and that it requires a very supportive culture, strong leadership and the support of other schools. He also notes that if schools are able to control rapidly increasing teacher workloads then the Lesson Study Approach holds the promise to make significant improvements in pedagogy and outcomes. In the next chapter the researcher draws the conclusions and recommendations.

CHAPTER SIX

CONCLUSIONS AND RECOMMENDATIONS

6.0 Introduction

Having discussed the findings of the study, in this chapter the researcher will now draw conclusions and make recommendations for possible implementation and future research.

6.1 Conclusions

Arising from the findings of the study, the following conclusions were drawn. The HoSs and the teachers perceive the Approach to be viable and value adding to their schools. The Lesson Study Approach has enabled them to acquire new knowledge and skills which they can apply in a classroom situation. Yet most teachers of Religious Education in the three selected secondary schools have not applied and effectively used the Lesson Study Approach in the teaching and learning of Religious Education. The few that have a positive attitude and professional commitment have applied the technique from time to time and the outcome has been positive. Even though the nature of the subject does not make it possible for the approach to be used in daily lessons, it is applicable and can yield positive results. Challenges ranging from syllabus content, non-availability of learning and teaching aids, heavy workloads, limited classroom space, learners' attitude and many more tend to overwhelm the teacher and negatively impact their performance in implementing the Lesson Study Approach.

6.2 Recommendations

After establishing the above findings, the following recommendations have been made.

1. The Ministry of General Education through the Curriculum Development Centre should consider involving teachers as they revise the curriculum in order to accommodate the learner-centered activities needed in the Lesson Study Approach. This will help to ensure that there is effective delivery of lessons and lifelong learning.
2. The Ministry of Education should address teachers' challenges in the implementation of the Lesson Study Approach. These include lack of adequate classroom space, lack of adequate teaching and learning materials, over enrollment and heavy workloads.
3. In order for the Approach to be successful in Religious Education and to take root in schools, close supervision by education administrators is necessary through monitoring

and evaluation to track down performance, giving ongoing information on the direction of change, pace of change and generation of appropriate results regarding the Lesson Study Approach in Religious Education.

4. Since one of the key features of the Lesson Study Approach is lifelong learning, the Examinations Council of Zambia and schools should consider using continuous assessments as part of assessment requirements in Religious Education and other subjects.

6.3 Recommendations for Future Research

1. Since the Lesson Study Approach was recently introduced in Social Science subjects and this study focused only on Religious Education, it is important that similar studies are undertaken to find out how it is working in other Social Science subjects.
2. In case the study came too early to adequately establish the effectiveness of the approach in Religious Education, there might be need to repeat this study with a wider sample in a few years' time from now.

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APPENDICES

APPENDIX i: LEARNERS FOCUS GROUP GUIDE

I am a postgraduate student of Religious Studies at the University of Zambia doing research on the Lesson Study Approach in Religious Education. I'm glad you have accepted to be part of this study and I can assure you that all the responses will be appreciated and treated with confidentiality.

1. What can you say about Religious Education?
2. Why do you take the subject?
3. Describe a typical Religious Education lesson.
4. What kind of activities are you given during Religious Education lessons?
5. Which of these do you find helpful?
6. Mention the topics mostly covered in your Religious Education lessons.
7. If you were the teacher what methods of teaching would you mostly use?
8. Do you think Religious Education gives you enough knowledge to use in your daily life?
9. What other important ideas do you learn from Religious Education?
10. Give examples of situations where you have applied what you learn in Religious Education.
11. Do you have anything you think you have left out and you would like to add on?

Thank you for your cooperation.

APPENDIX II: INTERVIEW GUIDE FOR HEADS OF SECTION

School: -----

Date: -----Time: -----

I am a postgraduate student of Religious Studies at the University of Zambia doing research on the Lesson Study Approach in Religious Education. I'm glad you have accepted to be part of this study and I can assure you that all the responses will be appreciated and treated with confidentiality

1. How long have you worked as head of department social sciences?
2. Have you taught Religious Education before? If yes for how long?
3. Comment on Zambian Religious Education.
4. What can you say about Zambian Religious Education and SMASTE/CPD?
5. Is the approach applicable in Religious Education?
6. In your opinion has the Lesson Study been effective in Religious Education? If yes how?
If not why?
7. Do you think Lesson Study is ideal for Zambia?
8. How can Religious Education contribute to the enhancement of the learner's development?
9. If you are to improve on current Religious Education what would you change? Why?
10. Do you have anything you think you have left out and would like to add on?

Now that we have come to the end of our discussion may I request that you keep your doors open for me to come back and seek clarity if need be and may I assure you once more that all the responses you have given will be treated confidentially and used for academic purposes only.

Thank you very for your cooperation.

APPENDIX iii: TEACHERS' FOCUS GROUP GUIDE

School: -----

Date: -----Time: -----

I am a postgraduate student of Religious Studies at the University of Zambia doing research on the Lesson Study Approach in Religious Education. I'm glad you have accepted to be part of this study and I can assure you that all the responses will be appreciated and treated with confidentiality

1. What can you say about Religious Education as a curriculum subject?
2. What topics are usually taught?
3. What determines the choice of topics?
4. What teaching and learning methods do you mostly use in Religious Education?
5. What is your opinion of the Lesson Study Approach?
6. Is it applicable to Religious Education?
7. What is the response of the learners to the approach?
8. If you are to improve on current Religious Education what would you change? Why?
9. Do you have anything you think you have left out and would like to add on?

Now that we have come to the end of our discussion may I request that you keep your doors open for me to come back and seek clarity if need be and may I assure you once more that all the

Thank you very for your cooperation.

APPENDIX IV: LESSON OBSERVATION CHECKLIST

School.....Date.....Time.....

ELEMENT	COMMENT
General lesson presentation	
Teaching methods employed	
Effectiveness of the teaching methods	
Pupil explanation of concepts	
Any other observations	

APPENDIX V: PERMISSION LETTER

*All Communication should be addressed to
the District Education Board Secretary*

TEL/FAX: 05 - 224702



In reply please quote:

No: TS # 59981

REPUBLIC OF ZAMBIA MINISTRY OF GENERAL EDUCATION

DISTRICT EDUCATION BOARD
P.O. BOX 80423
KABWE

January 16, 2017

The Headteachers

- Kabwe Secondary School
 - Kalonga Secondary School and
 - Highridge Secondary School
- KABWE

RE: STAFF INTRODUCTORY: MRS. E. M. LUPAPULO

Reference is made to the above subject.

I wish to introduce to you the above named teacher who is visiting your school for the collection of data in the field she is studying as she is pursuing a masters degree at the University of Zambia.

Your assistance will be highly appreciated.



Beard H. Mwanza
DISTRICT EDUCATION BOARD SECRETARY
KABWE DISTRICT