CHAPTER ONE

INTRODUCTION TO THE STUDY

1.0 Introduction

This chapter commences with the background to the study. Thereafter, it presents
the statement of the problem, purpose of the study, research objectives and
questions that tallied. It then presents the significance of the study, theoretical
framework and limitations of the study. It ends with a summary.

1.1. Background to the study

There are many different types and levels of education systems but one salient
similarity among them is that of having a body of knowledge, that is always made
manifest through a curriculum. It is also true that the contents of different types
and levels of education differ depending on what the owners value most. However,
any type of curriculum acts as a mode of transmission of the body of knowledge of
any given type of education system.

The founder of the discipline of Educational Sociology, Emile Durkheim emphasized
that the curriculum and the method of offerage was very important in any
educational system. In support of his ideas on education, Durkheim argued that the
educational curriculum should be well designed in such a manner that it should
integrate in social facts of instilling discipline into the learners and that of moral
education (Durkheim, 1961)

Another scholar, whose ideas on education are of great importance to the field of
Sociology of Education, was Max Weber. He argued that dominant or prominent
people in the society decide on what should be taught as well as who should be
taught. He also argued that dominant people usually put obstacles in the education system, so that the less dominant groups do not achieve the prestigious (quality) type of Education which they have (Chakulimba, 2009).

(Bernstein, 1974), also attaches great value to the importance of the curriculum in the internal operation of Educational institutions, like schools and teacher training colleges. Bernstein looks at the school curriculum as an expression of the principles governing the organization and selection of educational knowledge (Bernstein, 1974).

According to Datta (1984), traditional education also had a curriculum which was used in the preparation of the young generation for a productive life. He further stated that the curriculum for this type of education was very relevant, for it was determined by the physical environment of any society. Datta (1984), also states that, this type of educational curriculum is an integrated type, in that it includes every vital part of human survival.

On the contrary, Gadsen (1992) states that colonial education had a well co-ordinated structured curriculum compared to traditional education. Plato, the Greek philosopher did like wise stress the importance of a relevant and well designed curriculum. In his educational theory for the Greek states of Sparta and Anthens. Plato proposed for a differentiated type of curriculum that was dictated by the age of the learner. Like Weber, Plato postulated that influential prominent knowledgeable people like ministers of education were to decide on what was to be taught and who was to teach (Lodge, 1932).

Contributing on the importance of the curriculum to any given form of education, Bishop (1985), postulates that the manner in which a curriculum is developed and offered determines the type of education to be offered in terms of quality. He further stated that, educational curriculums can be offered under differentiated or
integration modes. He therefore concurs with Farrant (1964) in ascertaining that the method of curriculum offerage has an effect on the type of education to be offered too. Urebvu (1985:47) elaborates more on the operations of the segregated/differentiated and subject integrated curriculum by stating that;

*Differentiated/segregated subject curriculums are modes of curriculum coverage where by subjects or courses that make it up are taught to learners separately while maintaining their own unique boundaries. This is contrary to the subject Integrated curriculum whose content offerage is an inclusion of other related independent related subjects.*

It is therefore important to make mention of the fact that no education system in the world has ever existed without a curriculum. From pre-school to University Education system, curriculums are offered differently or variedly. From colonial to post independence times of the introduction of Western Education in Zambia, the Basic College of Education curriculum designs have undergone several changes that aim at improving the quality of education in schools, since it is the curriculum content and the manner in which it is designed and offered, that determines the type of education (MOE, 1977).

Before and soon after Zambia attained its political independence, the training of teachers was conducted by different missionary society stations whose curriculums were the differentiated type. Teachers were trained and examined in all the fifteen subjects separately, corresponding with the way pupils were taught and examined in the primary schools. In support of this trend, MOE (1977:29) states that:

*In all this, the teacher as the number one resource should continually play an important role. He must understand and be involved in the curriculum process and be adaptable to necessary changes brought about by the new curriculum; while his knowledge, methods and expertise are important,*
his attitude towards the new curriculum is even more crucial and can make the difference between reform on paper and reform in reality.

All the teacher education courses followed a differentiated curriculum in which subjects were independently taught as they created very minimal links between them. In that way, subjects competed among themselves and eventually created artificial over crowding of the curriculum (MOE, 2000). The differentiated curriculum was later on discovered not to be suitable for the age of the learners, as it failed to meet their learning needs (MOE, 1992). Therefore, the Subject Integrated Curriculum was preferred to be offered in Basic Colleges of Education like Solwezi and many others to address the issue of quality education in the Zambian education system.

In 1996, a new programme of training lower and middle basic school teachers called the Zambia Teacher Education Reform Programme (ZATERP) was introduced as a pilot programme. It was run for two years on pilot basis in three Colleges of Education and these were Kitwe, Mufulira and Solwezi. From the year 2000 to date, this programme is now offered in all the Basic Colleges of Education under the name of Zambia Teacher Education Course (ZATEC). This curriculum is a subject integrated type, in which traditional contributory subjects are grouped into study Areas, according to their definable relationships. This grouping of the subjects means that study areas operate on the principles of team planning, team teaching and integrated assessment (MOE/DANIDA ZATEC Tutor’s guide, December, 1988). The grouping also means that the number of areas to be covered by the trainee teacher in terms of content remains the same but the number of examinations to be written under that grouping is reduced. Previously, the subject integrated curriculum was made up of six study Areas, but currently, it is made up of seven study areas with several contributory subjects as tabulated below,
Table 1: Classification of Study Areas for the Subject Integrated curriculum currently followed at Solwezi College of Education.

<table>
<thead>
<tr>
<th>Study Area</th>
<th>Contributory subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education Studies</td>
<td>Sociology, Guidance, Counseling and placement, Special Education needs (SEN), philosophy and psychology</td>
</tr>
<tr>
<td>Social, Spiritual and Moral</td>
<td>History, Geography, Civics, Religious Education and Moral Education.</td>
</tr>
<tr>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>Expressive arts</td>
<td>Art and Design, Music, Physical Education and Dance.</td>
</tr>
<tr>
<td>Literacy and Languages Education</td>
<td>Local languages (Zambian-Languages) and English</td>
</tr>
<tr>
<td>Integrated Science</td>
<td>Integrated Science and Agriculture Science.</td>
</tr>
<tr>
<td>Mathematics Education</td>
<td>Mathematics</td>
</tr>
</tbody>
</table>

(Source: MOE, 2007)

While it is well known that the subject integrated curriculum under the Zambia Teacher Education Course was introduced with a major aim of improving on the quality of Education in Basic Colleges of Education and in the Lower/Middle Basic Schools, many concerned stake holders were still criticizing the whole arrangement. There was therefore great need for this study to be conducted in order to find out the effects of the subject integrated curriculum offered in Basic Colleges of Education on quality Education. This was very important more especially that there has been no research conducted on the same since the introduction of the whole arrangement.
1.2. **Statement of the problem**

The problem addressed in this study was to find out the effects of the subject integrated curriculum offered in Basic Colleges of Education on quality Education. The subject integrated curriculum was introduced in Basic Colleges of Education in order to improve on the quality of Education (MOE, 1996). However, since this mode of curriculum was introduced, there had been complaints from several concerned stakeholders that Educational standards had gone down (Carmody, 2004). It was not precisely known as to whether such complaints were true or not because no study had ever been conducted to review and analyse this type of curriculum. This situation raised a lot of concern in the researcher, who found it necessary to conduct a study of this nature.

1.3. **Purpose of the study**

The purpose of the study was to establish the effects of the subject integrated curriculum offered at Solwezi College of Education on quality Education.

1.4. **General objective of the study**

The general objective of the study was to establish the effects of the subject integrated curriculum at Solwezi College of Education.

1.5. **Specific objectives of the study**

The specific objectives of the study were to:

1. Investigate the reasons for the introduction of the subject integrated curriculum offered at Solwezi College Education.

2. Find out how the subject integrated curriculum was designed at Solwezi College of Education.
3. To examine how the subject integrated curriculum was being implemented at Solwezi College of Education.

4. To determine whether the policy initiative of Continuing Professional Development Programmes helped in building up the Subject Integrated Curriculum at Solwezi College of Education or not.

5. To establish the effects of the subject Integrated Curriculum offered at Solwezi College of Education on the quality of Education.

1.6. Research questions

The study embarked on finding answers to the following research questions:

1. What reasons led to the introduction of the subject Integrated Curriculum offered at Solwezi College of Education?

2. How was the Subject Integrated Curriculum designed at Solwezi College of Education?

3. How was the Subject Integrated Curriculum implemented at Solwezi College of Education?

4. Did the policy initiatives of Continuing Professional Development Programmes help in building up subject Integrated Curriculum at Solwezi College of Education or not?

5. What were the effects of the Subject Integrated Curriculum offered at Solwezi College of Education on the quality of Education?
1.7. **Significance of the study**

The study was conducted to highlight the effects of the subject integrated curriculum offered in Basic Colleges on quality Education. It was hoped that the findings would help the Ministry of Education, Politicians, Non Governmental Organizations (NGO) and other concerned stakeholders to improve on the operations of the subject integrated curriculum in Basic Colleges of Education. In addition, the findings were intended to contribute to the body of knowledge worldwide.

1.8. **Limitations of the study**

The major limitation of the study was that it was a case study that was inclined to Solwezi College of Education only, therefore its findings could not be generalized because only one entity was studied. The other limitation was that the study was conducted during the census period, when Colleges of Education were used as venues for two months. This resulted in the major target study population not to be available for the commencement of the study, because they were (Students and Lecturers) were sent back home.

1.9. **Conceptual frame work of the study**

The study was based on the conceptual Framework from the new sociology of education or teachers’ theory. This theory was developed by Basil Bernstern and his associates at the University of London institute of education in 1963. Karabel and Halsey (1977) describe the new sociology of education theory as one that is directly concerned with the nature and organization of education content or curriculum and the internal operations of schools and teacher training institutions. Karabel and Halsey (1977) further explain that the new sociology of education theory focuses on the use and control or management of knowledge by teachers and their
students. The new sociology of education theory looks at the curriculum as an expression of the principles governing knowledge or contents taught to learners.

Karabel and Halsey (1977) further state that Educational curriculums can be strongly or weakly classified. They further state that strongly classified Curriculum depict curriculum designs and offereage that fosters a specialized and hierarchical Educational content, in which courses or subjects are segmented from each other, by setting sharp boundaries between their contents. They also explain that weakly classified curriculum depict curriculum designs whose mode of transmission is of an integrated code, in which courses or subjects stand in an open relationship to each other.

In the case of Zambia, both strongly classified (differentiated) and weakly classified (integrated) curriculum designs have so far been offered in the educational system since the introduction of modern education. Strongly classified or differentiated curriculum designs have been on offer in the whole education system for a long time, but it is currently only offered from upper Basic to University level. Weakly classified or integrated type of curriculum is offered at Lower/ Middle Basic School level and Basic Colleges of Education.

Bernstern (1974) postulates that the way a curriculum is organized and offered can facilitate or hamper the teacher student relationship, which later on hampers student performance. He also states that only well organized curriculum enhance the teacher student relationships during the teaching and learning processes, that finally affects student academic achievement.

Therefore, basing on facts from this theory, one would clearly understand and deduce that curriculum designs can be of two types. The strongly classified or segmented or differentiated or specialized type where subjects are segmented from each other by setting sharp boundaries between them and the weakly classified /
integrated curriculum design whose mode of transmission is of an Integrated Code in which courses or subjects stands in an open relationship to each other. This theory is related to this study in that it brings out an understanding of the effects of different curriculum organization on students academic achievement. The theory is also related to the study in that its pre-occupations of being relevant to teacher training institutions stands out like a point of relatedness. Being a micro sociological theory that is fit for small scale studies like this case study makes it even more relevant and related to the study.

In this study, the concern was not on the teacher- student relationship or student academic achievement, but was rather on whether the type of curriculum arrangement (the weakly classified or subject integrated code) that was offered at Solwezi College of Education had promoted the achievement of quality Education or not.

1.10. Summary

This Chapter has established that every form and level of any education system has a body of knowledge, that is made manifest through a curriculum. The background to the study and the theoretical frame work that guided the study has clearly shown that the way a curriculum is organized and offered can either facilitate or hamper the teaching and learning processes, which later on hampers the quality of education of any given educational system.

In the following chapter (chapter 2), a review of literature on the subject Integrated Curriculum according to the objectives of the study has been undertaken.
CHAPTER TWO

LITERATURE REVIEW

2.0. Introduction

This chapter reviews literature related to studies and works on the subject integrated curriculum. It will do so by looking at its meaning and that of quality education, reasons for its introduction in Basic Colleges of Education, its design, its implementation in Basic Colleges of Education, whether continuing professional development programmes has helped in building it up or not and its effects on the quality of education.

2.1. The meaning of the Subject Integrated Curriculum and Quality Education

In order to discuss the phrase of “subject integrated curriculum” amicably. It is imperative to first of all look at the meaning of the words “curriculum.” and “integration.” MOE (2000), defines the word “curriculum” as specification of the desired knowledge, competencies, skills, values and attitudes which school children in Zambia need to achieve. Curriculum includes an overall plan of how educational institutions are to achieve their goals, detailed syllabuses, time tables, recommended text books, examination requirements and other Ministry directives affecting teaching and learning. It is a sum total of planned teaching and learning experiences, that learners are subjected to in an educational institution for a stipulated period. From the above definition, it is evident that the word “curriculum.” is a much wider concept than merely a set of detailed syllabuses that state the subject content and related competencies to be covered.

According to Farrant (1964), the word “integration” is a new trend in education in relation to curriculum, whereby similar topics of subjects that have some
relationships, are brought together and grouped into one study or learning area from which they are taught. Integration is practiced in Basic Colleges of Education and their related schools, as a thematic approach with cross cutting issues and themes like HIV and Aids, Gender and Community Studies included. Beane (1977), clearly explains that a subject integrated curriculum is a way of teaching students that attempts to break down barriers between subjects and make learning more meaningful to students. The idea is to teach around “items” or “organizing centres” that which students can identify with such as “the environment”, “Life in the school”, or more traditional area like “myths and legends”.

Beane (1977), also states that Subject Integration occurs when major concepts are culled from the broad themes and activities are planned that teach or inform of these concepts. Beane (1977) further explains that the subject integrated curriculum requires accessing knowledge from all the traditional subjects without labeling them as such. He further states that the subject integrated curriculum adds problem-solving, real world- application and social consciousness to the learning process, making it a more comprehensive way of educating and learning.

MOE/DANIDA (2000), explains that Integration is one of the principles of the Zambia Teachers’ Education Course that is offered in Basic Colleges of Education, in which the contents of different contributory subjects are taught and assessed from study areas. Farrant (1964), also states that the notion of an integrated approach to curriculum is derived from modern cognitive Psychology and Philosophy developed by Dewey, Piaget, Dieses and Burner among others. These adopted a holistic view of the learning process and were concerned with children acquiring an understanding of fundamental structures.

MOE (2003) defines subject integration in its elaborate sense as curriculum where by subjects with some relationship or connectedness in their contents are grouped together in the same study or learning areas, through the principles of team
planning, team teaching and integrated assessment. At the college level, the subject integrated curriculum is based on six study areas as shown in table (1) of the background of this proposed study. (MOE/DANIDA ZATEC tutor’s Guide 1998).

MOE (1996), defines the notion of quality Education as the type of education where by the teaching and learning processes develop the analytic skills of learners, promote learner’s ability to form and transform concepts, enable learners to acquire as well as use knowledge, stimulate learners to identify and solve problems, equip them to express their beliefs intelligibly; while empowering them to develop and live by a personally held set of values (MOE, 1996). According to Hawes and Stephens (1990) in Kelly (1999), the notion of quality Education means efficiency, relevance of the taught curriculum to human and environmental needs and the pursuit of high standard or excellence and human betterment in education. Hawes and Stephens (1990) further summarized that quality education is a type of education that involves the transformation of an individual and society at large through education.

Kelly (1999), further states that the quality of Education can be measured by looking at educational set goals like those in mission statements whether they are met or not. Very often, examination results show whether expected knowledge, Skills, attitude and values have been acquired or not. An educational system can also be seen to be of high quality only if its curriculum is seen to be relevant and serves the changing needs of students and society they will enter in. Quality education can also be measured by looking at students’ success and performance when they leave Educational institutions in their further education and at their work places in carrying out work efficiently and effectively.
2.3. Reasons for the introduction of the Subject Integrated Curriculum in Basic Colleges of Education

After noticing that the standards of Education in learning institutions had gone down, the Ministry of Education through its influential stakeholders undertook many studies and national surveys in the early 1990s inside and outside Zambia, to find out a better and beneficial education system for Zambians. The studies and surveys revealed several indications of low educational standards at the lower / middle basic schools and Basic Colleges. In support of the above, MOE (1996:67) points out that;

*In spite of teacher training colleges regularly supplying the country with qualified teachers, they have been handicapped in the accomplishment of their mission by inability to bring the quality of their output to the level they would have desired.*

MOE (1992) highlights an overcrowded and inappropriate curriculum as one of the quality related problems in teacher training colleges and lower middle basic schools. The discovered true picture was that the Zambian Education system was not performing well, as evidenced by poor literacy, numeracy and problem-solving levels among learners. Such low quality Education indicators within the Education system, made the call for curricular reform necessary. MOE, (2001) elaborates that reform was necessary as the previous primary teacher Education Course’s curriculum, which also spread into basic schools was later on found to be unsuitable for the age of the learners at the lower/middle basic school level.

The Ministry of Education then started the reform process by reforming the Colleges of Education’s Curriculum first. It decided to take initial steps in reviewing and restructuring the teacher training curriculum that would later on spread and manifest Educational developments in the lower / middle basic schools. In support of the above, MOE (1996) postulates that, the way in which any educational
curriculum is prescribed, has a major impact on the quality of Education. A well designed, responsive and relevant curriculum which was well taught and learned was advocated for. To that effect, the Zambia Teacher Education Reform Programme (ZATERP) was established to design and implement a new Basic Teacher Education Curriculum. This new curriculum mode is the subject integrated curriculum which is offered through the Zambia teacher education course, in all the Basic Colleges of Education found in Zambia (MOE, 2001)

Citing the authenticity of the origins of the introduction of the subject integrated curriculum, MOE (1996:33) states that:

> While striving for the comprehensive development of pupil knowledge, Understanding and skills, the curriculum should not be unduly fragmented or Overloaded. Hence, several areas and issues, instead of being offered as independent subjects, will be Integrated across the curriculum; others will be structured as special modules that can be offered within the frame work of an appropriate discipline.

Therefore, avoidance of curriculum overload was one of the major assumptions behind the introduction of the subject integrated curriculum. The other assumption was that lower and middle basic curriculum need not to be fragmented into rigid independent subjects and defined compartments. This is so because the child at this stage has not yet acquired the analytic capacity of separating the world of experience, which is unified and integrated into clearly defined categories.

Therefore, the Ministry of Education Curriculum specialists understood and concluded that the curriculum should respond to the child’s unified outlook on life, by itself being unified and integrated. A study undertaken by Beane (2002) on the need for subject integration in learning institutions revealed that subject integration
was the ideal appropriate type of Education suitable for training teachers to teach young children. The study also revealed that educational curriculum for young children needed to be integrated so that children’s learning in all traditional subject areas occurs primarily through projects, learning centers and playful activities which reflect children’s natural interests and needs.

A general study conducted by Caine et al (2000) on the significance of subject integration revealed that learners work cooperatively with each other and learn facts, skills, values and attitudes in a more meaningful contexts and therefore enjoy learning naturally.

MOE (2001), clarifies that the introduction of the subject integrated curriculum in basic colleges and later on in lower/middle basic schools was a response to the demand of the education policy known as “Educating our future”.

2.4. Design of the Subject Integrated Curriculum in Basic Colleges of Education

MOE/DANIDA (2001), explains that previously the subject integrated curriculum in Basic Colleges of Education was designed into six study areas of the names of “Education Studies”, “Literacy and language Education” “Mathematics and Science Education” “Expressive Art”, “Social, Spiritual and moral Education” and “Technology studies”. Currently the Subject Integrated Curriculum in Basic Colleges of Education is designed into seven Study Areas. This is so because Mathematics Education was de-linked from Science Education, which brings the total number of study areas to seven (Examinations Council of Zambia, 2009). According to MOE / DANIDA (2000), each study Area draws its content from the traditionally separated subjects of the segregated curriculum and has integrated the content in a way that is relevant and meaningful to the experience of the learner. Contributory Subjects in each study area are grouped according to their definable
relationships among them. For instance, calculative oriented subjects, practical oriented subjects, Language articulatory subjects and educational oriented subjects.

According MOE/DANIDA (1998), it is impossible to cover all the appropriate content from each contributory subject within the study area. Some content remain untouched with a hope that students will have attained a level of development from whatever was taught at high school level. It further states that the contents of the syllabuses for the subject integrated curriculum offered in basic colleges are designed with great emphasis on numeracy, literacy and cross – cutting issues in almost all study Areas, as seen to be sufficient for all students. Therefore, most study areas lack background content and scope of individual contributory subjects. However, MOE/DANIDA (1999) substantiates that the student will cover the untouched content independently when need arises. The above assumption has some other authentic origin from MOE (1996:108), where it is stated that:

_The initial preparation provided at training colleges and the university, does no more than lay the foundation for a life time of teaching. There is need for regular on going development in a process that is never complete._

As far as the subject integrated curriculum is concerned, it is assumed that students have sufficient content knowledge from their previous high school level. This assumption contradicts what Mutobo discovered during his study of the Evaluation of the field based components of ZATEC. Mutobo (2009) discovered that most school based year students still lacked background information in certain contributory subjects, as they complained that they did not study such subjects because they were offered as options at high school levels. Nevertheless, this curriculum’s main attention is on the application (methodology) of whatever is taught in the classroom. MOE/DANIDA (1998), further argues that whether
students have sufficient prior content or not, they should be involved with tutors in the solution of real world problems even before they fully master the knowledge and skills necessary for problem solving. This is important for the improvement and renewal of the motivation which in turn promote involvement in the development of skills.

Just like MOE (1996), another study conducted by Caine et al. (2000), on the operation of the subject Integrated Curriculum, recommends the inclusion of those aspects of teaching and learning that affect curriculum practice irrespective of the subject or curriculum area. Such aspects are known as cross curricular issues and themes. MOE (1996) identifies health (HIV and AIDS in particular) reproductive health, cultural heritage, environmental education, life skills, gender and special education needs as being cross curricular issues and the themes that are critical to the future development of Zambia. Despite having or not having association with any specific curriculum content, students need to be trained to include them in their entire teaching load.

MOE (2000), notes that the arrangement of the subject Integrated Curriculum practiced in Lower/ Middle Basic Schools does not correspond with that of Basic Colleges of Education. MOE (2000) outlines different subject areas of different grades with different contributory subjects. Somehow, this defeats the purpose of introducing such curricular reforms at college level, as such reforms are supposed to overflow into the targeted schools. For instance, there are about nine contributory subjects and likewise nine subject areas in the curriculum offered from grade five to seven. A contributory subject like Home Economics appears to be in the same learning area with Science. English, Zambian languages, Mathematics, Literacy and Physical Education seem to stand on their own as shown in the following table.
Table 2: Classification of subjects /Learning areas for the subject Integrated Curriculum followed at Middle Basic Level from Grades 5 to 7

<table>
<thead>
<tr>
<th>Subject Areas</th>
<th>Contribution Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 English</td>
<td>English language, Literature and culture, oral communication skills, life skills, Thinking and learning skills, problem solving, concept formation, analytic and creative skills, basic Computer Literacy.</td>
</tr>
<tr>
<td>2 Zambian Language</td>
<td>Oral communication skills in the most familiar language, literature and culture, competence in a school national Zambian language, life skills as above under English course.</td>
</tr>
<tr>
<td>3 Literacy and Information technology</td>
<td>Developing literacy skills in English and in a Zambian language. Applying such skills on computers</td>
</tr>
<tr>
<td>5 Science, Environmental and Home Economics</td>
<td>Environmental education, Agriculture, geography, food security, nutrition.</td>
</tr>
<tr>
<td>6 Social Studies</td>
<td>Society and the individual, history, civics, religious and moral education, reproductive health, social and psycho-social life skills.</td>
</tr>
<tr>
<td>7 Technology Studies</td>
<td>Design, industrial Arts, Construction and Maintenance, using tools, practical life skills, psychomotor skills.</td>
</tr>
<tr>
<td>8 Expressive Arts</td>
<td>Art, Drawing, Music, Dance Theatre, Zambian Traditional culture.</td>
</tr>
<tr>
<td>9 Physical Dev</td>
<td>P.E. games and sport activities</td>
</tr>
</tbody>
</table>

(Source: MOE, 2000:87)
2.5. Implementation of the subject Integrated Curriculum in Basic Colleges of Education.

MOE (2001), establishes that the Subject integrated curriculum that is followed in the Basic Colleges of Education, under a two year Teacher Education Course known as ZATEC is a radical shift from the previous curriculum. This new curriculum is implemented through seven study areas. Knowledge, skills and concepts that are specifically confined to certain contributory subjects within study Areas are discretely taught, while those that are common among the contributory subjects within the study area are integratively taught, using the thematic approach. MOE (2000) is of the idea of maximum cooperation among members of a study Area which is cardinal for the effective delivery of the integrated curriculum.

According to MOE/DANIDA (1999), team planning, team teaching and integrated assessment are principles that govern the implementation of the subject integrated curriculum within the study areas. Termly and weekly plans are also integratively and teamly constructed within study areas. MOE/DANIDA (1998) states that this approach to curriculum, advocates for participatory activity based learner centered methods such as class visits, demonstration teaching, micro-teaching, team-teaching, group work and project work in its implementation.

The results from Caine et al (2000) study on the operations of the subject integrated curriculum in education institutions recommended that the learner should be the centre of the learning process, which should be structured into activities where students perform while the tutor facilitates. Because of the above preferred approaches, the curriculum is designed and implemented using contact and non contact time. According to MOE/DANIDA (1998), contact time is the time when tutors are in face to face contact with students while non contact time refers to the time students spend working alone under the guidance of tutors. Each
sylabus of the seven study areas indicates the content to be covered during the contact and non contact time. Both contact time is counted in the calculation of the total time available for each study area.

MOE (2001), clarifies that, the above cited system of content coverage of the subject integrated curriculum, is totally different from that which was previously offered in basic colleges under the differentiated or segregated curriculum, where by contact times and teacher centered methods like lecture and explanations where used in content coverage.

MOE/DANIDA (1999), emphasizes the importance of modules in the coverage of the subject integrated curriculum, during the school teaching practice period of the training phase of students. The subject integrated curriculum is designed in such a way that the content of each study area is also presented in a modular framework, for use by students during their school teaching practice period in their second year of training. MOE (2002), states that each study area is allocated a certain number of modules with a total number of contact and non contact time indicated. Each module normally generates thirty hours of contact time and eighteen hours of non contact time.

Assessment is one of the ways in which the subject integrated curriculum uses to evaluate the quality of education that is provided to both students, and the nation at large. MOE (2001), states that the subject integrated curriculum advocates for a criterion based assessment, which is not only examination centered but rather also based on the continuous assessment of students throughout their training duration. The criterion based mode of assessment is said to be the most ideal, because it does not only help in assessing the knowledge but also the competencies of students. MOE (2001) further states that the subject integrated curriculum also advocates for an outcome or competence based form of assessment. Therefore,
this form of curriculum follows the system of assessment that is open, democratic, negotiable and largely based on continuous work of students.

One of the major instruments of assessment used is the assignment. A study undertaken by Beane (2000) on the modalities of subject integration in education, revealed and concluded that an assignment should be a piece of work of about two or four thousand words or its equivalent. According to MOE/DANIDA (1999) both formative and summative assignments are given to students throughout their training period. However, MOE/DANIDA (1998) emphasize that only summative assignments add to the final continuous assessment Grades of the students. Previously as in accordance with MOE/DANAIDA (1999), students were previously assessed through the compilation of portfolio which, was done in the second year of their training. Currently the compilation of the portfolio has been replaced by the compilation of the professional and research assignment, which is set by the Education study area that covers aspects from all study areas and related classroom practice (ECZ/ MOE, (2007).

MOE/DANIDA (2001), also cites the Area of curriculum strength as one of summative assignments given to students in their second year. As far as this mode of assignment is concerned, students choose any study area and write some major detailed assignment from any of the chosen study area, whilst on their school teaching practice. MOE (2000), advocates that the Area of curriculum strength provides the student with an opportunity to develop deeper in the chosen study Area, in order to build on more strength and sow seeds of future professional development.

According to MOE (2007), the final examination is the final assessment given to students at the end of their first and second years. MOE (2007) further clarifies that from the year 2000 to 2006, final examinations used to be written only at the end of the first year. However, the scenario changed from 2008 and onwards
where students are subjected to control examination at the end of the first year and final examination at the end of the second year (ECZ, 2009).

Teaching practice is the other mode of assessment adopted by the subject integrated curriculum, where students are sent into schools to practice on how to teach for some time and then return to college to graduate.

MOE (2009), states that there is a change with regard to the period that students spend in the field for teaching practice. MOE (2009) clarifies that students are to spend only the second term of their second year on teaching practice, as opposed to the previous trend where students used to spend the whole of their second year on school teaching practice, where they were guided by mentors.

MOE (2007) explains that mentors are of cardinal help in offering professional guidance to student teachers on school teaching practice. Collaboratively, tutors, head teachers, deputy head teachers, senior teachers; standard officers and mentors assess students during the school teaching practice period. According to ECZ (2009), Students are expected to pass in all the modes of assessments in order to graduate as teachers.

2.6. Policy initiatives aimed at building up the Subject Integrated Curriculum in Basic Colleges of Education.

From the time that the subject integrated curriculum was introduced in Basic Colleges of Education and later on in lower / Middle Basic Schools, Continuing Professional Development Programmes were advocated for. According to the study under taken by Ndopu (2009) on the role of professional associations in the Continuing Professional Development of teachers; the case of the Home-Economics Association of Zambia, Continuing Professional Development is defined
as all types of professional learning under taken beyond the initial training of teachers (Ndopu, 2009). In Basic Colleges of Education, study area holiday workshops and in service short programmes used to be held at various Basic Colleges of Education throughout the country at the same time. Such policy initiatives were tailored and run by the teacher education department, to help to build more capacity into the lecturers regarding the operations of the subject integrated curriculum (Solwezi College of Education Annual Report, 2001).

Later on, the trend of holding study area holiday workshops at various Basic Colleges of Education for all Senior Lecturers throughout the country, was found to be expensive on the part of the Ministry of Education. From that time, in house College study area Continuing Professional Development Workshops were advocated for. Therefore, Basic Colleges of Education were mandated by the Ministry of Education to hold them every week, so as to build up the current curriculum (MOE, 2007).

MOE/DANIDA (1999), points out that the subject integrated curriculum was structured with a realization that, whatever was offered during the college based period, was not enough to equip each student with all the knowledge, skills attitudes and values, needed for a successful career in basic teacher education. Teaching practice period was seen to be some sort of a favourable ground for students to get exposed and involved in the in-service opportunities available in schools (MOE) DANIDA, 1999). This confirms the study carried out by Manchishi et al (1995) under the Zambia Educational Rehabilitation Programme (ZERP) of the Ministry of Education as cited in Mulundano (2006) which showed that by the late 1990s, in-service Education would become highly recognized and a vital component of Continuing Professional Development.

In support of the need for the on going professional development of teachers, MOE (1996) states that the initial training given at pre-service basic teacher training
institution, may be solid and adequate as a start but not sufficient for a life time. It further states that, just like 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 the profession in order to improve learning results (MOE2007). MOE (1992) also encourages teachers to get involved in continuing professional development in order to teach effectively.

This also concurs with Lockhead and Verspoor (1991) who point out that researchers have supported findings that reveal that academic and professional training of teachers have a direct and positive bearing on the quality of their performance and consequently on the achievement of students.

The policy initiatives by the Ministry of Education aimed at building up the subject integrated curriculum in Basic Colleges of Education and Lower/Middle Basic Schools concurs with the study carried out by the Poly Technique South West (1989) on in-service Education and Continuing Professional Development, which stated that in service and Continuing Professional Development at its best is responsive to both teachers as individuals and to teachers as they function in their work place. It moreover stated that,

> to be successful, it has to be the product of continuing negotiation between those planning and delivering the course and those for whom it is intended


### 2.7. Effects of the Subject Integrated Curriculum in Basic Colleges of Education on quality Education.

While the government and some stakeholders are happy and satisfied with the subject integrated curriculum offered in Basic Colleges of Education and its related
schools, other concerned stakeholders have expressed some degree of dissatisfaction concerning the operations of this mode of curriculum.

Mutobo (2009) in a study conducted in five Basic Colleges of Education on the evaluation of the field based component of ZATEC, revealed that some stakeholders such as some catholic bishops expressed their concern on the feasibility and effectiveness of the current curriculum, in relation to producing quality teachers, as there were already mismatches of what was going on in basic colleges and middle/lower basic schools, in terms of study areas/learning areas and their compositions at both levels. Carmody (2004) also argues as to how a clustered curriculum offered in Basic Colleges of Education can produce quality teachers as some of the curriculum’s valuable content remains uncovered due to lack of time factor.

Looking at the way contributory subjects are grouped into study areas as outlined in the ZATEC tutors / students guide, it appears that certain study areas were well and realistically created while others were not well matched with regard to subject content relatedness. For instance, a study area such as technology studies, whose contributory subjects are Home Economics and Industrial Arts, was not well composed, simply because the two subjects’ contents were not related at all. To that effect one would wonder how team planning, team teaching and integrated assessment can be effectively done.

Furthermore, Carmody (2004) wonders as to how a curriculum whose philosophy is that only basics should be taught to students and also assumes that students must have acquired some background knowledge/ content from their previous high school levels, can produce quality teachers. This is very crucial more especially that the curriculum offered in high schools is the differentiated type, where each subject stands on its own and is sometimes not offered to all learners but remains an option.
This scenario contradicts Carmody’s belief on the importance of teachers giving more time to academic instruction to their learners to help them learn better (Carmody, 2004).

However, Beane (1977), is of the idea that the subject integrated curriculum gives each subject and topic more meaning, relevance, more depth and real world applicability as opposed to a disjointed curriculum. He furthermore states that the subject integrated curriculum offers students time for discussion and also time for critical thinking and exploration. In support of the above, a study taken by Caine et al (1992) on the advantages and disadvantages of an integrated curriculum, revealed more on the merits of the subject integrated curriculum by summarizing that learners are also encouraged to integrate learning experiences into their schemes of meaning so as to broaden and deepen their understanding of themselves and their world.

Moreover, that learners are engaged in seeking, acquiring and using knowledge in an organic and not in an artificial way. Hence forth, the integrated knowledge is called forth in the context of problems, interests, issues and concerns at hand. Caine et al (1992) further clarifies that since life itself does not know the boundaries or compartments of what we call disciplines of knowledge, such a curriculum is ideal as it uses knowledge in an integrated manner.

According to Solwezi College of Education Annual report (2009), students’ final examinations overall performance has been improving, ever since the introduction of the Subject Integrated Curriculum, as can be seen from some years’ final examination results analyses in the table below:

<table>
<thead>
<tr>
<th>Year</th>
<th>No. Sat</th>
<th>No. Passed</th>
<th>Percentage</th>
<th>No. Referred</th>
<th>Percentage</th>
<th>No. Failed</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>258</td>
<td>253</td>
<td>98.1%</td>
<td>3</td>
<td>1.2%</td>
<td>2</td>
<td>0.7%</td>
</tr>
<tr>
<td>2001</td>
<td>688</td>
<td>679</td>
<td>98.7%</td>
<td>9</td>
<td>1.3%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2003</td>
<td>418</td>
<td>416</td>
<td>99.5%</td>
<td>2</td>
<td>0.5%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2007</td>
<td>693</td>
<td>536</td>
<td>77.3%</td>
<td>107</td>
<td>15%</td>
<td>50</td>
<td>7.2%</td>
</tr>
<tr>
<td>2008</td>
<td>484</td>
<td>481</td>
<td>99.4%</td>
<td>0</td>
<td>0</td>
<td>03</td>
<td>0.6%</td>
</tr>
<tr>
<td>2009</td>
<td>113</td>
<td>109</td>
<td>96.5%</td>
<td>0</td>
<td>0</td>
<td>04</td>
<td>3.54%</td>
</tr>
</tbody>
</table>

(Source: ECZ, 2009)

2.8. Summary

The literature above reveals that the subject integrated curriculum was introduced in Basic College of Education in order to address the issue of quality education, which was compromised by the previous differentiated curriculum. It has also revealed that some stakeholders were happy and satisfied that the subject integrated curriculum was suitable for training lower/middle basic school teachers. However, the literature has also revealed that concerned stakeholders like catholic bishops expressed some degree of dissatisfaction that the curriculum was too clustered.

Having reviewed the Literature on the subject integrated curriculum offered in Basic Colleges of Education, the research methodology will be discussed in the next chapter.
CHAPTER THREE

METHODOLOGY

3.0. Introduction

Basically, this chapter deals with the methods that were used in carrying out the case study. These include the research design, target population, sample size, sampling procedure, research instruments, data collection procedure and data analysis.

3.1. Research design.

The research was a case study, which aimed at collecting detailed information through the use of a variety of data collection procedures, as propounded by Leedy and Ormrod (2010), in order to establish the effects of the subject integrated curriculum on quality education at Solwezi College of Education.

3.2. Location of the Study

Basically, the study was conducted at Solwezi College of Education. However, to help in the verification of students’ performance during and after training, the DEBS office, Solwezi Basic, Kikombe Basic, Mushitala Basic, and Kyalalankuba Basic schools were part of the study location. Solwezi College of Education was chosen as the major location of the study, because it was one of the three pilot colleges that began training lower/middle Basic school teachers in the subject integrated curriculum. The DEBS office was chosen as one of the study locations because of its role of monitoring Educational standards in basic schools. The four basic schools were chosen as study locations simply because that is where some of the student teachers from Solwezi College of education usually went for
their teaching practice and also that the cited schools had serving teachers who were trained under the subject integrated curriculum.

3.3. Study population
The research targeted senior lecturers, students (both college and school based) Education standards officers, serving teachers recently trained from Solwezi College of Education, Deputy Head teachers and school mentors.

3.4. Sample size
The sample constituted hundred respondents such as the principal of Solwezi College of Education, Vice Principal of Solwezi College of Education, the DESO for Solwezi District, 7 heads of section of Solwezi College of Education, 28 senior lecturers of Solwezi College of Education (Four from each study area), 46 college based students, 4 Deputy Head teachers (one from each basic school), 4 school mentors (one from each basic school), 4 school based students on teaching practice (one from each school) and 4 serving teachers recently trained from Solwezi College of Education (one from each school).

Bio Data of Senior Lecturer Respondents
Gender of Respondents
The figure below shows the sex of the respondents. As can be seen from the figure, most of the respondents of about 31 (83.8%) where male while only 6 respondents, representing (16.2%) where female.
The above figure shows that there were more male and fewer female senior lecturers at Solwezi College of Education.

**Age of Respondents**

Respondents were asked to indicate their ages. Figure 2 below shows their responses. It is clear from the figure that most of the respondents of about 18(48.6%) were above 45 years, 15 (40.5%) respondents indicated that they were between 36-45 years while the rest (10.8%) indicated that they were between 26-35 years old.
From the above figure, it can be clearly noted that the majority of the respondents were above forty-five years old, implying that they were mature and had lasted enough in the Ministry of Education, therefore, they were capable and suitable enough to provide information on the effects of the subject integrated curriculum offered at Solwezi College of Education.

**Highest professional qualification of respondents**

Respondents were further asked to indicate their highest professional qualifications. As can be seen from table 4.4 below, 25 (67.6%) of the respondents indicated that they were Bachelor of Education degree holders, 10 (27.0%) were secondary teachers diploma holders and 2 (5.4%) indicated that they were Master of Education degree holders.
Table 4.4: Highest Professional qualification of respondents

<table>
<thead>
<tr>
<th>Highest qualification</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary teachers Diploma</td>
<td>10</td>
<td>27.0</td>
</tr>
<tr>
<td>Bachelor of Education Degree</td>
<td>25</td>
<td>67.6</td>
</tr>
<tr>
<td>Master of Education</td>
<td>2</td>
<td>5.4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>37</td>
<td>100.0</td>
</tr>
</tbody>
</table>

It is very clear from the above table that the majority of the respondents were Bachelor of Education degree holders. They were therefore qualified to deliver the subject integrated curriculum that they are obliged to offer in their learning institution. This has been pointed out so because qualification of the teaching staff is a key factor to the promotion and further more attainment of quality Education in any given learning/training institution.

**Position held at the place of work**

Respondents were asked to indicate the position that they held at their places of work. As can be seen from table 4.5 below, 28 (75.7 %) of the respondents were senior lecturers, 7 (18.9%) were Heads of Sections, the last two representing 2.7 % for each one of them were the Principal and Vice Principal.

Table 4.5: Responses on positions held at the place of work

<table>
<thead>
<tr>
<th>Position Held</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior lecturer</td>
<td>28</td>
<td>75.7</td>
</tr>
<tr>
<td>Heads of sections</td>
<td>7</td>
<td>18.9</td>
</tr>
<tr>
<td>Principal</td>
<td>1</td>
<td>2.7</td>
</tr>
<tr>
<td>Vice Principal</td>
<td>1</td>
<td>2.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>37</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Number of years served in current position.

As can be noted from table 4.6 shown below regarding the number of years that respondents had served in their current positions, 15 (40.5%) had served from 6-10 years, 7 (18.9%) had served from 0-5 years while 8 (21.6%) served from 11-15 years. 6 (16.2%) indicated that they had served from 16-20 years and while one representing 2.7% served from 21 – 25 years.

<table>
<thead>
<tr>
<th>Years served in Current Position</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 5</td>
<td>7</td>
<td>18.9</td>
</tr>
<tr>
<td>6- 10</td>
<td>15</td>
<td>40.5</td>
</tr>
<tr>
<td>11- 15</td>
<td>8</td>
<td>21.6</td>
</tr>
<tr>
<td>16 – 20</td>
<td>6</td>
<td>16.2</td>
</tr>
<tr>
<td>21 – 25</td>
<td>1</td>
<td>2.7</td>
</tr>
<tr>
<td>Total</td>
<td>37</td>
<td>100.0</td>
</tr>
</tbody>
</table>

This entails that the majority of the respondents lasted long in their current positions. This also implies that they professionally witnessed the inception of the subject integrated curriculum in Basic Colleges of Education like Solwezi, more especially that Solwezi College of Education was one of the three pilot colleges. It also means that the majority of the lectures for some good duration implemented the subject integrated curriculum, right from its inception, therefore, they were in a better position to provide information as to whether that mode of curriculum was promoting quality education at Solwezi College of Education or not.
Area of specialization of senior lecturers whilst at the highest professional institutions

Respondents were asked to indicate their areas of specialization whilst at the highest professional institutions. As can be seen from table 4.7 shown below; 5 (13.5%) respondents specialized in Art and Design/ Social Studies, 4 (10.8%) specialized in Home Economics and English while the other 4 (10.8%) specialized in Industrial Arts. 4 (10.8%) more specialized in Mathematics, 3 (8.1%) specialized in Science and the other 3 (8.1%) specialized in English and Zambian languages. 3 (8.1%) more specialized in Geography and Religious Education, 2 (5.4%) respondents specialized in Physical Education and Social Studies while 2 (5.4%) others specialized in History and Religious Studies. 2 (5.4%) respondents specialized in Music and English, 2 (5.4%) others specialized in Geography and Mathematics while 1 (2.7%) respondent specialized in Agricultural Science.
Table 4.7: Responses on Area of Specialization at Highest Professional Institution

<table>
<thead>
<tr>
<th>Area of Specialization</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art and design / S/ studies</td>
<td>5</td>
<td>13.5</td>
</tr>
<tr>
<td>Home Economics / English</td>
<td>4</td>
<td>10.8</td>
</tr>
<tr>
<td>Industrial Art</td>
<td>4</td>
<td>10.8</td>
</tr>
<tr>
<td>Mathematics</td>
<td>4</td>
<td>10.8</td>
</tr>
<tr>
<td>Science</td>
<td>3</td>
<td>8.1</td>
</tr>
<tr>
<td>English / Zambian languages</td>
<td>3</td>
<td>8.1</td>
</tr>
<tr>
<td>Geography / Religious Studies</td>
<td>3</td>
<td>8.1</td>
</tr>
<tr>
<td>Music</td>
<td>2</td>
<td>5.4</td>
</tr>
<tr>
<td>Physical Education/S/Studies</td>
<td>2</td>
<td>5.4</td>
</tr>
<tr>
<td>History / Religious Studies</td>
<td>2</td>
<td>5.4</td>
</tr>
<tr>
<td>Geography / English</td>
<td>2</td>
<td>5.4</td>
</tr>
<tr>
<td>Geography / Mathematics</td>
<td>2</td>
<td>5.4</td>
</tr>
<tr>
<td>Agricultural Science</td>
<td>1</td>
<td>2.7</td>
</tr>
<tr>
<td>Total</td>
<td>37</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Study Area of Operation as a Tutor**

Respondents were asked to indicate the study areas in which they did operate from as Tutors. Table 4.8 below shows their responses. 6 (16.2%) respondents operated from Expressive Arts, the other 6 (16.2%) operated from technology studies, then five groups of five respondents representing 13.5% for each operated from Mathematics Education, Science Education, Literacy and languages Education, Education studies, Social-Spiritual and Moral Education.
Table 4.8: Responses on study area of operation of Tutors

<table>
<thead>
<tr>
<th>Study Area</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expressive Arts</td>
<td>6</td>
<td>16.2</td>
</tr>
<tr>
<td>Technology</td>
<td>6</td>
<td>16.2</td>
</tr>
<tr>
<td>Mathematics</td>
<td>5</td>
<td>13.5</td>
</tr>
<tr>
<td>Science</td>
<td>5</td>
<td>13.5</td>
</tr>
<tr>
<td>Literacy &amp; languages</td>
<td>5</td>
<td>13.5</td>
</tr>
<tr>
<td>Education</td>
<td>5</td>
<td>13.5</td>
</tr>
<tr>
<td>Social and Spiritual Moral Education</td>
<td>5</td>
<td>13.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>37</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

3.5. Sampling procedure

Purposive sampling was used to identify respondents such as the Principal, Vice Principal, District Education Standards Officer, Heads of Sections, Deputy Head Teachers, Mentors and recently trained serving teachers as in accordance with White (2005). Purposive sampling was used simply because the above cited subjects were the target group of people believed to be key-informants in terms of providing relevant and reliable information related to the study, due to their positions at the place of work and training background.

Stratified random sampling technique was used to pick out respondents such as students and Senior lecturers because these respondents needed to come from homogeneous subgroups with equal numbers from all classes (of which gender was to be considered). Senior lecturers also were to come from all the seven study areas. As it is the procedure of stratified random sampling as in accordance with Best and Khan (2006), simple random sampling was further utilized in arriving at the actual number of respondents that were needed in each subgroup (stratum). Stratified random sampling helped in ensuring that subgroup within
the target population of students and senior lecturer were represented and also unbiasedly included in the sample size.

3.6. Research Instruments

Being a case study, the research aimed at collecting both primary and secondary data to help in the verification of the validity of the collected data, as proposed by Leedy and Ormrod (2010).

In order to collect detailed information that would help to understand the phenomenon under study as supported by White (2005), a variety of data collection instruments were used. These included the interview guide, questionnaires, lesson observation guide, participant observation guide (the researcher become a participant observer at the institution under study for four months) and focus group discussion guide. Secondary data was collected through content analysis of authentic documents like annual college reports, teacher education literature and internet documents related to the study. The above cited qualitative data collection instruments were chosen because they were suitable for case studies, as they allowed the researcher to interact with the respondents and the study location from a natural context that was cardinal for collecting extensive data as supported by Leedy and Ormrod (2010).

The use of various data collection sources enabled the researcher to collect comprehensive rich data as exemplified by Best and Khann (2006).

3.7. Data Collection procedures

Before the actual data collection process commenced, the Researcher got permission from the office of the Principal of Solwezi College of Education and also from the District Education Board Secretary of Solwezi District. The above procedure was made much easier by the introductory letter that was given to
the researcher from the office of the Assistant Dean of Post Graduate Studies of the University of Zambia. Thereafter, the Researcher started working with the target sample size.

Primary data were first and foremost collected through the use of observation guides from four (4) sampled Solwezi College of education second year students who were on school teaching practice and also from the four (4) sampled teachers recently trained from Solwezi College who were teaching in the four nearby Basic Schools of Kyalalankuba, Solwezi, Kikombe and Mushitala. This was quickly done as schools by that time were about to close (second term, July-August, 2010). Furthermore, Focus Group Discussions were conducted on the forty-six (46) college based first and second year students in groups of ten and lastly six students per each Focus Group Discussion. Questionnaires were also administered to respondents like the Principal of Solwezi College of Education, the Vice Principal of Solwezi College of Education, Heads of Sections and Senior Lecturers. Following that, interviews were conducted with Solwezi District Education Standard Officer (DESO), Deputy Head teachers and mentors of the four near-by Basic Schools. Being a participant observer the researcher continually and directly observed all that was going on at the institution under study for the period of four months.

Secondary data were also collected from available authentic college archival reports/literature, Examinations Council of Zambia results analyses, Teacher Education Department Documents and Literature related to the study.

3.8. Data analysis

In accordance with Kombo and Tromp (2005), qualitative data collected from focus group discussion guide, interview guide and observation guides were analyzed through thematic analysis by coding, grouping and meaningfully interpreting
emerging themes. Quantitative data from questionnaires were analyzed using statistical package for social sciences (SPSS) which generated frequency tables and percentages that were presented in form of tables and pie charts. Data collected from various sources (primary and secondary sources) substantiated each other and was integrated to produce comprehensive, rich and valid data that addressed the study objectives.

3.9. Ethical issues

Before the actual data collection process commenced, the researcher got permission from the office of the principal of Solwezi College of Education and also from the District Education Board Secretary of Solwezi District. This was done relation to what White (2005) has proposed as the first cardinal ethical requirement that researchers should observe before commencing the actual research procedures. In order to obtain honest responses and to allow respondents to be free, the researcher assured the respondents of anonymity and confidentiality by asking them not to disclose their names.

3.10. Summary

The methodology part of the research has been presented while outlining the instruments that were used in the collection of data. The findings of the study are then presented in the following chapter.
CHAPTER FOUR
DATA PRESENTATION

4.0 Introduction

This Chapter presents the findings of the study that was looking at the effects of the subject integrated Curriculum offered in Basic Colleges of Education, by looking at the case of Solwezi College of Education. The findings from Senior Lecturers are presented first, followed by those of the categories of Solwezi District Education officer, Deputy Head Teachers and School Mentors, College Based Students, participant observations and lesson observations. The findings are presented according to the following objectives:

- To investigate on the reasons for the introduction of the Subject Integrated Curriculum offered at Solwezi College of Education.
- To find out how the Subject Integrated Curriculum was designed at Solwezi College of Education.
- To examine how the subject Integrated Curriculum was implemented at Solwezi College of Education
- To determine whether the policy initiative of continuing professional Development programmes helped in building up the subject integrated curriculum at Solwezi College of Education or not.
- To establish the effects of the subject integrated curriculum at Solwezi College of Education on quality education.
4.1 Reasons for the introduction of the Subject Integrated Curriculum at Solwezi College of Education

4.1.1 Findings from Senior Lecturers.

The reasons given by respondents were that the Ministry of Education wanted to reduce on the number of subjects so as to help students’ / Learners’ understanding. Lecturers also stated that the Ministry of Education wanted to train teachers in an integrated curriculum that was responsive and that which met the learning needs of Lower/Middle Basic school learners, whose brains operated in an integrated whole manner.

4.1.2 Findings from Solwezi District Education Standards Officer, Deputy Head Teachers and School Mentors.

In regard to reasons for the introduction of the subject integrated curriculum offered at Solwezi College of Education, views from this category of respondents indicated that the Curriculum was seen to be a suitable mode for training teachers to teach learners at the Lower/Middle Basic school level, whose brains were not fully developed to accommodate separate contents from the previous over loaded curriculum (the differentiated type).

Other responses indicated that the Ministry of Education wanted to de –congest the previous overloaded curriculum which was discovered to have been the cause of poor quality of education in Zambia. Views from respondents further revealed that the Ministry of Education discovered that the previous curriculum arrangement was not suitable for the age of the learners at Lower/Middle Basic schools, therefore it
failed to promote quality education. For example, one Deputy Head teacher said that,

\[\textit{indeed, the previous curriculum failed to promote quality Education because most learners at the Lower/Middle Basic Schools were failing to read or grasp basic concepts because it has a lot of subjects.}\]

4.1.3. Findings from College Based Students.

College Based Students indicated several reasons that led to the introduction of the subject Integrated Curriculum offered at Solwezi College of Education. The majority indicated that, the curriculum was introduced in order to reduce on the number of subjects to enable learners learn better. They also explained that it was introduced in order to improve on the quality of Education in Basic Colleges of Education and Lower/Middle Basic Schools, since the previous overloaded Curriculum failed to promote quality education. Helping to carter for the teacher shortages that existed in the Lower/Middle Basic schools was one of the reasons that the students indicated. Regarding this reason, one student said,

\[\textit{The grouping of several subjects into learning Areas can help to reduce on the number of teachers required per school, because the grouping of subjects into learning areas, can help few teachers to run the whole school Curriculum.}\]

Further, respondents indicated that the curriculum was introduced in order to help to meet the learning needs of the learners at the Lower/Middle Basic School level because the previous differentiated curriculum was found to be unsuitable for the age of learners.
4.2. Design of the Subject Integrated Curriculum at Solwezi College of Education.

4.2.1 Findings from Senior Lecturers

Concerning the design of the subject integrated curriculum at Solwezi College of Education, all Lecturers indicated that it was designed into seven study areas. These were Education Studies (which constituted contributory subjects such as Sociology, Psychology, Philosophy, Audio Visual Aids and Special Education), Social, Spiritual and Moral Education (which constituted contributory Subjects such as Religious Education, Social Studies, Civics, History and Geography), Expressive Arts (which constituted contributory Subjects such as Art and Design, Music and Physical Education), Technology Studies (which constituted subjects like Home Economics and Industrial Arts), Literacy and Languages Education (which constituted subjects like English, Literacy and Zambian Languages), Integrated Science (which constituted contributory Subjects like Integrated Science and Agricultural Science) and Mathematics Education (which was not integrated with any other subjects, but rather stood alone).

In addition, Senior lecturers were asked to comment on the format of the subject integrated curriculum offered at Solwezi College of Education with that which they found in Lower/Middle Basic Schools during the monitoring of Students. Senior lecturers indicated that except for the format of Mathematics and Social, Spiritual and Moral Education study areas, the rest of the study areas did not correspond with the format found in the Lower/Middle Basic Schools. The above findings implied that there was no subject Integration in the Mathematics study area but only in the other six study areas. Moreover, the findings also implied that the curriculum offered at Solwezi College of Education did not match with that of the needs of Lower Middle Basic Schools.
In the same line of thought, senior lecturers were asked to indicate whether they were happy and satisfied with the classification of study areas at Solwezi College of Education or not. Below were the results.

Table 4.9: Responses on whether happy and satisfied with the classification of study areas or not.

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>25</td>
<td>67.6</td>
</tr>
<tr>
<td>Yes</td>
<td>10</td>
<td>27.0</td>
</tr>
<tr>
<td>Somehow</td>
<td>2</td>
<td>5.4</td>
</tr>
<tr>
<td>Total</td>
<td>37</td>
<td>100.0</td>
</tr>
</tbody>
</table>

As can be seen from the table, 25 (67.6%) indicated that they were not happy and satisfied, 10 (27.0%) respondents indicated that they were happy and satisfied while 2 (5.4%) respondents indicated that they were somehow happy and satisfied with the classification of the curriculum.

A further question was asked for respondents to give reasons for their above answers. Respondents who indicated that they were not happy and satisfied (67%) explained that contributory subjects in certain study areas had no defineable relationship in their bodies of knowledge, so much that it was difficult to effectively integrate contents and that led to discrete coverage of contents.

Some indicated that certain study areas like Social, Spiritual and Moral Education and Education Studies had many contributory subjects such that detailed coverage of study area syllabuses within the allocated periods was not possible, henceforth only basics were covered. Others exemplified that, the study area and operations of the subject integrated curriculum inhibited practical oriented study areas from holding comprehensive consecutive practical lessons due to limited time.
Respondents who indicated that they were happy and satisfied with the classification of the curriculum at Solwezi College of Education indicated so because ever since their subjects (Mathematics and Integrated Science) were separated from each other, they stood as study areas on their own without combinations with any other subjects.

Those who indicated that they were somehow happy and satisfied clarified that classification of contributory subjects in their study area was fine except for the inclusion of Special Education, which seemed to have been a more specialized subject on its own. Such respondents further stated that classification of subjects in their study area favoured only Senior lecturers who specialized in Special Education, because they were also capable of teaching any other Education Studies contributory Subjects. The above results implied that most Senior lecturers at Solwezi College of Education were not happy and satisfied with the way contributory subjects were classified.

4.2.2. Findings from Solwezi District Education Standards officer, Deputy Head Teachers and School Mentors.

Responses from most respondents indicated that they were not aware of how the subject integrated curriculum was designed at Solwezi College of Education. Findings from respondents further revealed that they were only fully aware of the subject integrated curriculum offered in Lower/Middle Basic Schools. Respondents clearly stated that the design of the subject integrated curriculum offered at Solwezi College of Education was only known to Senior Lecturers and their Students. However, some School Mentors indicated that they became aware of the design of the subject integrated curriculum of Solwezi College of Education during their training period as students at the College. To this effect, one of them said:
I can not exactly state the number of Study Areas, but what I know is that the curriculum is offered in Study Areas.

The above responses seems to imply that there was no co-ordination in the operations of Solwezi College of Education and the Lower/Middle Basic Schools.

4.2.3. Findings from College Based Students.

Views from focus group discussions with College Based Students indicated that the subject integrated curriculum at Solwezi College of Education was designed into seven study areas of the names of Technology Studies, Expressive Arts, Social, Spiritual and Moral Education, Mathematics Education, Literacy and Languages Education, Integrated Science and Education Studies. Other views from students revealed that each of the seven study areas had contributory subjects that formed them up. Contributing on the formation of study areas, one of the students explained that:

Some Study Areas have many contributory subjects, other have few while others have only one subject. Furthermore, some Study Areas have related subjects while subjects in other Study Areas are not related at all.

Students further indicated that they were mandated to study all the contributory subjects in all the study areas despite not having studied all of them at High School level, since subjects like Home Economics, Art and Design, Agricultural Science, Industrial Arts and Religious Education, were offered as optional in most High Schools.
4.2.4. Findings from participant observations of Senior Lecturers and College Based Students.

Through interaction and close observations of each study area, the researcher discovered that the subject integrated curriculum offered at Solwezi College of Education was previously designed into six study areas. At the time the study was being conducted, it was designed into seven study areas because of the separation of Mathematics from Integrated Science Education. Therefore, Education Studies, Technology Studies, Expressive Arts, Social Spiritual and Moral Education, Literacy and Languages Education, Integrated Science and Mathematics Education formed up the subject Integrated Curriculum at Solwezi College of Education. It was also discovered that each study area was made up of contributory subjects. The researcher established that Technology studies and Expressive Arts were made up of unrelated contributory subjects while Education Studies and Social, Spiritual and Moral Education Studies were made up of many contributory subjects. It was also in the discovery of the researcher that Mathematics stood alone as a study area.

4.3. Implementation of the Subject Integrated Curriculum at Solwezi College of Education.

4.3.1 Findings from Senior Lecturers.

Respondents were asked to explain on how the subject integrated curriculum was implemented in their study areas. Senior lecturers indicated that similar topics among contributory subjects within study areas were integratively planned, taught and assessed, while unrelated topics were separately covered using contact and non contact periods. In addition, it was indicated that other topics were covered through summative assignments, professional paper and modules, that were given to students in their first and second year. Views from other Lecturers revealed that topics in the Mathematics study area were discretely planned, taught and assessed during contact and non contact periods, because the study area was not integrated with any other subject.
In line with the implementation of the subject integrated curriculum at Solwezi College of Education, Senior lecturers were asked to indicate whether it was easy to effectively deliver the Curriculum in their study areas or not. 25 (67.6%) indicated that it was not easy, 10 (27.0%) indicated that it was very easy while 2 (5.4%) indicated that it was only easy under certain instances.

Lecturers who indicated that it was not easy (67.6%) explained that it was not easy to integratively plan, teach and assess syllabus contents in some study areas because the contributory subjects that formed them were totally different. As a result, most syllabus contents were discretely covered and that resulted in Students not learning the skill of subject integration at College level. Respondents further stated that real subject integration would have been taken place if only related subjects were grouped together.

Respondents who indicated that it was very easy (27.0%) explained that it was very easy to effectively deliver the curriculum in their study areas (Mathematics and Integrated Science Education) after they were separated than before. They further indicated that they had a lot of time to cover every relevant topic. Senior lecturers who indicated that it was only easy under certain instances (2.7%) explained that, since every Lecturer in Education studies was mandated to teach all the contributory subjects integratively within the study area, it was only very easy for those who also specialized in Special education, than those who only studied the General education Subjects (Sociology, Psychology, Philosophy and Educational Administration) availed to all teachers at initial professional training levels. They also indicated that, Special Education needed to stand alone or that all Education study area Tutors needed to undergo some intense induction in it, to enable them effectively deliver the integrated curriculum.
4.3.2 Findings from Solwezi District Education Standards Officer, Deputy Head teachers and School Mentors.

Just like views on the design of the subject integrated curriculum at Solwezi College of Education from the majority of the respondents, responses from respondents on this aspect indicated that they did not know how the subject integrated curriculum was offered at Solwezi College of Education.

4.3.3 Findings from College Based students.

Regarding how the subject integrated curriculum of Solwezi College of Education was implemented, responses from College Based students revealed that related topics among contributory subjects within study areas were integratively taught and assessed while unrelated topics were discretely taught. Other findings from students revealed that the curriculum was implemented through formative and summative assignments, modules, teaching practice and final examinations.

Similarly, students were asked to discuss their role in the implementation of the subject integrated curriculum. Views from some students revealed that they were responsible for their own learning through group discussion activities and group presentations. Other responses revealed that students learnt on their own during research and consultation periods with the guidance of tutors. Further, students indicated that their role was to do whatever they were told by Senior lecturers.

In relation to implementation of the subject integrated curriculum at Solwezi College of Education, college based students were asked to discuss on the effectiveness of the teaching and learning processes in different study areas. Views from students revealed that the teaching and learning processes were very effective theoretically but not practically in most study areas, because contributory subjects in some study areas were not related. Other views from students indicated
that most topics in some study areas were discretely covered. To this effect, students indicated that they did not know how to integrate topics of contributory subjects found in most study areas. Further, responses also revealed that students were holistically attended to by lecturers, but the fact that some study areas were clustered with several subjects, contents and practical lessons covered during the teaching and learning processes were few and not detailed. While expressing sadness on the reality of this situation, to cite one student:

*Just imagine Madam! We shall graduate as shallow minded Teachers.*

### 4.3.4. Findings from participant observations on Senior Lecturers and College Based Students.

The researcher observed that implementation of the subject integrated curriculum was carried out through contact and non contact periods. Senior lecturers facilitated in all the teaching and learning processes, in class during contact periods with students and also gave maximum guidance to students during their research and consultation periods (non contact periods). It was observed that the curriculum was also implemented through continuous assessment from summative assignments, first year control examinations, teaching practice and end of second year final examinations. Modules were also found to be another strategy of curriculum implementation at Solwezi College of Education.

Through lesson observations, the researcher noticed that most of the senior lecturers executed work to the best of their professional abilities. Lecturers did team plan, team teach and integratively assessed students’ work cooperatively within study areas. However, it was observed that subject integration was not easy in study areas like Expressive Arts, Technology studies and Social, Spiritual and Moral Education due to unrelated contributory subjects that formed up such study areas.
Learner centered methodologies such as group class presentations, demonstration teaching, micro teaching, group discussions and project work were effectively used in curriculum delivery. The criterion based mode of assessment which was not only examination centred but also based on he continuous assessment of students was consistently used in all the seven study areas. The researcher observed that both theoretical and practical summative assignments that made up students’ continuous assessment marks were timely given to students and were marked on time.

4.4. Whether continuing professional Development programmes helped in building up the subject Integrated Curriculum at Solwezi College of Education or not.

To address this objective, data was sought from Senior lecturers who were directly connected to Continuing Professional Development Programmes. Data was also sought from participant observations and like wise from authentic reports and MOE documents that were connected to this aspect.

4.4.1 Findings from Senior Lecturers.

Concerning this aspect of the study, respondents indicated that continuing professional Development Programmes aimed at building the subject integrated curriculum were held at Solwezi College of Education once every week on Wednesday or Fridays. Senior lecturers indicated that the continuing professional Development Programmes that were held in various study areas helped in building up lecturers competencies in the delivery of the subject integrated curriculum because during such programmes, subject integration of different lessons was collectively planned, discussed and demonstrated to study area members. In addition, findings revealed that difficult topics were addressed as well as different
gained personal professional experiences were shared to all members by the members themselves.

However, other views indicated that, that which could really build up lecturers competencies, which was also crucial in the delivery of the curriculum like sharing of background information of different contributory subjects within study areas was not covered. Therefore, Lecturers indicated their need for sharing background information of different contributory subjects during such meetings in order to build capacity into all Senior Lecturers, to enable them deliver the integrated curriculum competently.

4.4.2 Findings from Participant Observations.

The researcher observed that study area and college continuing professional Development meetings were held once every week on Wednesdays or Fridays. Such in house meetings usually aimed at demonstrating integrated lessons in different study areas and sometimes, effective ways of handling difficult topics were demonstrated to members within study areas. However, some Lecturers complained that, what they needed from such in house meetings in relation to the design and implementation of the subject integrated curriculum was not the methodological aspects only but also the background content information of different contributory subjects that were found within study areas, in which they had no professional background training. Despite the above, the researcher observed that most Lecturers were active and keen in attending such in house Professional Development Programmes.
4.5 Effects of the subject Integrated Curriculum at Solwezi College of Education on Quality of Education.

4.5.1 Findings from Senior Lecturers.

In regard to the effects of the subject integrated curriculum at Solwezi College of Education on the quality of education, some senior lecturers indicated that the Curriculum had at least helped in the achievement of quality education since through it the assumed basic body of knowledge, skills, values and attitudes were imparted into trainee students. To that effect, other views from Senior lecturers indicated that goals set in college mission statements were somehow achieved.

In relation to this point, Senior lecturers were asked to explain on students’ performance in all assessment. The majority indicated that students’ performance was very good since the introduction of the subject integrated curriculum at Solwezi College of Education. Further, it was also indicated that from 1998 to 2002, students’ performance was very good. From 2003 to 2006 students’ performance was very bad due to the restructuring exercise of the Ministry of Education. From 2007 to 2009, students’ performance had been very good, such that the College was even commended for producing the best 2009 final examination ZATEC results in the country, by the Permanent Secretary of the Ministry of Education.

On the contrary, some Senior lecturers explained that the grouping of unrelated contributory subjects into same study areas made integration and coverage of expected knowledge, skills, values and attitudes difficult. That led to discrete coverage of contents of contributory subjects within study areas, leading to students failing to learn subject integration at college level. They also stated that the clustering of many subjects within one study area made it difficult for the necessary basic contents, skills, values, attitudes and methodologies (Syllabus contents) to be holistically imparted into students due to inadequate time.
In addition, other Senior lecturers explained that compulsory teaching of all contributory subjects by all Lecturers in some study areas despite having no professional training in all of them made some Lecturers fail to holistically impart the necessary knowledge, skills, values and methodologies competently.

It was also indicated that mismatches in the design of the college curriculum and that of the intended schools of operation made the college curriculum not to correspond to society and that such mismatches an could not promote quality of education. Finally, the Senior lecturer respondents also explained that the study area concept and operations of the subject integrated curriculum inhibited practical oriented study areas from conducting comprehensive consecutive practical lessons due to adequate time. That resulted in students graduating with less practical skills.

4.5.2. Findings from Solwezi District Education Standards Officer, Deputy Head teachers and School Mentors.

Views from respondents indicated that at least the curriculum was able to produce teachers that were able to impart the needed knowledge, skills, values and attitudes into Lower/Middle Basic School learners. Other views indicated that since student teachers and teachers recently trained from Solwezi College were performing very well in the classroom situations, then the curriculum had a positive effect on quality education in the country.

However, it was also revealed that society was complaining that student teachers and working teachers recently trained from Basic Colleges of Education such as Solwezi, faced problems in teaching practical lessons, integrating lessons and lacked the Lower/Middle Basic School level methodologies. One respondent lamented that:

It’s like the College Curriculum does not emphasize on the methodological aspect.
Further, findings revealed that the subject integrated curriculum of Solwezi College of Education did not correspond with that of the Lower/ Middle Basic Schools, therefore, it was seen to be irrelevant to the needs of the society (target schools).

4.5.3. Findings from College Based Students.

In order to capture information on the effects of the subject integrated curriculum on the quality of education, students were asked to indicate whether the subject integrated curriculum was enabling them to acquire all the necessary knowledge, skills, attitudes and values required for an effective teacher or not. Students were also asked to indicate their performance in all college assessment and as well as to indicate the challenges they faced in relation to the design and implementation of the subject integrated curriculum offered at Solwezi College of Education.

Most students indicated that whatever basics were taught from that mode of curriculum were enough for them to go and teach effectively because the level of learners that they were supposed to go and teach did not need much in their brains. Other respondents indicated that the learner centered methodologies that were used in the implementation of the curriculum helped them to fully participate in the course and that helped them to acquire the necessary basic knowledge, skills, values and methodologies needed for effective teaching. In appreciation of the learner centered methodologies, one student said:

*I have learnt a lot through group discussions, class presentations and research and consultation periods.*

In addition, students were of the view that their performance in all college assessment was very good. It was indicated that integrative teaching and assessment used in the implementation of the subject integrated curriculum,
helped to compensate student strengths and weaknesses in different contributory subjects of different study areas and that helped them to perform very well.

On the contrary, other views indicated several challenges that students faced in relation to the design and implementation of the subject integrated curriculum offered at Solwezi College of Education. For instance, it was indicated that some study Areas were over crowded with many contributory subjects whose integrated contents were supposed to be covered within the time allocated to such study areas. As a result, a lot of syllabus contents were not covered. Findings also revealed that practical study areas found it difficult to conduct comprehensive practical lessons due to limited time, which resulted in students graduating with more basic information but limited practical skills.

4.5.4. Findings from participant observations.

The researcher observed and verified from final examination analyses that ever since the subject integrated curriculum was introduced at the college under study, final examination results seems to have improved. The integrative assessment was found to enhance students’ good performance as their strengths and weaknesses in contributory subjects were easily complemented in final assessment Grades.

In addition, the researcher observed that the learner centered methodologies used in the implementation of the subject integrated curriculum made students to fully participate in the whole course programmes, hence helping them to acquire the necessary basic knowledge, skills, value, attitudes and methodologies. Clustering of many subjects into one study area, made it difficult for adequate syllabus work load to be covered. Therefore, only shallow basics were covered. Such a scenario was not healthy for a teacher to be, who was expected to graduate with adequate knowledge, skills and methodologies needed for effective classroom work delivery.
Further, the grouping of unrelated contributory subjects into same study areas, like was the case for technology and expressive Art studies, made topic integration and coverage of study area work load difficult. That instead led to discrete coverage of contents of contributory subjects within study areas. That resulted in student teachers failing to learn the skill of topic integration at college level. Like wise, the researcher also observed that practical study areas rarely conducted practical lessons. They complained that it was not easy to carry them out within the study area allocated time. That resulted in student teachers graduating with less practical skills.

4.5.5. Findings from Lesson observations of working Teachers recently trained from Solwezi College and trainee Student teachers on School teaching practice.

This data collection strategy was employed in order to establish the performance of trained teachers and trainee teachers on teaching practice in the actual classroom, in order to help the researcher ascertain whether the subject integrated curriculum offered at the college under study was able to produce teachers who were able to teach effectively or not.

Despite having differences in the levels of classroom performance, all the eight teachers who were observed by the researcher planned, taught and evaluated their lessons professionally. Most of them had up to date files that were periodically checked by the school authorities. The researcher used a comprehensive observation guide as can be seen from Appendix iv. However, upon going through the files of the teachers, the researcher discovered that most of them, especially the trainee teachers had problems in integrating topics of lessons in various learning. At the end of each lesson observation, the researcher always discussed with the School mentors or Deputy Head teachers concerning the usual work performance of the observed teachers. Most of the Deputy Head teachers and Mentors firmly stated that their work performance was good despite having
individual performance differences. They clarified that the observed teachers adequately planned and effectively delivered their lessons, just like any other teachers that had been trained in the past under the differentiated / segregated curriculum.

However, the Deputy Head Teachers and Mentors stated that the concerned teachers faced some difficulties in integrating lessons and delivering practical lessons from the beginning, but later on learnt from their School Mentors. Most Mentors said that Student teachers / graduate working teachers recently trained from Basic Colleges of Education complained that, the format of the subject integrated curriculum of Basic Colleges was different from that of the Lower/Middle Basic schools. Mentors stated that recently trained / trainee teachers always learnt the different formats from schools. From lesson observations, the researcher deduced that despite the cited short comings, the subject integrated curriculum offered at Solwezi College of Education was able to produce teachers who were able to teach just like any other teachers.

4.6. Summary

The views of respondents about the subject integrated curriculum offered at Solwezi College of Education have been presented in accordance with the objectives of the study. Discussion of the findings is presented in the following chapter (Chapter Five).
CHAPTER FIVE

DISCUSSION OF THE FINDINGS

5.0. Introduction

This Chapter discusses the findings on the effects of the subject integrated curriculum offered at Solwezi College of Education on quality education. Discussions of the findings are presented with reference to the objectives of the study in the following order: to investigate the reasons for the introduction of the subject integrated curriculum offered at Solwezi College of Education, to find out how the subject integrated curriculum was designed, to examine how the subject Integrated Curriculum was implemented at Solwezi College of Education, to determine whether the policy initiative of Continuing Professional Development Programmes helped in building up the subject integrated curriculum at Solwezi College of Education or not and to establish the effects of the subject integrated curriculum offered at Solwezi College of Education on quality Education.

5.1. Reasons for the Introduction of the Subject Integrated Curriculum offered at Solwezi College of Education

In order to establish facts on the reasons for the introduction of the subject integrated curriculum offered at Solwezi College of Education, the study sought information from almost all sampled respondents. Data from all the Senior Lecturers revealed that training teachers in an integrated curriculum arrangement that was responsive in meeting the learning needs of the Lower/Middle Basic School learners, whose brains operate in an integrated or holistic manner as outlined in MOE (1996), was one of the reasons for the introduction of the subject integrated curriculum that was offered at Solwezi College of Education.
The findings from focus group discussions with college based students revealed that reducing or decongesting the curriculum so as to help learners learn better was another reason that led to the introduction of the subject integrated curriculum. In their discussions, students also said that wanting to promote quality Education in Basic Colleges and lower / Middle Basic Schools that was lost through the previous over loaded curriculum was another reason as to why the Ministry of Education introduced the ZATEC course’s content or curriculum arrangement. Moreover, findings from Solwezi District Education Standards Officer, Deputy Head teachers and school mentors revealed that the subject integrated curriculum was seen to be suitable for training teachers who were to go and teach learners at the Lower/Middle basic school level, whose brains operate in an integrated manner.

The above research findings are in line with what the Ministry of Education (1996) stipulates in relation to assumptions for curriculum integration at the Lower/Middle Basic School level. However, such research findings contradicts Carmody’s perspective about the subject integrated curriculum at college level. Carmody (2004), despises the whole curriculum arrangement and looks at it as a mere clustered curriculum that cannot produce quality teachers.

5.2. Design of the subject Integrated Curriculum at Solwezi College of Education

As regards the design of the subject integrated curriculum at Solwezi College of Education. Finding from Senior lecturers and College based students revealed that the subject integrated curriculum offered at Solwezi College of Education was previously designed into six but currently designed into seven study areas of Education Studies, Technology Studies, Literacy and Languages Studies, Expressive Arts, Social, Spiritual and Moral Education, Mathematics Education and Integrated Science Education. Moreover, findings from Senior lecturers and College based students revealed that some study areas had more contributory subjects than
others and that it led to insufficient coverage of study area syllabuses, due to lack of time factor. In addition, it was also revealed that some study areas were made up of contributory subjects with related content while some were not related at all, which led to difficulties in integrating topics of different contributory subjects, hence resulting in discrete coverage of content of different contributory subjects within affected study areas.

For instance, study areas such as Technology Studies, Expressive Arts, Education Studies and Social, Spiritual and Moral Education were cited as study areas made up of unrelated contributory subjects. Such a scenario of classifying unrelated contributory subjects into same study areas hampered the real operation of a subject integrated curriculum. That is what led to discrete coverage of the different contents of contributory subjects within affected study areas. Such a state of affairs totally contradicts the real essence of subject integration and reverts the whole situation back to the differentiated type of curriculum where subjects were independently taught. Its like there is no real subject integration in certain study Areas.

However, the findings on the current number of study areas found at Solwezi College of Education concur with the MOE (2007) new guidelines on the Design of the subject integrated curriculum at Basic College level. The findings on the grouping of unrelated contributory subjects into same study areas contradicts MOE/DANIDA (1998) initial guidelines on the composition of study areas, where it is stated that composition of study areas, should be based on definable relationships of contributory subjects. Findings from Solwezi District Education Standards Officer, Deputy Head teachers, School mentors and lesson observations revealed that the design of the subject integrated curriculum offered at Solwezi College of Education was somehow different from that of the Lower/ Middle Basic Schools.
This research finding is worrisome as curriculum formats of the two educational levels are supposed to correlate to avoid confusing student teachers and also to promote real quality of education that is always possible through curriculum arrangements that are relevant to societal needs (Kelly, 1999). In fact, the findings moreover revealed that what was happening at college level in relation to subject integrated curriculum was not clearly known to officials that were concerned with the Lower/Middle Basics Schools level, as they were also doing their own type of subject integration. This research finding concurs with MOE (2000) where learning areas that are different from those of the Basic college level are outlined.

5.3. Implementation of the Subject Integrated Curriculum at Solwezi College of Education

The study also sought to find information on the implementation of the subject integrated curriculum at Solwezi College of Education. Information from most respondents revealed that the subject integrated curriculum was delivered through team planning; team teaching, modules and integrative assessment of related topics among the contributory subjects within study areas, while unrelated contents/topics within study areas were discretely covered using contact and non contact periods. Such findings portray a double standard type of curriculum offerage within the same institution due to making other topics/subjects independent off subject integration.

The removal of Mathematics Education from the subject integrated mode of curriculum offerage as revealed by the study, is a clear indication that subject Integration is not an easy trend at college level, as trainee teachers need to receive more content, skills and methodologies at training level that can not be possible under a subject Integrated curriculum that advocates the coverage of Basics only. Furthermore, the findings from direct and lesson observations of the curriculum’s implementation at Solwezi College of Education revealed that participatory activity
based type of curriculum implementation was in full use. Senior lecturers made use of learner centered approaches like group discussions peer teaching and class group presentations in the implementation of the curriculum.

The findings from College base student respondents revealed that students were actively involved in their own learning while tutors facilitated. That helped students to acquire the necessary basic knowledge, skills, values, attitudes and methodologies required for them to go and teach effectively. The above research findings were in line with MOE/DANIDA (1998) which states that the integrative approach to curriculum advocates for participatory activity based learner centred methods like team teaching, group work, micro teaching and so forth.

5.4. Whether continuing professional development programmes helped in building up the subject Integrated Curriculum at Solwezi College of Education or not

Determining whether continuing professional development programmes helped in building up the subject integrated curriculum at Solwezi College of Education or not, was another aspect that the study sought to find out. Findings from the Senior lecturers, college reports and observations revealed that study area Continuing Professional Development meetings for all Senior lecturers were previously held during holidays at various Colleges of Education throughout the country.

Currently, the study revealed that Continuing Professional Development meetings, aimed at building up capacity into Senior lecturers to enable them deliver the current curriculum competently were held every Wednesday or Friday at Solwezi College of Education. This study finding conforms to MOE (1996) which encourages teaching professionals to get involved into further Continuing Professional Development Programmes in order to deliver effectively.
However, the study also revealed that study area Continuing Professional Development Programmes that were held, were only concerned with not on how to integrate lessons handle difficult topics and share personal professional experiences but did not cover the needed sharing of background information of different contributory subjects found in different study areas.

Findings from the Senior lecturers revealed their need for back ground information of different contributory subjects in order to deliver the Integrated Curriculum effectively. This is because study area syllabuses in certain study areas are supposed to be executed by all concerned lecturers despite not having professional training in all contributory subjects. There is need for such programmes to heavily concentrate on the sharing of background information of all contributory subjects found in study areas. This will make Lecturers to be knowledgeable and effective in delivering the curriculum.

5.5. Effects of the subject Integrated Curriculum offered at Solwezi College of Education on the quality of Education.

The study intended to establish the effects of the subject integrated curriculum offered at Solwezi College of Education on the quality of education by looking at the curriculum’s design and implementation, achievement of set goals of college mission statement, professional qualifications and competence of Senior lecturers and students’ performance during and after training.

Findings from Senior lecturers, College based students and Researcher’s observations revealed that the learner centred methodologies used in the delivery of the subject integrated curriculum helped trainee teachers to participate fully in the whole course and that helped them to acquire the necessary basic knowledge, skills, values, attitudes and methodologies required for them to go and teach effectively. That finally resulted in the production of self directed hardworking
teachers who were able to do tasks independently and effectively. This research finding was in line with Beane (1977), where he stated that the subject integrated curriculum was suitable for training teachers to teach young children since learning usually happened through learning centers and activities which helped them carry out assignments effectively and independently (Learner centered methodologies).

Findings from most students, Senior lecturers and Participant observations revealed that the integrated teaching and assessment that were used in the implementation of the subject integrated curriculum in the seven study areas, compensated for student’s strengths and weaknesses of various contributory subjects. That in turn resulted in student’s good performance in most given assessments throughout the whole course. This study finding confirms reports from Solwezi College of Education Annual Report (2009) where it is stated that the results had tremendously improved ever since the introduction of the subject integrated curriculum at Solwezi College of Education.

However, the study also revealed that study areas such as Social, Spiritual and Moral Education and Education Studies had too many contributory subjects as compared to other study areas. That led to insufficient coverage of study area syllabuses due to limited time. That in turn led to student teachers graduating with only basics instead of enough as expected of trained teachers. This study finding confirmed what is stipulated in Carmody (2004), about his wonder of how a clustered curriculum which does not allow coverage of detailed contents, skills and methodologies can produce quality teachers.

Findings from Senior lecturers and College based students revealed that the study area concept and operations of the subject integrated curriculum made it difficult for the implementation of comprehensive consecutive practical lessons in practical study areas like Technology Studies and Expressive Arts, due to lack of time
factor. That resulted in student’s teachers graduating with a lot of theory load but limited/less practical skills.

Furthermore, findings from Senior lecturers and observations revealed that the grouping of unrelated contributory subjects into the same study areas like in the case of the Social, Spiritual and Moral Education, Technology Studies, Education Studies and Expressive Arts made subject integration, delivery and coverage of expected knowledge, skills, values, attitudes and methodologies somehow difficult. That led to discrete coverage of content of various contributory subjects and that resulted in student teachers failing to learn real subject integration at college level. This finding concurs with MOE/DANIDA (1998) were it is clearly stated that it is not possible for the subject integrated curriculum to cover all the stipulated content but rather that only basics are to be covered. This situation is only sound for a lower/middle basic school pupil but not so for a teacher to be. It however, conforms to Carmody (2004) were he has wondered as to why a curriculum that advocates for basics to be taught can produce quality teachers.

Findings from some Senior lecturers revealed that in study areas like Education studies and Social, Spiritual and Moral Education, all Lecturers were mandated to teach all the contributory subjects within them integratively despite not having any professional training background in all of them. That led to some concerned Senior Lecturers failing to holistically impart the expected knowledge, skills, values, attitudes and methodologies into student teachers due to lack of professional background training.

Finally, findings from Deputy Head teachers, mentors and lesson observations revealed that the type of subject integration followed at Solwezi College of Education did not correspond with that one offered at the Lower / Middle Basic school level. That led to student teachers on School teaching practice and Graduate working teachers recently trained from Solwezi College of Education to continuously
learn the different format of subject integration at School level. That resulted in the College mode of curriculum being criticized that it was not relevant to that of the intended schools. This finding confirmed MOE (2000)'s assertion where different nine learning areas for the Lower / Middle Basic schools are outlined. The finding also confirms the findings of the study by Mutobo (2009) on the evaluation of the field based component of ZATEC, where mismatches of curriculum designs were found between Basic Colleges of Education and Lower/Middle Basic Schools.

The findings of the study establishes the propositions of the New sociology of education theory (Karabel and Halsey, 1979) that guided the study as well as what was discussed in the Literature review, that the body of knowledge of any education institution is made manifest through any curriculum at hand. As stipulated by Bernstein (1974), that the way a curriculum of any given Educational system is constructed/arranged and delivered to the learners, can either promote or hamper the teaching and learning process that goes on in a classroom situation. This in turn can positively or negatively affect the teacher student relationship that is cardinal for student performance. It is therefore true that different curriculum arrangement can either promote or hamper the attainment of quality Education at any education level (Bishop, 1985).

5.6. Summary

The Ministry of education introduced the subject integrated curriculum with a major aim of improving on the quality of education that was failed by the differentiated curriculum. However, the study has revealed more negative effects and few positive effects of the curriculum on the quality of education, as outlined in the discussion of the findings presented above. Inspite of the good intentions that the Ministry of education had with regard to the introduction of the subject integrated curriculum in Basic College of Education, the study has clearly revealed that the
implementation of the curriculum did promote quality of education while the design of this curriculum did inhibit the attainment of quality education at Solwezi College of Education. As suggested by most respondents that participated in the study, the design of the curriculum need to be re-designed by grouping related contributory subjects into same study areas. Further, the number of contributory subjects in each study area need to be reduced to three per each study area. Its only after doing that, that the curriculum will promote holistic quality of education in Basic Colleges of Education.

Having presented the discussion of the findings as outlined above, conclusions and recommendations of the study are presented in the next chapter.
6.0. Introduction

This chapter presents the conclusion and recommendations based on the findings of the study.

6.1 Conclusions

The focus of the study was to establish the effects of the subject integrated curriculum at Solwezi College of Education on quality Education. As indicated in the purpose of the Study, the researcher intended to do so by looking at the curriculum’s design and implementation, achievement of set goals of College mission statement, Lecturers’ qualifications and competencies and students’ performance during and after training. According to MOE (1996), the core reason for the introduction of the subject integrate curriculum in the Basic Colleges of Education and Lower/Middle Basic Schools, was to improve the quality of education which was compromised by the previous differentiated curriculum. However, findings from this study revealed that, the subject integrated curriculum offered at Solwezi College of Education had more negative and few positive effects on quality of education.

One of the positive effect revealed by the study that the subject integrated curriculum at Solwezi College of Education had on the quality of education, was that the learner centered methodologies used in the implementation of the teaching and Learning processes, helped students to participate fully. That helped them to acquire the necessary basic knowledge, skills, values, attitudes and methodologies required for them to go and teach effectively. That in turn resulted in the
production of self directed hardworking teachers who were able to carry out tasks independently and effectively.

The other positive effect of the subject integrated curriculum on quality education revealed by the study was that, the integrative teaching and assessment that was used in the implementation of the curriculum, compensated for students’ strength and weaknesses in various contributory subjects. That resulted in students’ good performance in most assessment procedures. It is evident from the study that student’s performance had been very good, since the introduction of the curriculum at Solwezi College of Education. This entails that at least the subject integrated curriculum helped in the production of graduate teachers every year. On this aspect, the researcher concluded that the curriculum helped in the achievement of some of the set goals of College mission statement, because graduate teachers were always off loaded into the Lower/ Middle Basic Schools.

One of the negative effects that the study revealed about the subject integrated curriculum at Solwezi College of Education on quality Education was that study areas such as Social, Spiritual and Moral Education and Education Studies had too many contributory subjects as compared to other study areas. That led to inadequate coverage of study area syllabuses that were cardinal in producing quality teachers due to lack of time. That in turn resulted in Student teachers graduating with only basics instead of enough as expected of trained teachers.

The study also revealed that the study area concept of the subject integrated curriculum made it difficult for the implementation of comprehensive consecutive practical lessons in practical oriented study areas like technology studies and expressive Arts, due to lack of time, which resulted in student teachers graduating with more basic theory load but limited/less practical skills. Further, Senior Lecturers were mandated to implement all the contributory subject workload contents in certain study areas, despite not having professional training in all of
them. That resulted in some Lecturers failing to holistically impart the needed knowledge, skills, values, methodologies and attitudes into the trainee students.

In addition, the grouping of unrelated contributory subjects into same study Areas made integration and coverage of expected knowledge, skills, values, attitudes and methodologies difficult. That led to discrete coverage of contents of different contributory subjects in study areas and that resulted in Student teachers failing to learn real subject integration at College level. Finally, the study revealed that the subject integrated curriculum offered at Solwezi College of Education did not correspond with that of the Lower/Middle Basic School Level. That resulted in student teachers on School teaching practice and graduate teachers recently trained from Solwezi College of Education to continually learn the different format of subject integration at school level. That in turn led to the curriculum getting criticized as one that was not relevant to that of the intended schools.

Basing on the discussion and findings of the study, the researcher concludes that, subject integration is a workable new trend of curriculum arrangement that the Ministry of Education introduced at the Basic College level and Lower/Middle Basic school level. However, findings from this study established that the design of this mode of curriculum at Basic College level needs to be revisited because all the several negative effects of the subject integrated curriculum that the study established are closely linked to the design of the curriculum.

6.2. Recommendations

Arising from the above findings and discussions that addressed all the six objectives, this study makes the following recommendations:

- MOE should re-arrange or re-classify study areas, by making sure that only contributory subjects with related contents should be grouped together. This
would ensure effective and realistic subject integration within study areas. Practical subjects and any other subjects that are not related to other subjects should be left to stand on their own as is the case for Mathematics Education.

- MOE should allocate more teaching periods to practical oriented study areas. This would help in the implementation of comprehensive consecutive practical lessons to enable trainee teachers’ graduate with adequate practical skills and not only theories.

- MOE should ensure that the number of contributory subjects that form up/ Areas should be reduced to three per study area. This would help in the comprehensive coverage of study area syllabuses that are cardinal in producing quality teachers.

- MOE should design short courses tailored to provide professional background information to Senior lecturers found in study areas where they are mandated to teach the whole workload of contributory subjects found in such study areas. This would help to build up real capacity into the Lecturers, that would help them to implement the curriculum arrangement competently.

- MOE should match the type of subject integrated curriculum arrangement of Basic Colleges and Lower/ Middle Basic Schools, for relevance and uniformity sake.

- MOE should re-introduce the holiday continuing Professional Development Programmes for all administrative and professional personnel’s of Basic Colleges of Education and Lower/Middle Basic Schools, to continually update them on any workable logistics concerning the operations of the subject integrated curriculum.
Senior lecturers of Solwezi College of Education should effectively train trainee teachers on how to integrate subjects on their own. This skill would help them to carry out systematic subject integration at Lower/Middle Basic Schools level without much struggle.

6.3. Suggestions for Future Research

This study was a Case study that looked at the effects of the subject integrated curriculum at Solwezi College of Education only. Whilst revealing the effects of the subject integrated curriculum at Solwezi Basic College of Education on quality Education, the following gaps were noticed and are therefore some of the issues for future research:

- A holistic review on the effects of the subject integrated curriculum offered in all Basic Colleges of Education on quality Education.
- An evaluation on the effects of subject integration followed in selected Lower/Middle Schools on quality education.
- A comparative study on the impact of subject integration between selected Basic Colleges of Education and Lower / Middle Schools on quality Education.
REFERENCES


Chakulimba, O. (2009), "*Selected Reading in sociology of Education*. Lusaka: University of Zambia.


Polytechnic South West, (1989), *A policy for In-service Education*. Exmouth: Rolle faculty of Education.


http://712educators.about.com/cs/integrating curriculum.integrating.htm 09/15/2010

http://www.archeworks.org/projects/tesp/i.guide p2 html 09/20/2010


http://w.w.w. ncrel.org/sdrs/areas/ issues/ students/ early cld/ easik7. Htm 10/14/2010.
APPENDICES
APPENDIX VI

LETTER OF REQUEST FOR PERMISSION TO CONDUCT A CASE STUDY RESEARCH AT SOLWEZI COLLEGE OF EDUCATION.

Solwezi College of Education
PO.BOX 110096
Solwezi.

The Principal
Solwezi College of Education
POBOX 110096
Solwezi.

Dear Sir,

RE: PERMISSION TO CONDUCT A CASE STUDY RESEARCH AT SOLWEZI COLLEGE OF EDUCATION

I am a registered postgraduate student from the University of Zambia, pursuing a Master of Education Degree in Sociology of Education. Am researching on the effects of the subject integrated curriculum in Basic Colleges of Education on Quality Education: The case of Solwezi College of Education. I hope to begin the research by August, 2010.

I will be grateful if my request will be considered.

Yours faithfully,

Judith Santambo.

[Stamp: REPUBLIC OF ZAMBIA MINISTRY OF EDUCATION SOLWEZI COLLEGE OF EDUCATION 30 JUL 2010]

AVP - All HODs

Approved, let her go ahead.

[Signature]
APPENDIX VII

LETTER OF REQUEST FOR PERMISSION TO CONDUCT RESEARCH IN THE LOWER/MIDDLE BASIC SCHOOLS OF SOLWEZI, MUSHITALA, KIKOMBE AND KYALALANKUBA.

Solwezi College of Education
P.O.BOX 110096,
Solwezi.

The District Education Board Secretary
Ministry of Education
P.O.BOX 110070
Solwezi.

Dear Sir,

RE: PERMISSION TO CONDUCT RESEARCH IN THE LOWER/MIDDLE BASIC SCHOOLS OF SOLWEZI, MUSHITALA, KIKOMBE AND KYALALANKUBA.

I am a registered postgraduate student from the University of Zambia, researching on the effects of the Subject Integrated Curriculum in Basic Colleges of Education on Quality Education, as part of the requirements of my studies in a Masters Degree Programme in Sociology of Education.

I am requesting for permission to conduct research in the above cited schools, to help me observe on the classroom performance of the student teachers on teaching practice and ZATEC trained teachers in order to verify whether the subject integrated curriculum offered at Solwezi College of Education is helping in the production of quality teachers or not. I hope to begin the research by August, 2010.

I will be grateful if my request will be considered.

Yours faithfully,

Judith Santambo.