NATURE OF CAREER GUIDANCE COLLABORATION BETWEEN SCHOOL AND INDUSTRY: THE CASE OF SELECTED SECONDARY SCHOOLS IN LUNDAZI DISTRICT OF EASTERN PROVINCE, ZAMBIA

BY

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A dissertation submitted to the University of Zambia in partial fulfillment of the requirements of the degree of Master of Education in Guidance and Counselling

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DECLARATION

I **Augustus Musenge**, do hereby declare that this dissertation represents my own work and that it has not previously been submitted for a degree at the University of Zambia or at any other University. The sources of all materials referred to, have been adequately acknowledged.

Signed: ……

Date: ……..…….…

CERTIFICATE OF APPROVAL

This dissertation of Augustus Musenge has been approved as partial fulfillment of the requirements for the award of degree of Master of Education in Guidance and Counselling by the University of Zambia.

EXAMINERS' SIGNATURE	**DATE**
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DEDICATION

This dissertation is dedicated to my wife Vesta, and Children: Winnie, Chanda, Bwalya and Adiel who had to bear with my absence during the course of my studies. To all of them, I say thank you for your encouragement and inspiration. May the almighty God continue to show you abundant mercy.

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LIST OF ABBREVIATIONS

AACE: American Association for Career Education

AAU: Association of African University

ACTE: Association for Career and Technical Education

BTE: Bridge to Employment

DEBS: District Education Board Secretary

DEECD: Department of Education and Early Childhood Development

DEEWR: Department of Education, Employment and Workplace Relations

ELGPN: The European Lifelong Guidance Policy Network

FAWEZA: Forum for African Women Educationists in Zambia

GCSE: General Certificate of Secondary Education

ISP: Industry-school partnership

NASDCTEC: National Association of State Directors of Career Technical Education Consortium

NASA: National Aeronautics and Space Administration

NWK: North West Kompany

OECD: Organisation for Economic Cooperation and Development

ST: Saint

STEM: Science, technology, engineering and mathematics

TVET: Technical and Vocational Education and Training

UPI: Universitas Pendidikan Indonesia

ZANACO: Zambia National Commercial Bank

ZESCO: Zambia Electricity Supply Corporation

ABSTRACT

The purpose of this study was to examine the nature of career guidance collaboration between schools and industry in Lundazi district. The objectives of the study were; to establish the nature of career guidance collaboration between schools and industry, to determine how pupils benefited if at all they did, from the collaboration between school career guidance and industry, and to devise strategies that would help strengthen career guidance collaboration between schools and industry. A descriptive survey design and qualitative methods were employed. Data was collected through interviews and focus group discussions. The sample comprised of 2 head teachers, 2 guidance teachers, 24 pupils and 10 human resources officers giving a total of 38 respondents. Purposive sampling was used to select head teachers, guidance teachers and human resources officers. Simple random sampling technique was employed to select the pupils. Data collected was analysed thematically. With regard to the nature of career guidance, the findings revealed that the following were offered to pupils; career talks, motivation talks, site visits, career exhibitions, entrepreneurial skills awareness, and university/college entry requirements information. The findings further revealed that pupils benefited from the school-industry collaborations through sponsorships, improvement in discipline, school attendance and academic achievement, increased awareness in educational and career paths and exposure to job environments. Pupils however complained of irregular career talks by staff from industry. Concerning ways to improve school-industry collaborations, recommendations included; increasing site visits, invitations, outreach activities and advocacy and that the existing collaborations between secondary schools with public and private institutions in their communities should be strengthened.

CHAPTER ONE

INTRODUCTION

1.0 Overview

This chapter presents the background to the study, statement of the problem, purpose of the study, objectives of the study and research questions. It also includes the significance of the study, theoretical framework, delimitation of the study, limitations, and operational definition of terms. Also provided are the organisation of the dissertation and a summary of all the aspects covered in this chapter.

1.1 Background

Career guidance collaboration between schools and the industry has long been recognised across the developed world as an important way to help improve the academic achievement and enhance career preparedness of learners but not so in Africa, and in particular Zambia (DEECD, 2010; Jean-Noel, Stringer and Kerr, 2015). It is in this regard that in 2014, the Zambian Government found it necessary to give direction to the provision and implementation of guidance services in the education system through the production of guidelines towards the administration and management of guidance and counselling services in Zambian schools and colleges of education (MESVTEE, 2014). Prior to this period, guidance services in Zambian schools and colleges of education were implemented without guidelines thereby, enabling uncoordinated, fragmented and ineffective implementation of the services. This was against the background that the national policy document on education "Educating Our Future" as well as the Zambia Education Curriculum Framework of 2013 acknowledged the vital role that career guidance played in preparing learners for post secondary education and training, and the acquisition of the world-of-work skills (Ministry of Education, 1996, MESVTEE, 2013). The Education Act No. 23 of 2011 provides for career guidance and counselling to be an integral component of the Zambian education system and stresses knowledge, values and skills acquisition for learners, hence the essence for school-industry collaborations. The need for close linkages between school and industry is even more crucial today than in past years, in that today's modern economy demands a better educated personnel with appropriate knowledge and skills. Accordingly, many jobs

require more complex knowledge and skills. To succeed in a dynamic and global economy, every pupil deserves an education that culminates in preparing them for higher education, careers as well as civic participation (ACTE, NASDEC and Partnerships for 21st Century, 2010; Ministry of Education, 2003; 1996). Many pupils therefore, need additional preparation to contain the increasingly higher expectations and demands of postsecondary education and workplace outcomes. This undertaking is especially more critical in this 21st century underpinned by dominance in complex skills and advances in technology. Not surprising, many businesses and industry in the developed world, are therefore apt to develop a closer relationship with schools, not only as part of their corporate social responsibility, but also as an economic issue, and a transit system helping to promote the acquisition of job-oriented skills and knowledge at school level (Jean-Noel, Stringer and Kerr, 2015; The School District of Palm Beach County, 2012). In this regard both parties; schools and industry stand to benefit from close collaboration. Consequently, governments in the United States, Canada and many European countries in both western and eastern Europe have not shied away from providing support to programmes intended to strengthen the delivery of career guidance services in their learning institutions, workplaces and communities (Bezanson and Kellett, 2001). The delivery of meaningful and relevant career guidance could only become a reality when education and training are interconnected, transparent and, are accessible to the learner by way of classroom, workplace experience and web-based learning (Bezanson and Kellett, 2001). In this regard, learning becomes tangible, and is therefore contextualised in a career development process. And one major way of achieving this is through sustained collaboration between school and industry. It is in this light therefore that school-industry collaboration in terms of career guidance is seen across the developed countries as an important measure in the improvement of pupils' skills leading to maximum utilisation of the nation's human workforce.

By working together in the provision of career guidance services schools and industry can transform the culture and character of learners through enriching their classroom and out of classroom learning experiences. Collaboration between career guidance and the world of work has also been proved essential to helping learners acquire a real life perspective of how the subjects they learn in class get applied in research, industry and

business (GRZ, 2006; American Institute for Research, 2013; Ministry of Education, 1996). Pupils need to understand why a particular theory should be leant, to which modern technology it is linked, to which competency it is associated and to which skills it contributed. They also need to understand for what purpose a skill should be learnt, and whether it is still in practice or it has since become obsolete (Bukit, 2012). Twenty-first century skills, career and technical education are essential in every country, district and school if pupils have to be ready for job demands.

The concept of career guidance-Industry collaboration entails involvement between schools and businesses, industry, government departments and community organisations. The essence for collaboration arises out of the recognition that the role of educating young people and preparing them for the transition to the world of work is the responsibility, not only for schools, but the entire community (DEECD, 2010). Collaboration between career guidance and industry is crucial to developing and supporting the aspirations and performance of all of the young people in institutions of learning. School, industry and communities collaborate because they wish to improve outcomes for young people, and also appreciate that by working together, they can often achieve outcomes that would not be possible from working in isolation. These collaborations are commonly initiated by agreements between a school, two or more other parties and involve identification of goals, and establishment of an action plan for the achievement of the set goals (The School District of Palm Beach County, 2012). Collaboration between career guidance and industry may involve the whole school, and its entire pupil population or a particular school grade, a single class or individual students (College Summit, 2013). Collaboration between career guidance and industry can help to provide learning institutions with various benefits including financial grants, bursary for learners, teacher development, provision of teaching and learning equipment and strengthening pupils' career awareness. Through specialised knowledge, skills, talents and ideas of the personnel of the participating firms, career guidance-industry collaboration provide a platform to strengthen instructions in academic skills and in so doing help to enrich the learning process (http://www.en.wikipedia.org/wiki/Business-education_partnerships). Changes in the nature of work and employment, due to advances in technology and other factors, also require that students be exposed to

various job situations, in addition to preparing them to successfully manage their learning transitions (Bezanson and Kellett, 2001).

Anchorage School District and Chamber of Commerce (2006), DEECD (2010) and Ministry of Education (1996) add that some of the activities in which schools and industry can collaborate via career guidance are; workshops, conferences, tours, guest speakers, exchange programmes, classroom visits, workplace visits, science fairs, work experience programmes, skills training, curriculum support and career development activities. Career guidance-industry collaboration may also include fund-raising, grants, recruitment, bursary support, equipment provision, scholarships for teachers and pupils as well as infrastructure support.

In this regard it can, therefore, be pointed out that career guidance-industry collaborations have the potential, not only to improve the quality of students' learning experiences, and to provide opportunities for their career exploration, but can also help to bring in resources for improving school infrastructure and teaching facilities. In addition to connecting schools with different local businesses, school-business collaboration in relation to career guidance can further help to support the curriculum, by promoting school teaching that is relevant to the skills demanded in industry (http://www.en.wikipedia.org/wiki/Business-education_partnerships). There are also various benefits for industry. To start with career guidance-industry collaborations provide a platform for industry's recruitment of future employees. Second is the opportunity to influence school curriculum with the aim of better aligning future employees with the needs of industry (Flynn, Pillay and Watters, 2014; Oregon Department of Education, 2008). Enhanced staff morale, better employee awareness of their firm, as well as community recognition are some of the additional benefits that may accrue to collaborating industry. It can therefore be argued that career guidance-industry collaborations mobilise human resources to work together to enhance pupils career opportunities.

In Zambia career guidance services are envisioned as an important component for preparing pupils for the world of work. To this end, career guidance services, under the Ministry of Education, now renamed as Ministry of General Education, have been in

existence in Zambian schools since 1967 (Mukuwa-Tuchili, 2008). One of the key roles of career guidance is to guide pupils into vocations based on their abilities and interests (Ministry of Education, Science, Vocational Training and Early Education 2013; Mukuwa-Tuchili, 2008; Musheke and Mataa, 2003). The Government of Zambia recognises the important role that collaboration involving career guidance and the job world can play in providing the academic and applied learning that seeks to satisfy the nation's demand for skilled employees crucial for the economic progress of the country (Ministry of Education, 1996). The national policy on education emphasises collaboration of educators and industry to build high quality school-to-work educational programmes in order to reduce the mismatch between what is taught in school and the job demand. In this regard, the Ministry of Education policy guidelines on guidance and counselling have stressed the need for education to focus, not only on knowledge provision, but also skills, values and attitude development of learners in cognisance of the psychosocial and economic dynamics of modern society and the ever changing technological advances (Ministry of Education, Science, Vocational Training and Early Education, 2014). Also, in the national strategic plan document on education, the Ministry of Education has undertaken to prioritise knowledge and practical skills acquisition by all pupils in secondary schools through provision of relevant teaching equipment, and by ensuring stronger linkages between schools and skills training institutions (Ministry of Education, 2003). As a result, schools are encouraged to identify potential career collaboration in the design and delivery of career guidance services and to develop mechanisms to sustain lasting relationships. When well coordinated, and anchored on a solid platform underpinned by clear objectives and outcomes, school and industry collaboration in terms of career guidance can help create sustained academic and meaningful career navigation support for pupils, and therefore reduce the mismatch between education and the world of employment. However, despite career guidance services having been in existence in Zambia, since 1967 and the Ministry of General Education's recognition of the role collaboration between school and industry can play, little is known about the nature of collaboration existing in Lundazi district.

1.2 Statement of the Problem

In the National Vision for 2030, the Zambian Government aspires for an education system anchored on strong and cohesive linkages between schools, industry and job market (GRZ, 2006). The greater variety of jobs and skills demanded in modern society has further necessitated, now more than ever before, the need for stronger linkages involving career guidance and industry. However, we do not know the nature of career guidance collaboration that is in existence between schools and industry in Lundazi district and how they benefit pupils. To this end, the contents of this report will be availed to the District Education Board Secretary for Lundazi district and all the head teachers and guidance teachers of secondary schools in Lundazi district as well as the district heads of public and private institutions of Lundazi district, in an effort to highlight the vital role of school-industry collaborations in the life of a learner. The main findings of the report will be further highlighted at a district consultative meeting to be held in Lundazi district, Zambia, for officials from the district education office, local secondary school head teachers and their respective guidance teachers, employers and all relevant stakeholders within the district.

1.3 Purpose of the study

The purpose of the study was to examine the nature of career guidance collaboration between schools and the job industry in Lundazi district and how they benefit pupils.

1.4 Objectives

The following were the objectives of the study:

(i) to establish the nature of career guidance collaboration between schools and industry

(ii) to ascertain how pupils benefit from the collaboration between career guidance and industry

(iii) to devise strategies that would help strengthen career guidance collaboration between schools and industry.

1.5 Research questions

The study was guided by the following questions:

(i) What is the nature of career guidance collaboration between schools and industry?

(ii) How do pupils benefit from the collaborations between career guidance and industry?

(iii) What strategies can be devised to help strengthen career guidance collaboration between schools and industry?

1.6 Significance of the study

The study was designed to establish the nature of career guidance collaboration between schools and industry in Lundazi district. It is hoped that the findings of this study may inform policy makers and guidance providers in the Ministry of Education on the important role that career guidance-industry collaboration plays.

It is further hoped that the findings of this study might help schools and the job sector to understand the importance of collaboration and help to remove barriers that, previously might have hindered effective engagement between these two important institutions. As such they may be helped to identify strategies aimed at strengthening career guidance-industry collaboration.

It is also hoped that the findings of this study may add new information to the already existing body of knowledge in the area under study. Lastly, it is further hoped that this study may stimulate further research into the subject of career guidance collaboration between school and industry.

1.7 Theoretical Framework

This study drew upon the Boundary Crossing Theory by Morse (2010). The theory posits that change, and therefore advancement can be accelerated by facilitating connections (collaborations) between potential partners (Morse, 2010, as in Flynn, Pillay

and Watters 2014). Akkerman and Bakker (2011) as in Bruining and Akkerman (2014: 5) have defined boundaries as "sociocultural differences between practices leading to discontinuities in action or interaction". They argue that professionals may face boundaries between different practices, when working in or with other groups, disciplines or institutions. Also, pupils may encounter different cultural traditions when transiting between school and work. In addition to providing academic learning, the major purpose of secondary schools is to facilitate for their pupils' transition to further education and the world of employment. Bruining and Akkerman (2014) argue that, boundaries though they convey a negative connotation of limitation are not to be perceived as problematic only. They argue that boundaries can trigger boundary crossing. The implication is that, boundaries can spur efforts of individuals or groups and larger systems to (re) establish continuity in actions and interactions across practices. Wenger (1988) as in Bruining and Akkerman (2014) also points out that boundary crossing of personnel prevents institutions of practice becoming too stale. Therefore, the shared view is that collaboration between different activity systems can spur creativity as well as transformation of collaborating parties.

Following an extensive review of literature on boundary crossing, Akkerman and Bakker (2011) as cited in Flynn, Pillay and Watters (2015); and Bruining and Akkerman (2014) outlined four learning mechanisms that can take place in situations of boundary crossing. First, is that boundary crossing enables the process of mutual identification, in which the collaborating institutions are re-defined in the light of one another, and how they can legitimately co-exist. Second, is a process of coordination that emerges, in that means and procedures are sought allowing diverse practice to cooperate efficiently in distributed functions and responsibilities. Thirdly, boundary crossing stimulates the process of reflection, which is about mutually defining the different perspectives that each collaborating institution brings, and the openness to take up others' perspectives to look at one's own practice. Lastly, boundary crossing leads to a transformation process, whereby in response to a particular situation, a shared problem space is defined, on the basis of which the collaborating institutions are integrated by hybridisation of perspectives and activities. Transformation indicates changes in practices or the creation of a new in-between practice.

The primary purpose of collaborations between school and industry is to facilitate pupils' school-to-work transitions, as well as their readiness for further vocational, college or university education. In this sense, there are outputs, including industry based learning and experiences that enable boundary crossing and development of a pupil's compatibility and readiness for work (Flynn, Pillay and Watters, 2015). The meaning of this is that pupils need to be afforded opportunities in authentic vocational education experiences that increase their career awareness and also reinforces their personal employability. This means that pupils need to be accorded opportunities to cross the barriers that exist between theory and practice (Fortuin and Bush, 2010). This entails boundary crossing, where two separate institutions (school and industry) need to get connected to provide school based learning and workplace experiences. This means that school teachers and industry personnel, need to engage in boundary crossing to enact a hybrid learning parameter where formal school-based learning and work place experiences are closely connected. In this light, industry often provides resources such as grants, equipment and the expertise that teachers can use to enhance career and further education preparedness of the pupils. Boundary crossing enables the convergence of multiple perspectives, thereby necessitating leverage of mutual benefits between collaborating institutions.

This study intended to examine the nature of career guidance collaboration between schools and industry. It also sought to determine how pupils benefit from collaborations between school and industry in terms of career guidance. The study hoped to bring out strategies that would help to strengthen career guidance collaborations between schools and industry. Career guidance-industry collaboration calls for the crossing of boundaries across institutions, experts (teachers and industry employees) and decision makers in order to leverage significant benefits for the collaborating institutions, with pupils as the central beneficiaries.

1.8 Delimitation of the study

The catchment area was Lundazi district in the Eastern province. Two secondary schools and 10 industries were selected for the study. Following the upgrading of five basic schools into secondary schools in January, 2014, there were 15 secondary schools in

Lundazi district. Two schools were selected for the purpose of this study. The two schools are in the central part of the district where industries are for easy collaboration. The choice of the two schools was also prompted by their size and ease of access from the main road. Both schools were super grade one co-education secondary schools. In addition, one school was a boarding secondary school, while the other was a day secondary school. In this regard, the two schools provided a sample of both a boarding and day school scenario imperative for the study. Furthermore, eight of the 10 industries that participated in the study were in the service provision sector. This situation was attributed to the low presence of production industries in the district.

1.9 Limitations of the study

The study focused on two secondary schools and 10 industries of Lundazi district. In addition, at the time of collecting data Grade 12 pupils had already concluded their school certificate/General Certificate examinations. This posed a challenge in contacting them. As a result, the views and experiences of this group of pupils who had been in school relatively longer compared to other pupils in the succeeding grades could not be captured. Nonetheless, efforts were made to capture as much information as possible through focused group discussions which were conducted with the grades 11 and 10, which were the next senior grades in the secondary schools visited. Further, lack of literature on the Zambian situation on the topic under study created a limitation on the discussion of the findings. As a result of this limitation, most of the literature reviewed was from studies conducted outside. Due to the aforementioned, the findings of this study may not be generalised to all the schools in Zambia.

1.10 Operational definition of terms

In the study, the following terms were used to mean:

Boarding secondary school: a secondary school where learners lodge and live during the school term, and go home only during school holidays.

Career exhibitions: an event where a school hosts representatives from industry, business, training institutions and community to highlight some examples of what is presently available for the pupils beyond secondary school.

Career guidance: direction and activities provided to assist pupils in making career choices based on their aptitudes, abilities and interests.

Co-education: an education system where boys and girls are taught and learn together.

Collaboration: the act of schools and industry working together to enhance pupils' learning achievements and career awareness through exposing them to different occupations and job environments.

Day secondary school: a secondary school where pupils live at home, and only go to school during the day.

Nature: basic qualities or essential type or kind of career guidance services provided.

Industry: public and private organisations that schools collaborate with in the provision of career guidance to pupils.

School-industry collaboration: involvement between schools and business-industry, government departments and community organisations.

Strategy: ways or methods of establishing and sustaining career guidance collaboration between schools and industry.

1.11 Organisation of the Study

This study is composed of six chapters. The first chapter gives an overview of the study. In addition, the first chapter covers: the statement of the problem, purpose of the study, objectives, research questions, significance of the study, theoretical framework, delimitation, limitations and definition of concepts used in the study. Furthermore, the first chapter includes the organisation of the study, and a summary of the items dealt with.

The second chapter explores literature relevant to the study. In addition to the historical perspective, the literature is presented according to the research objectives. Lastly, a summary of the literature reviewed is also provided.

Chapter three presents the methodology used in the study, and includes the following sections: research design, study population, study sample, sampling techniques, data collection instruments, data collection procedure, data analysis and ethical issues.

Chapter four contains the research findings, while chapter five discusses the findings. Chapter six provides the conclusion and recommendations of the study. References and appendices constitute the last part of this report.

1.12 Summary of the chapter

Chapter one provided the background, thereby putting the problem under study into context. Other items covered in this chapter were; statement of the problem, purpose of the study, objectives and research questions, significance of the study, theoretical framework, delimitation, and limitations of the study, operational definition of terms and organisation of the dissertation. Each of these items was dealt with separately. The next chapter focuses on the review of the studies related to the topic under study.

CHAPTER TWO

LITERATURE REVIEW

2.0 Overview

The previous chapter provided the introduction to this study. This chapter presents a review of relevant literature on the nature of career guidance collaboration between school and industry. As well documented, a review of literature is intended to help the reader deepen his/her understanding of the topic at hand and to help delimit the scope of the study, by identifying the knowledge gaps that need to be filled (Kasonde-Ng'andu, 2013; Kombo and Tromp, 2006). The review is presented according to the following subthemes generated from the research objectives: nature of career guidance collaboration between school and industry; how pupils benefit from the collaboration between career guidance and industry; and strategies that can help strengthen collaboration between career guidance and industry.

2.1 Historical perspective

The emergence of collaboration between school and industry can be traced to the United States of America and was necessitated by a combination of economic and social factors that were prevailing in the United States in the 1980s. During this period, the United States was confronted with several challenges which included urban degradation, high unemployment rate, shortage in skilled labour and general decline in productivity. This was further compounded by reduced funding to schools resulting in higher per- pupil costs (Hoff, 2002). These factors led to wider calls for reform and accountability in schools. Following reduction in federal funding, schools turned to the corporate world for financial help. Meanwhile, industries were also faced with a serious decline in labour market, and the poor quality of entry level applicants, many of whom had low education levels (Timpane, 1982, as in Hoff, 2002). It was these factors, together with the schools' need for additional funding and solutions to the aforementioned difficulties, which engendered the development of school-industry collaboration. The school-industry collaboration concept has since been embraced in other parts of the world including Europe and Asia. The perceived and real value of school-industry collaboration has

since gained wider recognition and momentum (College Summit, 2013). Many educationists and other stakeholders in the education enterprise across the globe realise that conditions today warrant a close working relationship between schools and industry. However, the nature of school-industry collaboration was yet to take firm root in Africa; and in the case of Zambia, it was not known whether or not such collaboration existed. It was that knowledge gap that motivated and necessitated this study.

2.2 Nature of career guidance collaboration between school and industry.

College Summit (2013) reported that in the United States businesses and industry had long worked with schools, to improve both student achievement and school effectiveness. In addition, these engagements had grown considerably over the years, essentially extending into all areas of the American education process. Further, College Summit (2013) outlined career exploration, work based learning, mentoring, academic tutoring and teacher professional development, student sponsorship, financial grants and equipment support, among others as some of the areas on which school-industry collaborations in the United States had focused.

Similarly, Soares (2010) conducted a study on the collaboration between Metropolitan Community College and UPS, an airline industry in the state of Kentucky in the United States of America. The findings revealed that collaboration between the two institutions focused on various aspects which included student workforce preparation activities such as financial literacy, career exploration, resume preparation, mock interview, career retention skills as well as academic preparation. Soares (2010) further reported that the academic and social support components built into Metropolitan College's model ensured that students received guidance and career building skills in addition to academic preparation. Further, the collaboration encompassed financial provision of part-time employment for students. The learn-and-earn nature component of the collaboration provided the needed financial incentive and support for students to continue with the collaboration.

The Department of Education, Employment and Workplace Relations for Australia conducted a study in 2010, to survey school-industry relations. The study found that

many secondary schools in Australia had collaboration arrangements with industry, and that industry were deeply engaged with the core functions in the schools. Commonly, the nature of collaboration centered on supporting school to work activities, enhancing staff development and student achievement as well as providing financial support for special projects (DEEWR, 2010).

In the 2008 report on provision of career education in senior secondary schools in Hong Kong, Yuk-Fan of the Hong Kong Professional Counseling Association stressed the need for secondary schools in that country to enhance career visits and short term job shadowing as vital forms of providing their pupils with authentic occupational experiences (Yuk-Fan, 2008).

Similarly, Homma and Attlage (2008), and Munyoki et al. (2011), as cited in Ssebuwufu, Ludwick and Beland, (2013) observed that creating opportunities for student attachments and co-op placements in the productive sector was a vital way in which education institutions could link up with industry. Boersma, Reinecke and Gibbons (2008) also argued that industry could play an important role in defining student research that focused on issues and problems of direct interest to both the education sector and the corporate world.

From the foregoing discussion, it is apparent that school-industry collaboration could be in many forms depending on the needs of the school, existing resources and time commitments of the parties in the collaboration relationship. The preceding studies highlighted above were carried out in the United States, Australia and Hong Kong respectively. The three countries enjoy a relatively long tradition of school-industry collaboration, hence the collaboration mechanisms between the learning institutions and industry having firmly permeated into the various aspects of the education system and processes in the respective countries. However, it remained unclear on the nature of career guidance collaboration that secondary schools in Lundazi district, Zambia, were involved in with the industry sector. It was the said lack of clarity that revealed the knowledge gap, which this study sought to fill.

Soares (2010), further reported that Northrop Grumman Corporation, a ship, submarine and aircraft building firm in Newport News, Virginia, United States, entered into collaboration with the local Technical Education Community Colleges. The collaboration resulted in the innovation of workplace-based postsecondary-education programmes with a path to an associate's degree and career advancement in ship and aircraft design, construction and repair, as well as other related trades. Community Colleges in the collaboration gained from the firm's expertise in curriculum development, as well as job placement opportunities for their students. The collaboration actualised the colleges' and company's shared goal of not only filling a void in the company's workforce, but also of ensuring that students had employment opportunities after graduation. Whereas, the study indicated above was on collaboration, it did not focus on school-industry collaboration. Rather the study focused on collaboration between industry and Community Technical Education Colleges. Further, the study was conducted in the United States, and it was based on a sample of postsecondary students in that country, thereby necessitating this study.

Jenschke, Schobar and Frubing (2011) reported that German secondary schools collaborated with local Employment Agencies, who had the legal task in that country to provide vocational guidance for both youth and adults alike. This practice was anchored on the belief that selecting a career and an occupational field connected to in-company training were more effectively accomplished when they were supported by counsellors who did not only have expertise in labour markets, but also had close links with training companies and employers. Therefore, career counsellors from employment agencies offered individual career counselling to pupils both in the employment offices, and also on regular basis on the school premises. In addition, the counsellors conducted class lectures, workshops, seminars and also organised class visits to career information centres, besides facilitating student placement into apprenticeship training places. They also supported teachers who were responsible for school guidance in all matters related to career guidance. Jenschke, Schobar and Frubing (2011) added that the collaboration between the schools and the local employment agencies was supported and regulated through formal agreements. They contended that this kind of practice was not only of help to pupils, but that it also assisted employers in that it facilitated industry's hiring of

apprentices. However, this study was based on a sample of secondary schools in Germany. Thus, it still remained unknown as to what the nature of career guidance collaboration the secondary schools and industry in Lundazi district, Zambia, were engaged in.

Chireshe (2012) conducted a study to assess the state of career guidance and counseling services provision at a South African University. Three university career advisors participated in the study. Data was collected by means of interviews. The study revealed that the university's career advisors' main activities included coordinating orientations for new students, conducting career advising workshops for students, graduate deployment programees and sometimes making high schools career guidance visits. The study further found that the career advisors collaborated with the Department of Education, district coordinators, principals and student counsellors. However, this study was undertaken in South Africa, and it focused on a University institution. For this reason, it still remained unknown as regarding the nature of career guidance activities that secondary schools and industry in Lundazi district, Zambia, collaboratively undertook. That also necessitated this study.

Elaborating on the roles of schools in preparing students for their careers Oluremi (2015: 703) stressed that:

> *"The school system provides a medium through which students can be trained toward a goal, which usually ends up in a career. The school counsellor with a developmental purpose, prepares students using their educational resources to attain a career choice".*

Oluremi (2015) further contended that, such could be achieved through providing vocational and career development activities such as career talks, career trips and symposia, among others, hence the need for school-industry collaboration. This was compounded by the firm belief that many students required additional preparation and experiences that were not normally available in a classroom to handle the increasingly higher expectations of postsecondary education and employment. Collaboration between

career guidance and industry was vital to ensuring that such educational experiences became a reality.

Similarly, Alabi (2002) identified excursions and site visits, seminars, symposiums, lectures and case conferences as some of the vital activities requiring collaborative efforts amongst counsellors and other school personnel in order to provide quality career guidance and education to pupils in Nigerian schools. However, it was still not clear as what the nature of career guidance activities the secondary schools and industry in Lundazi district, Zambia, were involved in, the realisation of which prompted this study.

2.3 How pupils benefit from collaboration between career guidance and industry

The United States Department of Education (2014) reported on strengthening school-industry collaboration and observed that through linkages with different organisations and employers, pupils had both the opportunity to be exposed to a broader range of careers, and also to learn directly from the professionals. In addition, pupils got inspired by observing the role models. Further, the school curriculum was enriched through exposing students to real occupational situations, while the interaction with adult role models provided the expertise otherwise not available in the class room setting.

College Summit (2013) also argued that collaboration between education and industry had consistently showed their value in various communities across the United States. They contended that school-industry collaboration provided work-based learning experiences, and in so doing, strengthened career awareness in pupils. They further asserted that school-industry collaboration helped schools to build success-oriented college and career cultures that empowered pupils. Funding and equipment were also provided to modernise classrooms, workspaces, and school laboratories. College Summit (2013) further argued that school-industry collaboration helped pupils to develop meaningful relationships with strong role models and mentors, in addition to providing financial guidance and advice that lessened affordability as a barrier to higher education.

The two studies reported above were based on a sample of schools in the United States where collaboration between schools and industry had long been part of the education

landscape. How the collaboration between the secondary schools and industry in Lundazi district, Zambia, helped to enrich the pupils' curriculum and learning processes and their career and college awareness is what this study sought to find out.

Barnes and Kent (2011) carried out a study on six secondary schools in England in 2010, and found that collaboration between schools and industry had a direct impact on raising pupils' career aspirations and scholastic achievement. They reported that career aspirations had positively influenced pupils' academic achievement as evidenced in the schools' overall GCSE pass rate which improved from 40 per cent to 75 per cent in 2010 (Barnes and Kent, 2011). It could therefore be argued that school-industry collaboration could contribute to enhancing pupils' academic achievements through motivating them and inspiring them in their choice of careers, as well as enabling them to become aware of what was required for the fulfillment of those careers. The study was based on a sample of schools and students in England. Therefore, it still remained unclear as to whether or not the collaboration between the secondary schools and industry in Lundazi district, Zambia, was benefiting pupils in their academic achievement.

In their report on school-industry collaboration the European Union's Organisation for Economic Cooperation and Development (OECD, 2011) observed that evolving jobs and careers had expanded employment opportunities across Europe, hence making career choices harder. They cautioned that when young people chose the wrong career the cost of later changes could be unavoidably high. They contended that career guidance-industry collaboration provided reliable and impartial sources of guidance as opposed to informal sources of career guidance, such as family and friends, which while having their own strengths, might nonetheless only have offered choices that were familiar. They added that school-industry collaboration provided a strong learning environment in that it afforded real on-the-job experience that made it easier for learners to acquire both hard and soft skills. They contended that hard skills required practical training on expensive equipment which was usually readily available in industry, along with personnel who knew how to use it, and could therefore explain associated techniques and concepts for the benefit of both students and educators. Similarly, soft skills such as problem solving, conflict management and entrepreneurship were more

effectively learnt in workplaces than in classrooms and simulated work environments. They added that workplace learning facilitated a two-way flow of information between potential employers and employees about each other, making later recruitment much more effective and less costly, besides complementing career guidance. Although the report given above was on school-industry collaboration, it nonetheless presented the situation that was obtaining across European countries. For this reason, it was still not clear whether collaboration between secondary schools and industry in Lundazi district, Zambia, benefited pupils in their choice of career and acquisition of hard and soft skills.

Meanwhile, the Department of Education and Early Childhood Development (2010) for the state of Victoria, Australia, put it on record that school-industry collaborations provided mutual benefits to both parties. Through School-industry collaborations, industry was afforded an opportunity to demonstrate their commitment to good corporate social responsibility, and also to invest in future generation of working Australians by helping young people to acquire skills relevant to the future needs of community and industry. Collaborations enhanced school capacity by affording a range of additional skills and resources to schools, which included broadened learning experiences for pupils, mentoring and professional development for school leaders and teachers, including assistance with information and communication technologies (DEECD, 2010). All these aspects in the longer term contributed to the school's capacity to deliver improved performance. Potential benefits included enhanced learner outcomes, particularly for pupils from disadvantaged backgrounds, retention and better pupil preparedness to transition from school into further training or employment. However, this study was based on a sample of schools in Australia. For this reason, it still remained unknown whether the collaboration between career guidance and industry in Lundazi district, Zambia, benefited the pupils.

Similarly, Flynn, Pillay and Watters (2014) carried out a study in Queensland, one of the states in Australia on a government-led ISP, the Gateway to Industry Schools programme intended to address perceived skills shortages and to promote economic development in key industries. The study involved three industry sectors namely; minerals and energy; building and construction; and aviation. The purpose of the study

was to establish how collaborations had been developed between the three major industries sectors and schools. The study found that there were mutual beneficial outcomes for ISPs that were backed by genuine and systematic collaboration supported by open communication, trust, coordination, reflection and mutually agreed policy guidelines. The study further found that ISPs that were engaged in genuine and systematic collaboration were able to co-produce industry-based school curriculums that aimed at equipping students with suitably employable industry skills. However, it remained unknown whether the collaboration between schools and industry in Lundazi district, Zambia, was supported by any systematic mechanisms, and whether it was empowering pupils with suitable employable skills.

Watters and Christensen (2013) and Fawcett, Jones and Fawcett (2012) as cited in Flynn, Pillay and Watters (2014) argued that school-industry collaborations enabled the education sector to keep pace with knowledge, innovations and new work practices leading to innovative educational solutions. They held that through innovative, contextualised, industry based curriculum, School-industry collaborations promoted knowledge transfer and workplace readiness of students. This assertion hinged on the belief that school-industry collaborations permitted the convergence of partners' perspectives, which could result in innovative solutions. As ISPs shared perspectives as well as resources, and built trust amongst themselves, they were apt to actualise innovative educational programmes which were of relevant and direct value to both schools and industry. These co-produced educational programmes were bound to create genuine and direct value to both schools, with the pupils as the main beneficiaries, and also for industry too.

In his report to the 2nd UPI International conference on Technical and Vocational Education and Training (TVET) held in Indonesia in 2012 on the topic 'Strengthening TVET Teachers' Education through Teacher-Industry Linkages', Bukit (2012) contended that TVET schools and industry linkages were crucial to imparting students with practical skills and positive attitudes at work, and also contributed to enabling teacher trainers to update their teaching methodologies.

> *"Industries give the students the opportunity to visit and to carry out internships. That way, students can observe and learn about the required working behavior and get familiar with the working culture which only can be found in industry sites. Through this internship students will be able to differentiate which lessons are required and highly related to the word of work and which are not".*

Bukit (2012) further added that the support provided by industries could be in form of equipment or students' training locations, and that internship opportunities allowed industries to choose prospective employees, even before students had graduated. However, this report was based on collaboration involving Technical and Vocation Education Training institutions and industry in Europe. It still remained unclear as to how collaboration between secondary schools and industry in Lundazi district, Zambia, benefited pupils, and whether it in any way spurred teachers to improve their pedagogical approaches, hence the need for this study.

Pineli and Hall (2012) conducted a study in Hampton, Virginia, United States. The study examined the perceptions of mentors and student interns from NASA's Langley Aerospace Research Summer Scholars (LARSS) Programme in Hampton, Virginia during the summer of 2010. The study involved a sample of 150 students and 91 mentors who participated in the 2010, ten-week summer internship programme, which focuses on developing a range of specialised areas including; aeronautics, earth science research, exploration and flight, systems and concepts, systems engineering and supersonic/hypersonic testing among others. The study focused on examining: mentors' perception of academic preparedness brought to the work place by student interns; student interns perceptions of how the internship helped develop key skill areas; and self reports from student interns and mentors about their internship experience. The study reported that student interns perceived improvement in their own skills over the course of the internship in relation to adaptability, computer knowledge and skills, critical thinking and problem solving, analytical thinking and oral communication. The study concluded that collaborative work experiences among higher education institutions and industry provided various benefits to students which included knowledge acquisition,

and also afforded students an opportunity to try out their chosen fields. However, this study was conducted in the United States of America, and it was based on a sample of students from higher education institutions in the United States and mentors from NASA. Consequently, it remained unknown whether collaboration between secondary schools and industry in Lundazi district, Zambia, benefited pupils in their academic performance.

The Bridge to Employment (BTE) initiative, sponsored by the Johnson and Johnson Company, reached out to support the academic and economic success of at-risk students from disadvantaged communities across the United States. The collaboration-based initiative linked young people to healthcare fields and drew upon the collaborative efforts of individuals from industry, business, education, and the community to empower students to stay in school and to help them build an enriching pathway into college and a career (College Summit, 2013). These BTE collaborations included, at a basic minimum, a local Johnson and Johnson Company, a high school, a postsecondary institution, and a community based organisation. The collaborations worked to promote student learning and institutional effectiveness by providing professional development, student sponsorships and instructional support for educators. However, how pupils benefited from the collaboration between secondary schools and industry in Lundazi district, Zambia, was what this study aimed to find out.

In a study on Strengthening University-Industry linkages in Africa, which was part of the project "Strengthening Higher Education Stakeholder Relations in Africa" (SHESRA), and in which a total of 133 African universities and higher education institutions participated Ssebuwufu, Ludwick and Belland (2013) reported that respondent institutions confirmed that they frequently benefited from their collaboration with industry. The said benefits were notably realised through commissioned research, investments in laboratories and equipment, student scholarships and funding for graduate research. Whereas, this study was conducted in Africa, its focus was on University-Industry linkages. For this reason, it was still unclear whether secondary schools in Lundazi district, Zambia, were engaged in any collaboration with industry,

and whether the collaboration, if any, was benefiting the pupils, hence prompting this study.

Tumuti, Wanderi and Thoruwa-Lang'at (2013) conducted a study on benefits of University-Industry collaborations. The study focused on the collaboration between Kenyatta University and Equity Bank. The study sought to establish whether the collaboration between Kenyatta University and Equity Bank had been beneficial to the involved parties; students, the community and other collaborating institutions since inception of the collaboration in June 2003. As part of its programmes tailored to reaching out to the community, Kenyatta University, through the Directorate of Community Outreach and Extension Programmes, entered into a five year renewable collaboration with Equity Bank of Kenya, in 2008. This collaboration was aimed at training and facilitating over 3000 students annually to give service to communities nationwide based on their needs. Founded on the bedrock of corporate social responsibility, the programme was aimed at benefiting all the stakeholders involved and transforming the lives of the members of the communities it served. Students who participated in the exercise reported that they acquired various skills which included financial skills, project management skills, interpersonal communication skills and networking skills, and that these skills could not have been acquired through book learning alone. It should be recognised that the said skills were critical in influencing students' success both in school, and also long after they had completed their studies. By virtual of acquisition of the skills referred to above, students were prepared for the challenges that awaited them as they graduated from their studies and sought to participate in the affairs of their communities, including the job market. However, it remained unknown whether the collaboration between secondary schools and industry in Lundazi district, Zambia, was empowering students with experiential skills acquisition, thus the need for this study.

2.4 Strategies to strengthen career guidance collaboration between school and industry

Having recognised the crucial role career guidance could play in the preparation of students for their transition to the world of work, the Government of the United States

provided a legal framework as a basis for federal support to career guidance and counselling in American schools. The first and second set of these federal statutes were contained in the Carl D. Perkins Vocational and Applied Technology Education Act of 1990, and the School-to-Work Opportunities Act (STWOA) of 1994 (Bezanson and Kellett, 2001). Both of these statutes called on state and local agencies to work together with educators and business, with a view to building high quality school-to-work and vocational/technology education programmes. Further, the laws called for professionally trained and licensed personnel to administer career guidance. However, it remained unknown whether there existed any locally formulated policies to guide the provision of career guidance, and the establishment of collaboration engagements in secondary schools in Lundazi district, Zambia. It further remained unknown whether provision of career guidance in secondary schools in Lundazi district, Zambia, was administered by professionally trained counsellors.

Rynkun (2007) conducted a study on collaboration between university research and industry. The study was carried out in Halmstad, Sweden, and it focused on analysing reasons and means of university research and industry collaboration which led to innovation processes. The results revealed how university research collaborated with industry from the university research point of view. The study employed qualitative methodology and data was collected through two interviews. The results of the study revealed that university research could not produce innovation without practical knowledge which was provided by industry during collaboration. In the same way, industry could not produce scientifically based innovation without the interactive learning with university research during collaboration. It was found that, since researchers from the university used scientific methods and studied theories of the problem, implementation of industry commissioned projects usually took long, ranging from a period of two to four years, in which case meetings and other forms of communication were considered crucial to sustaining the collaboration. It was further found that the first step to start collaboration was always initiated by industry and not the university. The study recommended the need for a written code which would spell out the rules to guide the collaboration, time-frame and terms of the collaboration as well as responsibilities of personnel involved. However, this study was carried out in Halmstad,

Sweden, and its focus was on collaboration between university research and industry. It therefore remained unknown as to what strategies were in existence to support career guidance collaboration between schools and industry in Lundazi district, Zambia. That knowledge gap necessitated this study.

The Department of Education for Australia developed benchmarks as guiding principles for the establishment, implementation and sustainability of school-industry collaboration. These included; enhancement of student learning out comes, creation of mutual benefits, developing common goals, accountability, community participation and evaluation (Department of Education, Employment and Workplace Relations, 2010).

In the same way, the state of Victoria, Australia's Department of Education and Early Childhood Development (2010) provided a framework of priorities to guide school-industry collaborations in government schools. The framework outlined five areas of priority: opportunity, excellence, leadership, community, and economy and society. Excellence entailed industry and schools working together to promote a world class education system that valued excellence in well- being, learning and teaching. Leadership on the other hand implied maximising the impact of leadership to enhance student, school as well as community outcomes. Meanwhile, community entailed school-industry involvement to bring schools and communities together to harness and share resources, as well as to learn and better understand the needs of each other with a view to creating productive and worthwhile collaborations. Economy and society referred to assisting in the broadening of opportunities for students to undertake learning and pathways in areas of skill gaps or labour shortages, with special focus directed at stimulating students' interest and performance in Mathematics and Science pathways. Opportunity, as the term suggests, implied creating greater opportunities for all Victorian students, especially those from disadvantaged backgrounds to achieve excellent academic, social and individual outcomes. The foregoing two studies were based on a sample of schools in Australia. It therefore remained unknown whether career guidance collaboration between schools and industry in Lundazi district, Zambia, was supported by any locally devised framework.

In his report to the 2nd UPI International Conference on Technical and Vocational Education and Training held in Bandung, Indonesia, in 2012, Bukit (2012) contended that many industries in developing countries tended to be reluctant to support technical education, as they were not convinced of the education institutions' capacity and competence to produce qualified skilled personnel and recommended the knock door approach as a vital technique to initiate collaboration with not yet cooperating industries in developing countries. Further, Bukit (2012) suggested better understanding between schools and industry, teacher incentives, and the appointment of employers to school advisory boards as vital strategies that could be employed to build linkages between TVET colleges and industry. He stressed that even though the TVET teachers-industries linkage was a two-ways approach, teachers should nonetheless take the first step to engage industry, even before formal arrangements were put in place. However, this report focused on collaboration between TVET colleges and industries in selected developing countries. It therefore remained unknown what the status of the collaboration between secondary schools and industries in Lundazi district, Zambia, was and what the strategies, if any, the secondary schools devised to establish and enhance career guidance collaboration with industry.

Meanwhile, Chen (2005) reported that High school students in Canada encountered the challenge of school-to-work transition, and proposed counsellor-teacher collaboration as both an initiative to help enhance classroom based career education and also as a strategy to reach out to majority of students.

In recognition of the central role that collaboration between schools and industry in relation to career guidance can play in shaping the human capital of a nation, Watts (1995) as cited in Bezanson and Kellett (2001) implored that career guidance should start early in schools, and that it should continue through the secondary and post-secondary life of a leaner, and even beyond. As such, career guidance is acknowledged in many developed countries as fundamental to preparing students at all levels of the education ladder for the challenges of the future by supporting their academic, career, personal and social development, as well as their community participation for the betterment of society (ELGPN, 2011). In this light, it can be argued that collaboration

between school and industry in the context of career guidance helps pupils to connect their educational programmes to the next level and future career success. Consequently, in the current scenario of high unemployment, school-industry collaboration in relation to career guidance can help to heighten the awareness of pupils and other individuals outside the school system, whatever their age or educational qualification in identifying opportunities that led to the development of new skills needed on the labour market or that enhanced self-employment and entrepreneurship as opposed to salaried jobs.

In Africa, Ssebuwufu, Ludwick and Beland (2013) conducted a study on University-Industry-Linkages. The study focused on the Institutions' capacities and gaps and was intended to help the AAU and other higher education stakeholders develop tools and programmes that responded to the identified capacity gaps, while at the same time building on the existing strengths and capabilities of the African Universities to link with industry and the productive sector in general. Based on the responses of a total of 133 Universities and other higher education institutions across Africa which participated in the study, it was found that, African Universities were indeed taking initial steps to stimulate and deepen linkages with industry. As such, strong leadership, both in terms of policy and personnel, was identified as an important enabling factor for promoting linkages. The results further revealed that many African Universities had incorporated industry linkages in their strategic plans and had to that effect created designated posts and offices, as a way of institutionalising, as well as fostering their collaboration with industry. Further, the findings revealed that respondent institutions prioritised assistance in training academic staff in entrepreneurial skills and developing institutional strategic plans emphasising engagement with the productive sector, as well as providing opportunities for peer learning from other institutions with a history for successful engagements with industry. However, although this study was carried out in Africa, its focus was on university-industry linkages. It therefore remained unknown as to whether secondary schools in Lundazi district, Zambia, had in place any deliberate measures and interventions intended to establish and strengthen their collaboration with industry.

In a paper presentation on enhancing schools-industries collaboration in Science Education in Nigerian schools, Ojimba (2013) argued that the parallel nature of school

Science and industry contributed to increasing the already widened gap between modern day realities and out of date school Science experiments. He urged curriculum reform and cooperation between schools and industry as a means to bridging the gap. He stressed acquisition of industrial skills, development of work habits, and acquisition of positive attitudes toward industry as some of the benefits that could be realised from school-industry collaboration. While acknowledging the possibility of obstacles in developing collaborations between secondary school Science teachers and industry in Nigeria, Ojimba (2013) held that school Science teachers were catalysts that would facilitate the desired cooperation between schools and industries. He proposed curriculum reform to merge school Science with industrial processes, and devotion of 60 percent of total learning situations to practical projects and school-industry collaborations. He further proposed a provision for science teachers to spend some weeks in the industries relevant to their fields of specialisation. He added that one-to-two percent of the industries' workforce be reserved for students on training to help acquaint them with the relevant industrial experience and the scientific principles being applied. Although, this paper presentation was on collaboration, it nonetheless focused on enhancing school-industry collaboration in Science Education. Further, the paper was based on the Nigerian situation. It therefore remained unknown as to what strategies the secondary schools in Lundazi district, Zambia, had devised to strengthen collaboration between career guidance and industry.

Similarly, Ezewu, as cited in Chileshe (2011), pointed out the need for schools and communities to work together in order to facilitate better learning for pupils in Zambian schools.

Ndhlovu (2005) conducted a study in Ndola, Zambia, on parental involvement in the education of their visually impaired children. He found that although both teachers and parents were willing to work together, parents still faced some constraints such as non invitation and lack of sensitisation to get involved in school activities, and recommended that teachers should educate parents on the importance of getting involved in the education of their children. Although this study was on collaboration, its focus was on parental involvement in the education of their visually impaired children. For this reason

it still remained unknown as to what the strategies the secondary schools in Lundazi district, Zambia, utilised to enhance their collaboration with industry in the provision of career guidance.

Kangombe (2013) conducted a study in Lusaka, Zambia, to investigate home-school collaborations in basic schools. The results of the study showed that teachers used various techniques to collaborate with parents. These techniques included: homework policy, open days, parents' day, parent-teacher association meetings, literacy clubs, extra lessons, class visits and remedial work. Whereas, this study was on collaboration, it focused on examining the strategies that schools used to promote their engagement with parents in home-school collaborations that were intended for pupils' literacy development. It therefore remained unknown as to what strategies secondary schools in Lundazi district, Zambia, used to enhance collaboration between career guidance and industry.

The foregoing demonstrated the commonly held view that education should not be left to schools alone, but that it should be everyone's responsibility; teachers, parents, civic organisations, and industry inclusive. This entailed boundary crossing through developing collaboration mechanisms between schools and the outside community. However, it was not known as to what strategies, if any, secondary schools in Zambia, and in Lundazi district in particular, had devised to establish and ensure sustainability of their collaborations with industry.

2.5 Summary of the chapter

This chapter discussed the literature review. The discussion was guided by the sub themes generated from the objectives of the study. The three sub themes were: nature of career guidance collaboration between school and industry, how pupils benefit from the collaboration between career guidance and industry, and strategies that can help strengthen collaboration between career guidance and industry.

From the review of the literature given above, it had been established that across the developed world, institutions of learning at various levels, secondary schools inclusive, were involved in several forms of collaboration with industry. It had also been

established that the nature of career guidance collaborations between schools and industry in the developed countries had notably included; site visits, work based learning, mentoring, academic tutoring, student sponsorship, staff development, financial grants, equipment and infrastructure support. However, studies conducted within Africa on school-industry collaborations were exceedingly scanty. Available studies conducted within Africa focused on collaboration between science education and industry and on University-Industry collaboration. Hence, there was still knowledge gap in relation to the nature of career guidance collaboration between schools and industry, which this study sought to fill.

It was also recognised from the literature reviewed above that in the developed world school-industry collaborations afforded several benefits to students, which contributed to enhancing their educational, social, and career outcomes. Real-world learning experiences, inspiration by role models and experts, and student scholarships were some of the notable activities from which students benefited due to school-industry collaborations. In contrast, the number of studies carried out within Africa on career guidance-industry collaborations was extremely low. In Zambia in particular, from the literature available it was evident that no studies had been undertaken to determine nature of school-industry collaboration and how pupils benefited from the collaboration between schools and industry. Therefore, there was still knowledge gap in relation to nature of career guidance collaboration and how pupils benefited from such collaboration.

Furthermore, the literature reviewed revealed that the world over, successful school-industry collaborations were underpinned by particular aspects. Among these were supportive government policies, legal statutes, formal written agreements, good leadership, shared vision, personnel, planning, consensus building, trust and communication. It was also observed that more studies on school-industry collaborations had been conducted outside Africa. In Zambia, and in particular for Lundazi district, it was evident from the literature surveyed that studies on school-industry collaboration in terms of career guidance were virtually not available. The available studies on collaboration focused on; parental involvement in education of visually impaired pupils

(Ndhlovu, 2005), nature of school/community partnerships (Chileshe, 2011) and home-school collaboration in literacy development (Kangombe, 2013). The above enumerated studies were conducted in Ndola, Chingola and Lusaka districts respectively. In this regard, there was still knowledge gap in relation to what strategies could help strengthen collaboration between schools and industry in Lundazi district in terms of career guidance. The next chapter discusses the methodology that was used in this study.

CHAPTER THREE

METHODOLOGY

3.0 Overview

The previous chapter dealt with the review of the existing literature. This chapter discusses the methodology employed in this study. It includes the research design, study population, study sample, sampling techniques, research instruments and data collection procedures, data analysis and ethical considerations.

The study was guided by Hermeneutic phenomenology by Husserl (1970). This is a qualitative methodology. Husserl argues that we are always already in the world and that our only certainty is our experience of our world. As a result the purpose of hermeneutic phenomenology research is to bring to light and reflect upon the lived meaning of experiences of participants. In this study, the lived meaning of experiences of head teachers, guidance teachers, pupils and human resources officers provided understanding to the nature of school-industry collaboration in terms of career guidance and how pupils benefited from such collaborations.

3.1 Research design

This study adopted a descriptive survey design. A descriptive survey design helps to describe the phenomena or unit under study (Kombo and Tromp, 2006). Descriptive survey designs describe and interpret the status of the phenomena under study in the form of conditions that exist, practices that prevail, opinions, attitudes and beliefs held. The major purpose of descriptive survey designs therefore is to establish the state of affairs of the phenomenon under investigation. Ghosh (2011) has observed that descriptive research methods are easily applicable to investigating various sociological problems, as such problems are generally descriptive. Ghosh (2011) further adds that the purpose of descriptive research methods is to describe, analyse and interpret socio and economic institutions, area or group with a view to draw out inferences which are helpful to directly address the identified problem, or to guide other investigations. Sidhu (2014) has also pointed out that descriptive survey designs are organised attempts to

analyse, interpret, ascertain and report on the current status of a social institution, group or area. Given that, schools may be said to be social institutions, this therefore was a descriptive study of two secondary schools in Lundazi district on the nature of career guidance collaboration between the schools and industry. This study employed a descriptive survey design among other designs, so as to permit an in-depth study of the case in its natural setting, in that this study was based on Lundazi district in the Eastern province of Zambia. The study employed qualitative research methods in its data collection.

3.2 Study population

Kasonde-Ng'andu (2013) defines population as a group of individuals, objects or items from which samples are taken for study with the purpose to draw inferences about them. In this study the population comprised of all the human resources officers in private and public institutions in Lundazi district, all the pupils, all the head teachers, and all the guidance teachers in secondary schools in Lundazi district.

3.3 Study sample

A study sample is a small proportion of the population that is selected for investigation and analysis (Sidhu, 2014). The sample of this study comprised 38 respondents segmented as 10 human resources officers (five of whom were employees of a private institution, while the other were employees of a government institution), two head teachers, two guidance teachers, and 24 pupils. The justification to settle on this sample size was based on the principle of saturation (Beck and Watson, 2008; Martins, 2008). Scholars such as Beck and Watson (2008) and Martins (2008) argue that sample size in qualitative studies are determined by how many interviews or focus group discussions saturation is reached. Martins (2008) reached saturation at the 12^{th} interview. In this case, saturation is expected to be reached by interviewing and having focus group discussions with 38 participants.

3.4 Sampling techniques

Sampling entails the process of selecting a study sample from the population. The procedure should be such that, the sample selected contains elements that are representative of the characteristics found in the whole group (Ghosh, 2011). In this study both simple random sampling and purposive sampling techniques were utilised. Simple random sampling technique was used to select the 24 pupils from the grades 10 and 11 classes. This technique was employed because it provided each element in the population an equal chance to be included in the study sample (Msabila and Nalaila, 2013). In order to ensure that each grade 10 and 11 class had an equal chance of being included in the study sample, simple random sampling procedure was used to select one grade 10 and one grade 11 class from each of the two secondary schools in the study. This was done by conducting a raffle. Pieces of papers with names of classes were placed in a box, from which one grade 11 and one grade 10 class for each of the two secondary schools was randomly drawn. To ensure gender parity within the sample, pupils in each of the classes selected in the two secondary schools were stratified into boys and girls. This was achieved by accessing a list of all the male and female pupils for each of the classes selected in the two secondary schools. Thereafter, a raffle was conducted to come up with three boys and three girls for each grade 10 class, and three boys and three girls for each grade 11 class translating into 12 pupils for each secondary school. This meant that the entire grades 10 and 11 pupils in the two secondary schools had an equal chance of being included in the sample. A non probability sampling procedure known as purposive sampling was used to select a sample of human resources officers, head teachers, and guidance teachers, since by virtual of their positions, they were in possession of information that was necessary to address the purpose of the study. Specifically, human resources officers play a key role in the coordination of employee recruitment, placement, training and development, job performance monitoring as well as employee counselling for their organisations.

3.5 Data collection instruments

Semi-structured interview guides and focus group discussion guides were used in collecting data for this study. Interview guides were used to collect data from head

teachers, guidance teachers and human resources officers. It is necessary to point out that interviews provide for collection of data directly in a face-to-face contact, and therefore avail the interviewer room for in-depth gathering of information, in addition to probing for clarity (Sidhu, 2014; Kasonde-Ng'andu, 2013). Further, by using interviews, the researcher is able to create rapport with respondents, and in so doing create an enabling environment necessary for openness and frank discussion. Similarly, respondents have an opportunity to seek clarification from the interviewer where they are not clear. Focus group discussion guides were used to gather data from the pupils. Focus group discussions were used in order to elicit the opinions, ideas and experiences of the pupils on the topic under study. In addition, focus group discussions had the advantage of yielding more information in a short period of time, as compared to the traditional forms of questionnaires and interviewing. Therefore, the information obtained from focus group discussions with the pupils was useful in cross checking the data obtained from interviews with head teachers, guidance teachers and human resources officers. Interviews with head teachers as well as guidance teachers were tape recorded with their consent.

3.6 Data collection procedure

The data was collected in the months of November and December, which was the third term of the 2015 school year. The actual procedure began with the researcher seeking permission from the District Education Board Secretary (DEBS) for Lundazi district. Semi-structured interviews were employed to come up with desired data from head teachers, guidance teachers and human resources officers. Focus group discussions were held with pupils. The use of focus group discussions was to elicit pupils' perspectives and experiences with regard to their awareness, and benefiting from career guidance services in their respective schools, including the aspect of collaboration between their schools and industry in the provision of career guidance services. Further, in these focus group discussions pupils were implored to render opinions on what needed to be done to strengthen collaboration between their respective schools and industry. Permission to interview respondents whose institutions did not fall under the Ministry of General Education was sought from their relevant district or institution's supervising officers.

3.7 Data analysis

Data analysis entails giving order and meaning to the information acquired. It involves scrutinising, examining and drawing inferences (Kombo and Tromp, 2006). In this study the data obtained through the interviews and focus group discussions was analysed qualitatively by categorisation and grouping the emerging themes. The findings were then narrated and discussed descriptively.

3.8 Ethical Considerations

Ethical issues were given ultimate consideration in this study. Firstly, written consent to conduct this study was obtained from the University of Zambia. Secondly, permission was sought from the Education Board Secretary, for Lundazi district in order to conduct research in the selected schools. The purpose of the research and its possible benefits to the field of education was explained. At school level consent was obtained from the head teachers, and all the persons who participated in the study. The importance of the study was also explained. It was further explained that participation was voluntary. In relation to the participation of the pupils consent was obtained from both the school authority as well as their parents. With regard to institutions that were not under the Ministry of General Education, consent was sought from the relevant heads of the institutions, as well as the individual respondents. In addition, confidentiality was highly observed by ensuring that respondents' names were not revealed, while alphabetical letters were used for schools and other institutions in which research was carried out.

3.9 Summary of the Chapter

This chapter presented the methodology that was used in this study. A descriptive survey design was employed. Lundazi district was the research site. The study population comprised all secondary school head teachers, guidance teachers, pupils in secondary schools and human resources officers in private and public institutions. The study sample consisted of two head teachers, two guidance teachers, 24 pupils and 10 human resources officers giving a total of 38 respondents. Simple random sampling was used to select the 24 pupils, while a non-probability sampling procedure known as purposive sampling was employed to select the school head teachers, guidance teachers and human

resources officers. Semi-structured interview guides were used to collect data from head teachers, guidance teachers and human resources officers. Focus group discussions were held to gather data from pupils. Ethical issues were taken into account. The next chapter presents the findings.

CHAPTER FOUR

PRESENTATION OF FINDINGS

4.0 Overview

The previous chapter outlined the methodology that was employed for this study. Data was derived from head teachers, guidance teachers, pupils as well as human resources officers working for public and private institutions. The present chapter presents the findings of the study aimed at examining the nature of career guidance collaboration between schools and industry in Lundazi district, Zambia. The findings are presented in accordance with the research questions, which were as follows: (i) What is the nature of career guidance collaboration between schools and industry? (ii) How do pupils benefit from the collaboration between career guidance and industry? and (iii) What strategies can be devised to help strengthen collaboration between career guidance and industry?

4.1 Nature of career guidance collaboration between school and industry

The following were identified as nature of career guidance collaborations between the secondary schools and industry in Lundazi district: career talks, motivation talks, site visits, career exhibitions, entrepreneurial skills awareness, job market awareness, as well as university/college entry requirements information.

4.1.1 What activities are provided to pupils under career guidance services

The Head teachers and guidance teachers of the two secondary schools were asked in an interview to indicate what activities they provided to pupils under career guidance. The following activities were indicated by both the two head teachers and the two guidance teachers as the activities that they provided to pupils under career guidance; academic guidance such as study skills and timetabling, motivation talks, career talks, career exhibitions, site visits, and coordinating inter class quiz and debate contests. This can be deduced from what the guidance teacher for school Y had to say:

"We provide career guidance. We give career talks to pupils. We also offer counselling sessions. We provide personal, group, academic and social counselling. When we give group counselling, we do it according to gender: Girls on their own, and also boys on their own. We want pupils to be free during group counselling. We also give motivation talks. We coordinate inter-class quiz and debate competitions."

The aforesaid, was confirmed by the head teacher for school Y who reported that:

"As a school we provide guidance and counselling services to pupils on academic affairs, social affairs and job market identification."

From school Z the head teacher reported:

"We provide several services. We provide personal counselling, which is one-to-one to help pupils with self understanding, problem solving and we give them advice on self-contentment. We also provide educational counselling to help them with study skills and time tabling skills. We do it class by class, especially for Grade 12s who were writing. They need to know the difference between a school time table and a personal time table."

When asked to indicate whether they were satisfied with the career guidance services that they were providing to their pupils, three of the respondents said they were not satisfied, while the head teacher of school Y indicated that he was satisfied. When the three respondents who reported that they were not satisfied with the career guidance services that they were providing to the pupils were asked to give reasons, they explained that they still needed to do more in the area of field trips, and also to create awareness amongst teachers so that they could support career guidance, and that up until then, career guidance services were mainly provided to the pupils in grades 9 and 12 as part of preparing them both, for examinations and also for their entry into community life. The guidance teacher for school Z also indicated that the guidance unit had embarked on an exercise to construct open shelters where pupils could study during hot weather, and that only one study shelter out of the targeted number of 10 study shelters had been completed.

4.1.2 Whether schools collaborated with other public and private institutions in their provision of career guidance services

Head teachers and guidance teachers were asked in an interview to indicate whether their schools collaborated with other public and private institutions in their provision of career guidance services to pupils. All the head teachers and their respective guidance teachers indicated that their schools collaborated with other public and private institutions in their quest to provide career guidance services to pupils. This view was also confirmed by pupils in the focus group discussions, in which 21 of the 24 pupils who participated in the group discussions reported that their schools at times collaborated with other public and private institutions in their efforts to provide career guidance services to them. All the 10 human resources officers from the public and private institutions also confirmed during the interview that their respective institutions collaborated with several of the secondary schools in Lundazi district, Zambia. When further asked to indicate some of the secondary schools that their institutions collaborated with, the following schools were mentioned; Lundazi day, Lundazi boarding, Lumezi day, Lumezi boarding, Islamic Welfare Trust, Lumimba day, Lusuntha day, Emusa day as well as Mwase day secondary schools.

4.1.3 Institutions that collaborated with the selected schools

The following were the institutions that the secondary schools collaborated with in the provision of career guidance services to pupils; Drug Enforcement Commission, Ministry of Health, Ministry of Livestock and Fisheries, Department of Socio Welfare, Barclays Bank Zambia, Zambia National Commercial Bank (ZANACO), Eastern Water and Sewerage Company, NWK Agric Services, Village Industry, Zambia Electricity Supply Corporation (ZESCO), Department of Forestry, Ministry of Justice, Zambia Open University, ST Eugene University and the Roman Catholic Church.

Head teachers and guidance teachers were asked to indicate in an interview the names of the institutions their schools collaborated with in the provision of career guidance services to pupils, and also to state the nature of the collaboration. School Y, indicated that the school regularly collaborated with the Drug Enforcement Commission, the

Ministry of Health, Department of Socio Welfare, Village Industry, ZANACO and ST Eugene University as well as several existing and upcoming private teacher training colleges in Eastern province. When asked to indicate the nature of the collaboration, the following were the common responses received from the head teacher and guidance teacher for school Y; career talks, job market opportunities, academic guidance, personal socio guidance and health talks. The head teacher and guidance teacher for school Z indicated that their school collaborated with Barclays Bank Zambia, Eastern Water and Sewerage Company, ZESCO, Zambia Police, Department of Forestry, Ministry of Justice, Ministry of Health, Village Industry, Zambia Open University, and ST Eugene University. When asked to indicate the nature of the collaboration, both the head teacher and the guidance teacher for school Z indicated that the collaborations commonly focused on career awareness in particular fields, and that the banking industry offered entrepreneurial and financial management talks. They further added that the institutions named above, with the exception of Village Industry, Zambia Open University, and ST Eugene University participated in the 2015 district career exhibition that was hosted by the school. Regarding the same issue, the head teacher for school Z had this to contribute:

> *"Barclays Bank provided prize money that was used to procure awards for pupils who had excelled in the 2015 end of term II school examinations. A total of 10 pupils were awarded with prizes, and this served as a motivating factor to all the pupils in the school."*

From school Y the head teacher had this to offer:

> *"The drug enforcement group regularly comes here to give talks to help pupils desist from embarking on illicit use of drugs, so that they can concentrate on their education and future careers. The socio welfare department pays school fees for some of our pupils, and also helps them with other school requisites. Private institutions like ST Eugene University and Asante College of Education also regularly come here to inform pupils about admission requirements and also to advertise what they are*

offering in an attempt to woo our pupils. Barclays Bank and ZANACO were also here and gave talks to grade 12 pupils on job market survey and entrepreneurship."

In addition to the institutions stated above, pupils in the focus group discussions also mentioned the Forum for African Women Educationists in Zambia (FAWEZA) and the Roman Catholic Church as some of the institutions that their schools collaborated with in their provision of career guidance to learners. The aforesaid can be noted from what one grade 10, female pupil of school Y said:

"Yes, they collaborate with drug enforcement commission, FAWEZA and the Catholic Women Group. FAWEZA supports other pupils who can't afford to pay. The Catholic Women Group also sponsors vulnerable children so that they can continue with education and realise their career."

The fore mentioned was confirmed by another grade 11, male pupil also of school Y who commented as follows:

"The career guidance unit collaborates with FAWEZA and the Roman Catholic. They sponsor vulnerable pupils who cannot afford the school fees. In this way the pupils can concentrate on the studies and get a good career in the future and have a comfortable life."

However, it was established that FAWEZA was no longer implementing the scholarship facility to secondary school pupils in Eastern province, and that the organisation had not sponsored any secondary school pupils in the province, since January 2014. When further asked about the nature of collaboration, pupils' responses were similar to those given by the head teachers and guidance teachers.

4.1.4 Whether other public and private institutions collaborated with secondary schools

Human resources officers from the public and private institutions in Lundazi district, Zambia, were asked in an interview to state whether or not their institutions collaborated with the public and private secondary schools of the district. All the 10 human resources

officers indicated that, indeed their institutions collaborated with the public and private secondary schools of Lundazi district. When further asked to state the names of the public and private secondary schools that their institutions collaborated with, the following were their responses; Lundazi day, Lundazi boarding, Lumezi day, Lumezi boarding, Lumimba day, Lusuntha day, Emusa day, Mwase day and Islamic Welfare Trust secondary school. It was further established that Islamic Welfare Trust was the only registered private owned secondary school in the district. When further asked to indicate the nature of the collaboration, varying responses were recorded. The human resources officer for one institution reported that his organisation regularly provided professional advice to school Y in relation to livestock production and management. This can be seen in the following response:

> *"When their animals fall sick, for instance if there is an outbreak of a disease they contact us and we have always gone there to give them advice on how to contain the disease."*

One other human resources officer stated that in addition to providing sponsorships to orphans and vulnerable secondary school pupils, his institution also provided career talks to grade 12 pupils in almost all the secondary schools in the district in an effort to guide them in their decisions for further education and career choices. In this regard this is what he had to say:

> *"Our kind of collaboration with the secondary schools involves social services delivery to orphans and vulnerable pupils. We provide sponsorships for those that are orphans and vulnerable. Sometimes we do some career talks, especially with the grade 12s. Career talks on the opportunities that the job market is able to provide and also to encourage pupils to define their careers so that even when they complete their university or college education, they already know the opportunities that are on the job market."*

Another human resources officer reported that his institution dealt with skills training for out of school youth. As such, some secondary schools in the district that had practical

subjects on their curriculum, such as Design and Technology and Home Economics and Hospitality frequently took pupils to the training workshop for observations and use of the institution's machinery. This can be noted from the quote below:

> *"As an institution, we are very much involved in providing skills to unemployed youth who are not in school. We give skills to young people, so that they can be independent. Because of the new subjects they have introduced in schools like carpentry, bricklaying, computer lessons, metalwork and hospitality schools come for study tours at the training workshop. They look at projects how we are doing and sometimes to use our equipment."*

Another human resources officer reported that his institution provided part of the prize money for the 2015 award ceremony for pupils with outstanding academic performance hosted by school Z, and that the institution from time to time also provided motivation talks to pupils at four of the 15 secondary schools in the district on topics such as financial management as well as identification of opportunities for self employment in the informal sector. Yet, another human resources officer stated that his institution regularly collaborated with all the secondary schools in the district not only through the provision of career talks, but also by way of information sharing through health talks in an attempt to avoid possible out breaks of diseases in learning institutions. He had this to say:

> *"We collaborate with all schools. We communicate problems, for instance out breaks to ensure information is communicated to pupils. We also give health talks. Helping them to be aware of dangers of certain unhealthy practices. We also give career talks and the benefits of courses that we undertake as health sector. They need to have a wide choice so that they can decide whether to go for the courses or not."*

4.1.5 Whether other public and private institutions were satisfied with the level of collaboration with secondary schools

When asked in an interview to indicate whether or not they were satisfied with their existing collaborations with the secondary schools in Lundazi district, Zambia, four out of the 10 human resources officers responded that they were satisfied, while six of them reported that they were not satisfied. When the four human resources officers who had indicated that they were satisfied with the levels of collaboration between their institutions and secondary schools were asked to give reasons, they explained that their institutions regularly participated in the annual district career fairs, and that their personnel were always allowed permission to give career talks to pupils every time they made a request. They added that, some of the schools regularly conducted tours to their institutions as part of career exploration, and also to use the institutions' machinery. These findings were revealed by responses such as one provided by the human resources officer from one of the institutions:

> *"As an institution we take part in the careers fair at the boarding school each year. Schools come here to learn what is happening. How the machines work in the processing of cotton, from raw cotton in the field to lint, which is the final product."*

One human resources officer from another institution reported as follows:

> *"We are always given an opportunity to work together. There is no resistance in terms of working together. Every time we visit the schools we have been given an opportunity to give talks to the pupils."*

Another human resources officer, from yet another institution had this to report:

> *"We are very much involved in youth activities. We participate in Youth day activities. We also take part in careers day by displaying some of the things that we make. We have most of the facilities; computers, industrial grinding machines and hand tools for bricklaying. Some schools come to use our equipment. With the new subjects they have*

introduced I expect them to come in numbers. I expect a lot of schools to start coming here. At least, we are satisfied."

A human resources officer, who was female, and from yet another institution asserted the following:

"We participate in careers exhibition at Lundazi boarding. We also give career talks to pupils to sensitise them on what we do as an institution, and what these pupils need to know in order to join us. We also give them information on colleges in terms of where they can do engineering. We also give motivation talks in different schools to girls to motivate them to paying much attention in Maths and Science. Whenever, they have some career guidance they would always invite this office which at least works well."

In contrast, when the six human resources officers who had reported that they were not satisfied with the levels of collaboration between their institutions and secondary schools were asked to state the reasons, various responses were recorded. These were; more needed to be done to fully enlighten pupils on operations of their institutions, linkages with secondary schools not core business of their institutions, limited communication between the secondary schools and their institutions, less government funding to public institutions and delayed payment by secondary schools for the services rendered. To this effect one human resources officer said:

"Our institution has not done much in terms of collaborating with schools. We have been very busy. We need to include schools on our action plan. Pupils need to know our operation structure so that those that are willing can join us. Schools should inform us in advance whenever they want us to give career guidance to their pupils so that we prepare adequately. We need to plan for them."

Another human resources officer said:

> *"We are a business enterprise. We only collaborate with them, when they want something from us, like the upgraded schools they order trusses from us for their new buildings. In a month we would make six or more, but now I have done only one, due to less funding to schools. They can send the pupils here for practicals. In the classroom there is too much theory."*

4.2 How pupils benefit from the collaboration between career guidance and industry

Improvement in pupil discipline, school attendance and academic performance, sponsorship, financial and material donations, increased awareness of the link between school subjects and further education and career paths, mentorship in Science and Geography projects, formal and informal sector job market awareness as well as exposure to real job situations, and the utilisation of other institutions' machinery in practical lessons were cited as some of the ways in which pupils benefited from the collaboration between career guidance and other public and private institutions in Lundazi district, Zambia.

4.2.1 Whether pupils benefited from the collaboration between career guidance and other public and private institutions

With regard to benefits for pupils, head teachers and guidance teachers were asked in an interview to indicate ways in which the collaboration between career guidance and other public and private institutions benefited the learners. The following were their common responses; improvement in pupil discipline and academic performance, school bursary for needy pupils, school subject combination and its relationship to further educational and career paths, job market awareness, exposure to job environment and awareness of entrepreneurial skills and opportunities. When asked to indicate whether they were satisfied about the level of collaboration between career guidance and industry, three of the four respondents indicated that they were satisfied, even though they recognised that much more in the area of collaboration needed to be done. The guidance teacher for school Z indicated that she was not satisfied, and added that her school had not done

much in terms of collaborating with other public and private institutions in relation to field trips. On this account, the head teacher for school Z had this to say:

> *"To realise career choices, me I would like to become this or that, and what it takes to enter those careers. They also benefit from knowledge of entry requirements to universities and colleges. It encourages them. Zambia Open University provided provisional acceptance letters and entry requirements."*

However, the guidance teacher for school Z, had a contrary view, as can be seen in the quote below:

> *"We have not done much in terms of collaboration. We planned to go to Cargil, but due to time constraint we have been unable to go. Support from administration is confined to other activities. teachers feel guidance is a waste of time."*

From school Y, the head teacher had this to report:

> *"The senior boys and girls in particular, have benefited from interactions with personnel from different organisations and learning about requirements for various job setups. This is important, because they are about to leave school and get into society.*

In support of the aforementioned, the guidance teacher also of school Y said:

> *"Discipline is well implemented, academic performance has also improved. We have good results every year. They get knowledge about subject combinations and choices of courses. It helps them to work extra hard in class. As a school we have sent a lot of pupils to trades colleges and many of them to the university. That shows we are doing something as a section."*

Similarly, pupils during the focus group discussions were asked to indicate the ways in which they had benefited from the collaborations between career guidance and other public and private institutions. Several responses were recorded. Some pupils mentioned that as a result of these collaborations they had broadened their career awareness in terms of what was required for entry to specific career fields, and the opportunities for progression therein, as well as understanding the actual demands of certain jobs, besides the practical exposure to real life job environments. Others reported that collaboration with institutions such as the Catholic Church and socio welfare department had enabled some of them to continue with their schooling through sponsorships in relation to school fees, school uniforms and other school requisites that they accessed from these institutions. Others responded that through collaboration they were able to interact with various personnel from different organisations, and that this served as a source of encouragement and the motivation to continue working hard in their academic pursuits.

Further, some of the pupils indicated that by means of collaboration they had come to acknowledge the essence to meet specific academic requirements as a prerequisite in order to gain entry to particular careers and/or training institutions, and that this in itself had served as a source of motivation to enhance their school attendance, as well as their academic achievement. This can be observed in what one Grade 11, male pupil of school Y had to contribute:

> *"Last term as a school we went to Lundazi boarding for career exhibition. A lot of careers exhibited. We learnt on how we can improve our career and how we can get into those careers. The grades that we need to have to enter those careers."*

A grade 11, female pupil, also of school Y commented as follows:

> *"We had a visit from ST Eugene University, and also Zambia Open University. They told us about the courses that they offer and entry requirements."*

From school Z a grade 11, female pupil commented:

> *"We had a career talk with the staff from ZANACO. They informed us on the jobs that exist in the bank sector, and importance of saving money. They educated us how to be self-employed. How to become an entrepreneur and how to identify business opportunities."*

Some of the pupils from school Z pointed out that one financial institution that their school collaborated with, assisted the learning institution with prize money that was used to award some of the pupils that had excelled in various disciplines; academic and co-curricular inclusive. This can be seen in the response below provided by one grade 11, male pupil of school Z:

> *"Barclays bank donated money to our school. The money was used to buy prizes for pupils who performed well in mock. Even pupils who did well in athletic were given prizes."*

Several pupils from school Z further responded that they benefited from the anti malaria in-door spraying exercise, in which the district department of health fumigated school dormitories to help reduce incidences of malaria amongst the pupil population. This in itself enabled pupils to enjoy restful sleep at night, thereby enhancing their lesson attendance and academic performance, which is crucial to realising their future educational and career aspirations. They further reported that the department of health had also provided their school with one nurse to attend to their health concerns.

4.2.2 Whether collaboration can benefit the pupils: Findings from human resources officers

Human resources officers were asked in an interview to indicate whether they agreed or not that collaboration between their institution and secondary schools can benefit the pupils. All the 10 human resources officers responded that collaboration between their institution and secondary schools can benefit the pupils. When further asked to indicate the ways in which collaboration between their institutions and secondary schools can benefit the pupils, the following were their responses; awareness of admission

requirements and training opportunities in different institutions, sponsorships, financial and material donations, mentorship on career prospects and school projects, exposure to machinery and real job settings and educators' use of collaborating institutions' equipment and machinery to deliver practical lessons in subjects such as Computer, Science, Woodwork, Metalwork and Geography among others, and for other services as well. For instance, one human resources officer, who was female, had this to say:

> *"For me I feel not only should I be called to go to the pupils, sometimes pupils themselves should be able to come to our institution so that we explain to them things that we have as a district. They can have an education tour where we will explain that this is a transformer. Sometimes I take them to the substation. They will have a vision, a clear picture of what we are talking about and what is involved. When we are explaining, they will appreciate what they see physically. They will have a clear picture of what we are talking about and what is involved. They can easily connect to the theory that they learn in class. They will know what subjects matter most like, Maths, Science, including English."*

A human resources officer of yet another institution had this to report:

> *"It can benefit the pupils in the sense that they can admire and take up those careers that they are exposed to by this institution. And some of the questions can come in the exam and they can answer practically what they have seen. In terms of agriculture, questions about planting, period of planting, types of soil where they can plant cotton, soya beans, maize and sun flower. From planting up to harvesting. From those crops they will be exposed in the way they are being sold. The purchasing system which is used to buy or to sale. Then the uses of these crops. If there is need we can donate something, for example money or foodstuffs to the secondary schools."*

Another human resources officer said:

> *"In school, they also learn what we are offering here. But we have most of the facilities, computers, grinding machines, hand tools for bricklaying. They can gain knowledge and skills. We can guide them with projects. science, woodwork and metalwork projects."*

4.2.3 Whether there were other ways in which pupils can benefit from the collaboration

In a focus group discussion, pupils were asked to state whether there were other ways in which they could benefit from the collaboration between career guidance and industry. The common response given was that they could gain a general understanding of how various institutions operated as well as the nature of services that they offered, and that through field visits to industry, such as a factory they would be able to see for themselves how different components of machines functioned. Yet, others offered different views. A grade 10 pupil from school Z indicated that collaboration between career guidance and business houses could aid the school's tuck-shop to enjoy a steady supply of groceries, and that this would ease the pupils' day to day purchases, possibly at minimal prices. Still, a grade 11 pupil from school Z stated that collaboration with institutions outside the school would help the pupils to broaden their knowledge of the district. Another grade 11 pupil from school Y reported that linkages with institutions in the private sector such as ZESCO and the banking industry could assist pupils to become good citizens by inculcating into them the culture to practice thriftiness in the usage of money and other personal and public resources. Another grade 10 pupil of school Y indicated that collaboration with institutions outside the school would help pupils to recognise that besides their learning institutions, several other organisations in their communities had important roles to play for the betterment of society. Such would in turn, help them to appreciate the essence to respect, protect and safeguard both public and private property alike. This can be noted in the following contributions, such as one provided by a grade 11, male pupil of school Y:

"Through career visits, like to a factory, we can see how the machines are operated, and the kind of attire that workers in these industries wear."

Also from school Y, a female grade 10 pupil said:

"By working together with institution like ZANACO we can get counselling on how to save money, even when we are still at school. ZESCO can empower us with knowledge on how to use electricity wisely, to reduce the cost of electricity in school and our homes."

From school Z a grade 11, female pupil said:

"By working with these institutions I can be in a position to understand the different services that these institutions offer. I will also be in position to tour the different places in the district."

4.2.4 Whether pupils had participated in a career visit to industry

As regards career field trips, pupils in a focus group discussion were asked to state whether or not, they had participated in a career visit to an industry. Out of the 24 pupils in a focus group discussion, five of them stated that they had participated in a career visit to an industry, while 19 of them responded that they had not participated in any career visit to an industry. When asked to give an account of their visit, three of the pupils explained that they had visited a local cotton processing plant, where they had received practical lessons on how raw cotton was separated from seeds, refined and packaged, and that packaging was done according to the grade category of the refined cotton. Two other pupils accounted that they had participated in a field visit to the local hospital, and that they were given theory lessons by the hospital personnel on preservation of human dead bodies.

4.2.5 Whether the pupils had attended a school career talk presented by a guest speaker

Regarding career talks, pupils were asked during a focus group discussion to indicate whether or not, they had at one time attended a career talk presented by a guest speaker

from another public or private institution. Out of the 24 pupils in a focus group discussion eight of them reported that they had attended a career guidance talk presented by a speaker from an outside institution, while 16 of them indicated that they had not at any one time attended a career guidance talk presented by a guest speaker. When asked to indicate the areas on which the talks focused, the following were the responses; entry and progression opportunities in specific career fields, organisation structure and operation areas of guest institutions, college and university admission requirements, good hygiene habits, good citizenship and entrepreneurial and financial management skills.

4.3 Strategies to strengthen collaboration between career guidance and industry

The following strategies were pointed to help strengthen collaboration between career guidance and industry in Lundazi district, Zambia; sustained collaboration with existing institutions, identification of other public and private institutions to engage in collaboration, improving communication with outside institutions, invitations, incorporating collaboration in school annual plans, promotion of site visits, outreach activities, and advocacy through drama and songs.

4.3.1 What strategies schools had in place to strengthen collaboration between career guidance and industry

Head teachers and guidance teachers were asked in an interview to indicate the strategies that their schools had put in place to strengthen collaboration between career guidance and industry. All of them indicated that the schools' had kept their doors open to outside institutions, and that they had incorporated some of the private and public institutions on the schools' annual calendar of events. The respondents further stated that the schools had consistently afforded space for personnel from outside institutions to talk to the pupils each time they had received a request. With regard to the same matter the head teacher for school Z had this to point out:

> *"We have an action plan. We also provide administrative support such as transport to facilitate field trips. We have increased the number of guidance teachers to help them coordinate activities without problems.*

We have included other institutions on our calendar and we

have continued to give them space every time they approach us."

When further asked to suggest other initiatives that could help to strengthen collaboration between career guidance and industry the following were the common responses received from the two head teachers and the two guidance teachers; sustaining existing collaboration relationships, identifying and collaborating with other institutions that have materials that can benefit pupils, invitations as well as enhancing communication between the schools and outside institutions. The other common response was the essence for schools to develop action plans that should incorporate activities by collaborating as well as potential collaborating institutions. It was also felt that collaborating institutions needed to respond whenever they were called upon by the schools. In this regard the guidance teacher for school Z pointed out as follows:

"We need to improve communication with the institutions.

Institutions should also give us more support. When we call

on them they should quickly come in. We do not exist in isolation.

We need to strengthen institutional linkages by calling on them.

They need to respond to our invitations promptly."

As regards to what needed to be done in order to strengthen collaboration between schools and industry, the findings from the pupils during the focus group discussion were consistent with those of the head teachers and guidance teachers, serve for a few variations. The following were the common responses recorded from the pupils; enhancing communication between the schools and other private and public institutions, invitations and increasing site visits. Two grade 10, male pupils from school Z suggested that guidance units should introduce some school clubs that would provide some specific services to institutions and communities outside the school as a strategy to strengthen collaboration with both the institutions and the surrounding community. To this effect, one of them had this to contribute:

"The guidance department is not effective. The school should form clubs under career guidance with a specific patron. The clubs should strengthen relations outside school by providing help, like Red Cross at the hospital so that the community is helped. It will also encourage pupils to carry out career exploration"

In support of the aforementioned a grade 11, female, pupil also of school Z had this to contribute:

"Schools are recognised through such collaborations. Collaborations can be strengthened by inviting people from different institutions to come and give career talks and taking the pupils to these different institutions to see what is done."

A male, grade 11 pupil of school Y proposed creation of awareness through the deliberate mounting of school-industry collaboration campaigns, and that the said campaigns can be actualised through planned activities such as drama, sketches and songs among others. This can be noted in the following quote:

"The school should educate the community about the importance of collaboration. The guidance unit should work together with the patrons of drama and choir. Together they can plan activities like dances, plays and songs that can help the community to understand better the importance of collaboration. Pupils can perform during PTA meetings and important days like independe and labour day."

A female, grade 10 pupil of school Y said:

"We need to invite outsiders to come and share with us. We can also arrange for visitations."

In relation to what needed to be done to strengthen collaboration between school and industry in Lundazi district, Zambia, the study revealed that the findings from human resources officers were consistent with those from head teachers, guidance teachers and pupils.

4.4 New knowledge contributed by the study

The chapter has presented findings on the nature of career guidance collaboration between schools and industry in Lundazi district. Based on the study questions, new knowledge has been brought out as follows:

What was the nature of career guidance collaboration between schools and industry? The study has informed us that the following types of career guidance services were provided collaboratively: career talks, motivation talks, site visits, career exhibitions, entrepreneurial skills awareness, job market awareness and university/college entry requirements information.

The second study question sought to establish how pupils benefited from the collaborations between schools and industry in terms of career guidance. The study found that pupils benefited through improvement in school attendance, improvement in discipline, sponsorships, enhanced academic achievement, increased awareness in educational and career paths and exposure to job environments.

The third study question sought to bring out strategies that would strengthen school-industry collaborations. The following strategies were brought out: sustaining existing collaborations, identifying of more institutions for collaboration, improving communication with outside institutions, invitations, incorporating collaboration in school annual plans, promotion of site visits, outreach activities and advocacy

CHAPTER FIVE

DISCUSSION OF THE FINDINGS

5.0 Overview

The preceding chapter presented the findings of the study. This chapter discusses the findings of the study aimed at examining the nature of career guidance collaboration between schools and industry in Lundazi district, Zambia. The chapter discusses the findings under the themes drawn from the objectives of the study, which were as follows; (i) to establish the nature of career guidance collaboration between school and industry, (ii) to ascertain how pupils benefit from the collaboration between career guidance and industry, and (iii) to devise strategies that would help strengthen career guidance collaboration between schools and industry.

5.1 Nature of career guidance collaboration between school and industry

The study had shown that secondary schools were engaged in collaboration with different public and private institutions in an effort to provide career guidance services to their pupils. These public and private institutions included; Drug Enforcement Commission, Ministry of Health, Ministry of Livestock and Fisheries, Department of Socio Welfare, Barclays Bank Zambia, Eastern Water and Sewerage Company, NWK, Zambia Electricity Supply Corporation, Zambia Open University, ST Eugene University and the Roman Catholic Church among others. As regards the nature of career guidance collaboration, the study established that various forms of career guidance services were being offered to pupils. Common among these were; career talks, motivation talks, site visits, career exhibitions, entrepreneurial skills awareness, job market awareness and university/college entry requirements information. The findings were consistent with what was observed in a study by College Summit (2013) which reported that in the United States, businesses and industry had a long tradition of working with schools to improve student outcomes and school effectiveness. The findings were also in line with the 2010 report on education for the state of Victoria, Australia which revealed that many schools in Victoria were engaged in collaboration with different business organisations of various sizes and across many sectors (DEECD, 2010). Mentorship,

exposure to real-life learning as well as provision of guidance to career pathways and further education were cited as some of the activities in which Victorian schools and business organisations engaged to collectively enhance the students' educational and career outcomes. However, in contrast, in Lundazi district, Zambia, the nature of career guidance collaborations between schools and industry mainly revolved around information provision. Career talks, motivation talks, entrepreneurial skills awareness talks as well as university/college admission requirement forums were used as main vehicles for information dissemination. Lack of emphasis on mentorship activities and industry based learning experiences could perhaps be attributed to the low presence of production industries within the district. However, it is necessary for schools and the collaborating institutions to move beyond site visits and mere information provision if pupils are to be adequately prepared in their transition to further education and the world of employment.

Further, interviews conducted with head teachers, guidance teachers and human resources officers, revealed that both the schools, as well as most of other public and private institutions that the schools collaborated with, were not satisfied with the obtaining levels of collaboration. This finding is consistent with the 2012 reference manual on collaboration in education for the School District of Palm Beach County, Florida, United States which observed that there were numerous activities in which schools and other collaborating organisations can engage to enhance the learning environment and improve the educational and career preparedness of students (The School District of Palm Beach County, 2012). The implication is that career guidance collaboration between schools and industry could not be restricted to site visits and information provision on careers and admission requirements to postsecondary education. Rather collaborating institutions should mutually identify various areas in which they can work together collectively to enhance the educational, social and career opportunities of pupils. This can be achieved through identifying mutual goals, which should be matched with the needs of the pupils. This can only be realised in an environment where schools and industry enjoy close linkages, thereby promoting the convergence of ideas with the ultimate purpose of enhancing the educational and career outcomes of pupils. Hence the need for schools and industry to cross perceived

boundaries so as to leverage additional support and resources for collaboration engagements.

5.2 How pupils benefited from the collaborations between career guidance and industry

The findings from this study had shown that collaborations between school and industry afforded several benefits to pupils. In the interviews conducted with head teachers and guidance teachers it was revealed that collaborations between schools and industry helped to enhance pupil discipline in school, which in turn resulted in their improved academic performance. Pupils also recounted that they felt motivated and encouraged through interactions with personnel from collaborating institutions which had led to their increased lesson attendance, and academic improvement. This finding concurs with Barnes and Kent's (2011) findings on the role of school-industry collaborations in enhancing pupils' career aspirations and academic achievement. They observed that through interactions with role models from the business community, school students felt motivated to raise their career aspirations, which in turn impacted positively on their academic achievement. However, the above can only surface in an environment where schools engage in collaboration with institutions that are in a position to provide strong models who can readily inspire the pupils. This can prove quite a challenge for schools in the rural areas, such as Lundazi district which due to low levels of development are characterised by a limited presence of public and private organisations, which mainly are in the service industry, thereby restricting opportunities to find strong models across a diverse of sectors. Nonetheless, it is necessary that schools maintain collaboration relationships with various organisations in their communities so that pupils can benefit from encouragements and inspirations by the existing role models.

Interviews with head teachers and guidance teachers also revealed that subject combination awareness and its link to further educational and career paths, job market awareness, exposure to job environments through site visits and awareness of entrepreneurial opportunities were other benefits accrued by pupils as a result of the collaborations between the schools and industry. The findings from the study had also shown what pupils thought were the benefits they gained due to the collaborations

between schools and industry. Some pupils recounted that collaborations with other institutions enabled them to be well informed on different career fields, particularly on matters such as recruitment requirements, career progression opportunities and the physical and mental needs of the job aspects. Some other pupils felt that site visits had helped them to gain a good understanding of the physical and social environments of different job situations. These findings were consistent with the European Union's Organisation for Economic Cooperation and Development and the Directorate of Education, Education and Training Policy report of 2011 on school-industry collaboration (OECD, 2011). The report contended that school-industry linkages provided a strong learning environment which afforded work based experiences, and in so doing facilitated the transfer of both the hard and soft skills. The report further added that school-industry collaborations were an impartial source of career guidance education and counselling. The afore stated benefits can only be realised in an environment where schools and the collaborating institutions are engaged in long term collaboration relationships, supported by mutual commitment and interest to enhance the educational and career awareness of learners. The implication is that schools and industry should work together by crossing the socio-cultural constructed boundaries, so as to reinforce the educational and career aspirations of pupils. This means that school authorities should strive to create environments that enhance rather than distance existing and potential collaborating institutions alike.

Some pupils pointed out that collaborations between their school and other institutions enabled them to access sponsorships, which had made it possible for them to continue with their education. This finding is supported by College Summit (2013) which reported on the Bridge to Employment (BTE) initiative, sponsored by the Johnson and Johnson Company. Through this initiative the Johnson and Johnson Company supported the academic success of students from disadvantaged communities across the United States through the provision of student sponsorships and instructional support to educators. Affording sponsorships to vulnerable pupils is not only a matter of good socio responsibility, but it is also an avenue to enhance access. Through sponsorships, pupils from economically disadvantaged homes are assisted to continue with their education. In this regard pupil sponsorships constitute an important factor of investing in the future

generation. Given the high levels of poverty, schools in rural areas, Lundazi district inclusive, need to increase their efforts to sustain existing collaborations and also to collaborate with more institutions to broaden chances for more pupils in need, to access sponsorship.

The study further established that pupils benefited from the prize awards that were contributed by a collaborating institution. The study had also shown that pupils benefited from the health care services that were made available by yet another collaborating institution. This finding reinforces the view that collaborations can take various forms. It also reinforces the view that schools can engage in collaborations with institutions of different sizes, and across different sectors. This entails that schools and collaborating institutions should show dynamism, innovativeness and explore diverse areas for mutual collaboration. Hence the need for schools and industry to cross boundaries and engage each other in efficient and sustainable collaboration relationships so that pupils may leverage even more benefits.

Human resources officers from public and private institutions also concurred with what was reported by head teachers, guidance teachers and pupils that school-industry collaborations were of great benefit to learners. They explained that pupils were assisted to acquire skills that were required both at work and in daily life. They stated that in addition to supporting pupils from disadvantaged homes through school scholarships, collaborations between schools and industry also provided avenues for information sharing and opportunities for pupil mentorship. They reported that schools and pupils benefited from equipment support and financial donations that were realised through collaborations. The results of the study also showed that collaborations created opportunities for industry to participate in corporate socio responsibility through various engagements with schools.

However, eight out of ten industries were not satisfied with the collaborations they had with schools mainly due to limited communication between them and schools resulting in irregular career talks.

5.3 Strategies to strengthen career guidance collaboration between schools and industry

The findings revealed that schools had kept their doors open, as a measure to promote their collaboration with outside organisations. Head teachers and guidance teachers recounted that their schools provided opportunities for outside institutions to interact with pupils, whenever they received such a request. This finding is in tandem with Rynkun's (2007) finding on university-industry collaboration which revealed that the first step to start collaboration was always initiated by industry and not the university. However, this finding contrasts with the guidelines by Anchorage School District and Anchorage Chamber of Commerce (2006) in which schools are encouraged to create collaboration relationships with business and non-profit organisations in their communities. The implication is that, schools need to be proactive and possibly take the first step to engage external institutions in collaborative relationships. It is also vital for schools to identify the unmet as well the under met needs of their pupils. The needs can act as a pointer for school authorities to identify appropriate institutions to engage in collaboration relationships, with the end result of enhancing the pupils' learning process.

Head teachers and guidance teachers also indicated that their schools had included some of the public and private institutions on the school annual calendar of activities as a strategy to enhance collaboration with outside organisations. However, it is necessary that schools cross boundaries and go beyond the invitations of external organisations to school ceremonies and other public displays and functions. Instead, the outside organisations should be formally engaged to mutually explore the areas in which they can collaborate with the schools. Schools might require to conduct an inquiry to establish the core values and activities in which the collaborating and potential collaborating institutions are involved. This can be followed by an invitation to a meeting at which areas of collaboration, time commitments and other details concerning the collaboration relationship can be mutually defined and agreed upon. Such aspects were lacking in the collaboration relationships between the schools and industry in Lundazi district.

In relation to the Boundary crossing theory chosen as a theoretical framework, the findings from the study had also shown that head teachers, guidance teachers, pupils and human resources officers suggested several ways which can help schools to cross boundaries and to strengthen their collaborations with industry. Some of these were; improving communication between schools and other institutions, sustaining existing collaborations, increasing site visits, outreach activities and advocacy. In relation to communication, the findings is in agreement with Bukit (2012) who contended that many industries in developing countries were reluctant to support technical education as they were not convinced of the institutions' capacity to produce qualified skilled personnel. He urged better understanding between the two institutions, and also proposed appointment of industry employees to school advisory boards in order to strengthen cooperation and understanding. Improved communication becomes critical if the afore mentioned tenets have to be realised. Similarly, Ojimba (2013) proposed closer cooperation between schools and industry as a way to initiate and sustain collaborations between industry and Nigerian schools. As regards increasing site visits, the finding is in consonant with Yuk-Fan (2008) whose report on career education in Hong Kong called upon secondary schools to enhance career visits and short term job shadowing as vital measures to expose pupils to real life occupational experiences. However, for this aspect to bear meaningful fruit, it becomes necessary that secondary schools in Zambia be staffed with adequate numbers of professionally trained counsellors so that career guidance activities in Zambian schools are effectively planned and coordinated.

With regard to advocacy, the finding is in agreement with Ndhlovu (2005) who suggested that teachers educate parents on the importance of education in order to get them involved in the education of their children. Given that the findings at one of the schools visited also revealed that career guidance activities faced resistance from some of the teachers who considered career guidance activities a sheer waste of time, it is crucial that teachers are educated on the importance of career guidance to the education process and career aspirations of pupils. Following the introduction of the new education curriculum in 2014, guidance and counselling is one of the major foundation courses offered for teacher training programmes in Zambia (Ministry of Education, Science, Vocational Training Early Education, 2013). However, it should be recognised that

many of the teachers who underwent training prior to this period did not benefit from this important intervention, hence the need to sensitise and educate them on the important role of career guidance. It is also essential that employers (industry) and the general community are sensitised on the important role that school-industry collaboration in terms of career guidance plays in enhancing the learning process and career preparation of pupils. This undertaking is vital if career guidance has to benefit from the support and resources of industry and the community in general. Meetings, sporting events, sketches and drama can be utilised as avenues for public sensitisation.

Schools can also initiate outreach activities in order to enhance collaboration with external institutions. However, the activities need to align to what pupils are learning if they are to complement the academic success of the learners. To exemplify, pupils can participate in a tree planting project by the department of forestry as part of socio responsibility and also as an initiative to reach out to industry. With adequate planning, pupils may join efforts with government and non government agencies to provide literacy lessons to women's groups in local communities. Clearly, there are diverse ways in which schools can utilise outreach initiatives to enhance their visibility and also to promote school-industry collaborations. By way of outreach initiatives schools and industry are afforded opportunities to connect and complement their human and material resources in fostering pupils' educational and career aspirations. Similarly, by engaging in hands-on learning and real life experiences pupils are afforded the opportunity to apply the academics gained in the classroom to real life community projects. This in turn facilitates planning for their postsecondary education and the world of employment.

5.4 Summary of the chapter

This chapter discussed the findings of the study. The discussion was guided by the themes generated from the objectives of the research. The nature of career guidance collaboration obtaining between schools and industry was discussed first. This was followed by the discussion on how pupils benefit from the collaborations between schools and industry. Strategies to strengthen career guidance collaboration between schools and industry constituted the last part of the discussion. The chapter has also shown how the reviewed literature related to the objectives set out in this study. The

next chapter concludes the study and also makes recommendations on the basis of the discussed findings.

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.0 Overview

The preceding chapter discussed the findings. This chapter concludes the study and also makes recommendations on the basis of the findings of the study. It is necessary to reaffirm that this study sought to examine the nature of career guidance collaboration between school and industry. The study was limited to two secondary schools and ten industries of Lundazi district. The chapter closes with recommendations for further research.

6.1 Conclusion

The study has established that secondary schools were collaborating with different public and private institutions in their communities. This made it possible for pupils to benefit from the different types of career guidance services that were being offered. Specifically, the following types of career guidance services were being provided to pupils; career talks, motivation talks, site visits, career exhibitions, entrepreneurial skills awareness and university/college entry requirements information. The study has also shown that pupils benefited from the collaborations between schools and industry. They benefited through; sponsorships, improvement in pupil discipline and school attendance, enhanced academic performance, increased awareness in educational and career paths, exposure to job environments and use of other institutions' facilities. Nonetheless, the study has also shown that guidance teachers and human resources officers were not satisfied with the obtaining levels of collaborations. They felt that there was need for the institutions to explore more areas for collaboration to leverage additional benefits. Suggested strategies to strengthen career guidance collaboration between schools and industry were also revealed. Most prominent were; increasing site visits, invitations, outreach activities and advocacy.

6.2 Recommendations

Based on the findings of the study, the following recommendations are made;

(i) the Ministry of Education should sensitise school administrators, guidance teachers and employers on the importance of school-industry collaborations,

(ii) the Ministry of Education should review the 2014 policy guidelines on guidance and counselling to incorporate, enhance and make school-industry collaborations mandatory for secondary schools,

(iii) schools should strengthen their collaborations with industry through enhancing communication, invitations, increasing site visits, outreach activities and advocacy, and

(iv) industry should attend career exhibitions by secondary schools regularly.

6.3 Future research

For future studies, the following areas of research are suggested;

(i) there is need to carry out a comparative study in rural and urban areas on the nature of career guidance collaboration between schools and industry, and

(ii) factors that constrain collaborations between career guidance and industry should be explored.

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APPENDICES

APPENDIX I

INTERVIEW GUIDE FOR HEAD TEACHERS

1. Does this school have a trained guidance teacher?
2. Is this secondary school a boarding or day school?
3. Is this school a government or grant-aided (Mission) institution?
4. Mention some of the guidance and counseling services that are provided to pupils in this school.
5. Are you satisfied with the guidance services that are provided to pupils in this school? Give reasons for your answer.
6. Does the school collaborate with other public and private institutions in its provision of career guidance services?
7. If yes to question 6, mention some of the institutions that this school collaborates with in its provision of career guidance to the learners.
8. What is the nature/type of career guidance collaboration that exists between this school, and other public and private institutions mentioned in 7 above?
9. In what ways has the collaboration with other public and private institutions benefited pupils?
10. Are you satisfied with the level of collaboration by other public and private institutions in the provision of school career guidance? Please explain.
11. What are some of the factors that may be hindering collaboration between this school and other public and private institutions in the provision of career guidance?
12. What measures has the school put in place to strengthen collaboration with other public and private institutions in its provision of career guidance services?
13. What other ways could help the school to strengthen its collaboration with other private and public institutions in the provision of career guidance?

THANK YOU VERY MUCH FOR YOUR TIME

APPENDIX II

INTERVIEW GUIDE FOR GUIDANCE TEACHERS

Name of School ……..

1. Are you a trained guidance teacher? If so, what are your qualifications?
2. For how long have you been working as a guidance teacher in this school?
3. Is the guidance and counseling committee in existence in this school? Please explain.
4. What guidance and counseling services do you provide to pupils in this school?
5. What activities do you provide to pupils under school career guidance services?
6. Do you have a planned program for the provision of school career guidance services?
7. Are you satisfied with the current levels of the career guidance services that you provide to pupils in this school? Please explain.
8. In your provision of career guidance services to pupils do you collaborate with other institutions outside the school? If not, give reasons.
9. If yes to question 8, mention the institutions that you collaborate with and state the nature of collaboration?
10. In what ways do pupils in this school benefit from the collaboration between the school career guidance and other public and private institutions?
11. Are you satisfied with the current levels of collaboration between this school's career guidance and industry? If yes, please explain.
12. If no to question 11, what are some of the factors that hinder collaboration between the school career guidance and industry?
13. What steps have you taken to enhance collaboration between school career guidance and industry?
14. Suggest other ways in which collaboration between school career guidance and industry could be strengthened.

THANK YOU VERY MUCH FOR YOUR CO-OPERATION

APPENDIX III

INTERVIEW GUIDE FOR HUMAN RESOURCE OFFICERS IN PRIVATE AND PUBLIC INSTITUTIONS

Name of institution …….

Sector/Industry ……..

1. For how long have you worked at this institution ……
2. What is your position in this institution? ……..…
3. Does your institution collaborate with other public and private secondary schools in Lundazi district? ……
4. If yes, to question 3, mention some of the public and private secondary schools in Lundazi district that you collaborate with and specify the nature of collaboration.
   ……
5. Are you satisfied with the current level of collaboration between your institution and secondary schools in Lundazi district? Give reasons for your answer.
   ……
6. If there is no collaboration, would your institution be willing to collaborate with secondary schools in Lundazi district? ……..
7. If yes to question 6, in what ways could your institution collaborate with secondary schools?……
8. If no to question 7, give reasons for your response? ……
9. Do you agree that collaboration between your institution and secondary schools could benefit the pupils? ……
10. If yes to question 9, in what ways could collaboration between your institution and secondary schools benefit the pupils? ……
11. What do you think should be done to strengthen collaboration between your institution and secondary schools? .....

THANK YOU VERY MUCH FOR YOUR CO-OPERATION

APPENDIX IV

FOCUS GROUP DISCUSSION GUIDE FOR PUPILS

Name of School …….

Number of participants: Boys …… Girls ……

1. Are you aware of the guidance and counseling services that are provided in this school?
2. Does the school career guidance unit collaborate with other institutions outside this school?
3. If yes, what are these institutions, and what is the nature of the collaboration?
4. In what ways have you benefited from the collaboration between school career guidance unit and other public and private institutions?
5. In what other ways could you as a pupil benefit from the collaboration between school career guidance and other public and private institutions?
6. Have you participated in a school career visit to an industry? Please explain.
7. Have you attended a school career talk presented by guest speakers from another public or private institution? If so, please state the areas on which the talk focused.
8. Mention some of the ways in which the career guidance unit in this school could enhance its linkages with other public and private institutions?

END OF DISCUSSION: THANK YOU VERY MUCH FOR YOUR PARTICIPATION.

APPENDIX V

INFORMED CONSENT FORM

Dear Respondent,

My names are Augustus Musenge. Iam a postgraduate student at the University of Zambia, pursuing a Master of Education degree in Guidance and Counselling. The programme has a research component. You have been selected/Your child/ward has been selected to participate in providing information for research. This exercise is therefore intended for academic purposes only.

Purpose

The study is intended to find out the nature/type of career guidance collaboration between schools and the job industry in Lundazi district, and whether the collaboration if any, benefits the pupils at all. Further, it is the intention of this study to determine the strategies that would help to strengthen career guidance collaboration between schools and industry.

Consent

Participation in this exercise is voluntary. Therefore, you are free to decline to participate in this study, or to withdraw your participation at any point.

Confidentiality

Data collected from this study, will be used for academic purposes only, and the anonymity of participants is assured.

Rights of Participants

The rights of all individuals participating in this study will be upheld. Further, participants and/or their guardians are free to seek for any clarification at any point in this study and to inform the researcher if they feel uncomfortable about any procedure in the research.

Declaration of Consent

I have read and fully understand the contents of this document. I therefore agree/disagree to participate/ that my child/ward should participate in this study.

Signature ……

Date …….