ANALYSIS OF EDUCATIONAL SERVICES FOR LEARNERS IN SPECIAL PRIMARY SCHOOLS FOR HEARING IMPAIRMENTS: A CASE STUDY OF ORIENTAL PROVINCE IN THE DEMOCRATIC REPUBLIC OF CONGO

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DECLARATION

This thesis is my original work and has not been presented for a degree to any other University.

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DEDICATION

I dedicate this work to my mum Bigirwenda and dad Upiela Andrenicos for their encouragement and spiritual support and to my lovely wife Beatrice Nobabo, and children: Jacob, Isaac, Gabriel, Ibrahim, Tabita and Odozi.
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ABBREVIATIONS AND ACRONYMS

ADA American Disabilities Act
ASL American Sign Language
BSL British Sign Language
CBM Christian Blinden Mission
CBR Community Based Rehabilitation
CMD Christian Ministry for the Deaf
CMS Church Missionary Services
CRPD Convention on the Right of People with Disabilities
CSL Congo Sign Language
DANIDA Danish International Development Agency
DPO Disabled People Organization
DRC Democratic Republic of Congo
EARC Education Assessment Resource Centre
EARS-U Education Assessment and Resource Service Uganda
ENT Ear-Nose and Throat
ESMA Ecole des Sourds-Muets d’Ar
FAPE Free Appropriate Public Education
FPE Free Primary Education
HI Hearing Impairment
HL Hearing Loss
IDEA Individuals with Disability Educational Act
INAV Institut National pour Aveugle
KIE  Kenya Institute of Education
KISE  Kenya Institute of Special Education
KNAD  Kenya National Association of the Deaf
KSDC  Kenya Society for Deaf Children
KSL  Kenyan Sign Language
KU  Kenyatta University
LRE  Least Restrictive Environment
MDG  Millennium Development Goals
MoE  Ministry of Education
PCEHL  Permanent Congenital and Early onset Hearing Loss
SHG  Self Help Group
SHIA  Solidarity, Human Rights, Inclusion, Accessibility.
SNE  Special Needs Education
UN  United Nations
UNAD  Uganda National Association of Deaf
UNESCO  United Nations Educational, Scientific and Cultural Organization
UNISE  Uganda National Institute of Special Education
USD  Uganda Society of the Deaf
VSO  Volunteer Service Overseas
WHO  World Health Organization
ABSTRACT

The purpose of the study was to carry out situational analysis of educational services provided for learners in Special Primary Schools for Hearing Impairments in Oriental Province in the Democratic Republic of Congo. The study utilized the case study methodology to collect data from 3 special schools for learners with HI in Oriental Province, involving (3) Head-Teachers, (28) teachers and (15) parents of learners with HI. The respondents were sampled purposively and the sample size comprised 32(n), participants; 3 Head-Teachers, 14 teachers and 15 parents that were chosen from an accessible population of 46 (N). Semi-structured interview with open-ended questions was used to encourage free response from participants and observation during data collection from Head-Teachers and teachers. Data was analysed qualitatively that is it was organized by themes, coded by categories, then interpreted and presented in various forms. The study established that Special Classes were found to be the most preferable mode of educational service for learners with HI. Most of the schools do not have specific strategies for early identification. Further the findings revealed that children were brought to school without being assessed due to lack of Educational Assessment and Resource Centres and majority of the teaching staff had no qualification in special education for HI, most of them were Diploma holders in General Education. The study recommended that the government of the DR Congo adopts and implement specific Policy on special education to support learners with HI. For quality service, emphasis should be placed on developing appropriate tools for early identification and implementation of EARCs to ensure that Learners with HI have access to the assessment service and are placed accordingly. In addition, the government should engage the Non-Governmental Organizations, the faith based organizations and the community in mobilizing resources to implement structures for the training of special Teachers for HI at different levels.
CHAPTER ONE
INTRODUCTION

1.0 Introduction
In this chapter, the background to the study, statement of the problem, purpose of the study, objectives, research questions, significance of the study, limitations and delimitations, assumptions of the study, theoretical and conceptual framework as well as the operational definitions of terms used in this study are presented.

1.1 Background to the Study
Educational programmes for learners with Hearing Impairments (HI) started before 18th century in Europe and emerged in the early 19th century in the United States (US), and the residential school was the primary model for delivery of educational services (Burch, 2004; Marschark & Spencer, 2005). In the latter half of the 19th century, day schools were established followed by special classes for learners with HI within general education schools (Gargiulo, 2012; Hardman, Drew & Egan, 2011; Friend, 2008). Educational provision for learners with HI continues to improve throughout the world. Integration and inclusive education where children learn together have gradually been introduced and this is based on the civil rights and equal opportunities for all (Gregory, Knight, McCracken, Powers & Watson, 1998). In the United Kingdom (UK), the Education Act of 1993 provided for the establishment of new funding agency which is to support education and other services for learners with HI in their integrated environment. In 1994, the Code of Practice on Identification and Assessment of Children with Special Education Needs was introduced, as well as the Disability Act of 2001, which emphasizes on the establishment of effective
partnership between parents and professionals in promoting education for learners with HI.

In Africa, nearly all countries in East, Central and South Africa, have been providing some forms of special programmes for learners with HI before and after their independence around 1960s (Werth & Sindelar, 2007). Mpofu, Zindi, Oakland and Peresuh (1997) reported that the current status of special education in some countries such as Swaziland, Eritrea, Zambia, special education in Kenya may be better established. The development of education especially for learners with HI in Kenya, traces its history back to the establishment of the Kenya Society for the Deaf Children (KSDC) in 1958 (Ndurumo, 1993; Kenya Deaf Resource Centre, 2003 & Kenya Federation of Deaf Teachers, 2004).

According to Ndurumo (1993) until the mid-1970s, the education of learners with HI in Kenya was perceived as a charitable service and was pioneered by Non-Governmental Organisations (NGO) and churches. Since 1976, special education administration and inspectorate have been established and education for learners with HI has been strengthened by the Government of Kenya. The strengthening includes the adoption of clear policies and laws of quality education for learners with HI, establishment of special schools, units attached to regular schools and inclusive settings at different levels; primary, secondary and vocational rehabilitation. The improvement is also observed in the development of different services such as; Educational Assessment and Resource Centres (EARCs) in 1984 (Ndurumo, 1993), with focus on early identification, assessment, referral and placement of learners with HI; training program of teachers for HI at certificate and diploma level offered at the
Kenya Institute of Special Education (KISE) since 1987 and also at degree level in universities such as Maseno, Narok, Moi and Kenyatta. In addition, The Kenya National Examination Council in January 2010 issued a circular making Kenya Sign Language (KSL) an examinable subject for class 8 and Form 4, in equal stature with English and Kiswahili. Furthermore, the government of Kenya has recognised the NGOs such as Kenya Society for Deaf Children (KSDC) and Kenya National Association of the Deaf (KNAD) and the support they provide such as provision of hearing aids, lobbying and the promotion of the right of people with HI. The statistics show that out of the 26,885 learners with special needs in education enrolled in the eight provinces by 2003, 19.5% of them were learners with HI (MOEST-Kenya, 2003).

In Uganda, according to Werth & Sindelar (2007), the Government’s involvement in special education came earlier than other countries in East and Southern region of Africa, because of the lobbying efforts of Sr Andrew Cohen, a Colonial Governor of Uganda 1952–1957. The idea of the need to educate individuals with hearing impairment was conceived in 1958 when the Ear Nose and Throat (ENT) Surgeon Dr Peter Rowland launched the Uganda Society for the Deaf (USD). In 1959, the first school for the Deaf known as Uganda School for the Deaf was founded followed by Ngora Regional School for the Deaf and Kumi in 1969 with the support of Christian Blinden Mission (CBM) of German. The establishment of more schools and units was as a result of Uganda National Association of the Deaf’s (UNAD) advocacy, and awareness work which emphasized the realization of potentials of people who are deaf through education (Lule & Wallin, 2010).
Since 1990, there has been some improvements in educational services and opportunities for learners with HI in Uganda. The number of schools that are residential and units linked to mainstreaming schools has increased. In addition, learners with HI are offered places in regular schools at different levels. With the help of Danish International Development Agency (DANIDA) in 1991, the Uganda National Institute for Special Education (UNISE) was established and provides for teachers of learners with HI educational programmes at certificate, diploma and degree levels. In 1992, the Uganda Ministry of Education established Educational Assessment and Resources Services of Uganda (EARS-U). It has the responsibilities of evaluating programmes for children with disabilities and also responsible for coordinating educational placement, counselling parents, community education and prevention programmes (Werth & Sindelar, 2007; Lule & Wallin, 2010).

The Special Education in the Democratic Republic of Congo (DRC) dates back to 1955 when the first school for the deaf was established by the Sisters of St. Joseph of Cumeo (Italy) in Bandundu Province. Other schools and centres were opened a few years later, such schools include the Institute for Deaf in Kinshasa, the Shirika la Umoja Centre in Goma, and fifteen other centres of Bondeko village all in Kinshasa (Ministry of Education – DRC, 2012).

In Oriental Province, the North-Eastern part of the country, the Deaf African American Missionary, Reverend Andrew Foster (1927 – 1987), was instrumental for the establishment of two schools for learners with Hearing Impairment in 1982 in Nyankunde-Bunia and in 1987 in Kisangani (Christian Mission for the Deaf, 2012; Lang & Meath-Lang, 1995). Four more schools for learners with HI were later
established in the province between the year 2000 and 2005. Two out of the four schools were established by private organizations while the other two were started by the Catholic Church.

The educational activities in Special Education are primarily the work of the private sector. However, the Ministry of Primary, Secondary and Vocational Education has taken at least the responsibility to channel and coordinate these private initiatives by giving them the legal status; create a National coordination office by the Ministerial Order N° MINEPSP CABMIN/001/02052/92 08juillet of 1992. This office has the mission of establishing organizational structures, the education of children living with disabilities, coordinating administrative and educational services and facilities for special education in the sub-sector of the MoE. It also regulates and supervises private programmes in special education. (Ministry of Education-DRC, 2012).

The situation in DRC is that there are no clear policies, laws or initiatives that can fully support the education of learners with HI, special needs education in DRC is more spearheaded by churches and NGOs with minimal government support, there is no EARC established in Oriental Province. The current DRC’s Strategic Development Plan of 2010 states that, primary, secondary and vocational education for children requiring special education is low in literacy levels and little effort has been done to analyse the provision of educational services for learners with HI. Nyst (2010) suggest that studies pertaining to provision of services for learners with HI are rare, and for a number of countries, information is completely lacking. For others, only bits and pieces of information are available. She further argues that radical increase of research efforts in this area is necessary. Information which is available in DR Congo
is mostly anecdotal and there is no literature which has been documented to highlight on the situation of education of learners with HI in this country in general and particularly in Oriental Province. This study sought to bridge the existing gap by analysing the educational services for learners with Hearing Impairment in DRC focusing on Oriental Province.

1.2 Statement of the Problem

Educating learners with HI is not a new phenomenon in DRC. It is clear from the information gathered that there exists a problem in DRC (Oriental Province), particularly with regard to lack of adequate information on the situation of special education for learners with HI which can facilitate effective interventions. There is less information respectively on the education system for learners with HI provided by different stake holders in Oriental Province (government, churches and private sectors), on strategies used for early identification, audiological assessment, referral and placement and also the provision resources for learners with HI. This includes human resource, hearing aids, interpreter service, sign language development etc. If the gap and the issues are not addressed, the educational opportunities that would be possible and effective for learners with HI would be lost. In the long run, the country would find it difficult to achieve equity and retention in education for all its citizens as emphasised by the millennium development goals (MDGs) and Education for All (World Bank, 2009; UNICEF, 2007; UNESCO, 2000a). To overcome the gap, this study sought to analyse the educational services for learners with HI in Oriental Province and the findings could contribute to the formulation of useful policies and guidelines that could promote the educational opportunities for learners with HI as well as the establishment of appropriate support services.
1.2.1 Purpose of the study
The purpose of this study was to carry out situational analysis of educational services provided for learners in Special Primary Schools for hearing impairments in Oriental Province in the Democratic Republic of Congo.

1.3 Objectives of the Study
The study objectives sought to:

i. Investigate the extent to which the current education system serves the learners with HI in Oriental Province;

ii. Determine effectiveness of identification, assessment and placement currently used for learners with HI;

iii. Investigate the adequacy of resources available and devoted to learners with HI;

1.4 Research Questions

i. What is the current educational system for learners with HI in the Oriental Province?

ii. What strategies are used for effective identification, assessment and placement for learners with HI?

iii. What resources are available to teach learners with HI?
1.5 Significance of the Study
The expected beneficiaries of the study findings included Policy makers and teachers, national and international organisations working in the field of hearing impairment, parents and other related fields of special needs. The study outcome are expected to bring highlights to the study area and benefit to all the school managers in the education of learners with HI. The information could be used in the existing management structure for learners with HI in the DR Congo and also by curriculum developers that could meet the expectations and requirements for teaching children with HI. In addition, the research findings are also expected to further give useful information to the Ministry of Education, NGOs and churches which manage the schools. Similarly the findings will be useful in the establishment and development of Educational Assessment Resource Centres, where children with special needs and especially those with HI could be assessed and provide opportunity to determine the most appropriate placement options and referral. The findings could significantly contribute towards the documentation of relevant literature in Special Needs Education.

1.6 Limitations and Delimitations of the Study

1.6.1 Limitations
Time factors constituted a limitation to this study as the study region was a long distance from Kenyatta University. In addition, the available literature was scanty and this posed some challenges and limitation to this study since the DRC was not well-established in the area of special needs education especially in the area of HI. Language constituted a limitation as most of the available sketchy documents in DRC were in French and translation to English could not bring out the intended meaning.
1.6.2 Delimitation
This study covered three schools in Oriental Province of the DR Congo which were respectively run by church, private investor and the government.

1.7 Assumptions of the study
It was assumed that there was:

i. Continued participation and support by the respondents during the study;

ii. Cooperation by the participating schools and the sampled respondents so as to provide useful information;

iii. Political stability in the region to allow movement by the researcher while sampling the respondents, piloting the research instruments and finally collecting the research data;

1.8 Theoretical and Conception Framework
1.8.1 Theoretical Framework
This study was guided by the Piaget’s Theory of Cognitive Development. According to Garwood cited by Ndurumo (1993), psychology discipline that forms a basis for understanding exceptional children is developmental psychology. He views the role of developmental psychology not only as complementary but also as a natural array of special education. Developmental psychology states how the child develops and the stage he/she is at. When the child deviates from established developmental milestones, special educators step-in to determine the next action. This may include assessment of the extent of the deviation, the educational placement needed, intervention procedures, resources and the implication of other professionals to assist the child. According to Bidell & Fischer (1992), cognitive development is a central part of education; it can provide crucial insights into educational process whereby
skill theory offers both conceptual and methodological tools that are useful in understanding and guiding educational intervention.

In his theory of development, Piaget describes stages of normal cognitive development of a child. For example at stage 1 (0-1 month) which is characterized by reflex activities. A child with congenital hearing loss will not react to external stimuli. The importance of understanding these steps, allows parents, teachers, professionals and other stakeholders in educational provision services to determine appropriate strategies for early identification and adequate resources to help the child maintain his chances to develop normally. To complement Piaget’s theory, Lenneberg cited by Ndurumo (1993) and Flusberg (1994) in his theory of language development, state that, children acquire language skills according to a set timetable and age. That is from birth to three years. By the age of three, the child has a vocabulary of close to 1,000 words and communicates at a relatively comfortable and intelligible level. It is at the age of four that the child is said to have developed language. This stage is most considered by those in the education of children with hearing impairments. Parents, special educators and other professionals should consider the child’s language development to help both determine pre-lingual and post-lingual hearing loss. The study sought to establish how teachers determine educational services and resources for learners with HI as suggested by the theory in correlation to exceptional children.
1.8.2 Conceptual Framework

**Government**
The recognition of Special Needs Education (SNE)

- **Training of Special Teachers for HI** (government, churches, Private sector or NGOs)
  - In-service training
  - Diploma Training
  - Degree

- **Establishment of Education Assessment and Resource Centres (EARCs)**
  - Assessment
  - Placement & Referral
  - Referral

- **Other Collaborating Services for early intervention, identification and awareness at the community level for HI**:
  - Community Based Rehabilitation (CBR)
  - Parents Organisations, Deaf Organisations

- **Audiology**
  - ENT Service, Speech therapy and Occupation Therapy

- **Special Schools, The Units, Integrated schools**

- **Community Level**

- **Provincial and District Level**

- **Tertiary Level**: Central Provincial and District Level

**Figure 1.1**: Structure for a successful educational services for learners with HI.
**Source**: Researcher’s own adaptation.

The education of learners with HI, although for most cases, schools are established by NGOs and churches, the government has an obligation to provide support. This support should include the recognition of the programme that can be disseminated throughout the country and the training of cadres. This can be followed by the establishment of EARCs. In turn, the EARCs should assess children, place them in school or refer for further investigation in collaboration with other professionals. At
the community level, the Community Based Rehabilitation programme and other Disabled People Organization (DPO), Parents Association etc, may play an important role in early identification, community awareness, school screening and referral to EARC to provide successful educational services for learners with HI.
1.9 Operational Definition of Terms

**Assessment**: Process of gathering and interpreting information (Stach, 2010).

**Community Based Rehabilitation**: A strategy within general community development for habilitation and rehabilitation, equalization of opportunities and social inclusion of all people with disabilities (WHO, ILO & UNESCO, 2004).

**Disability**: Lack or restriction of ability to perform an activity in the manner within the range considered normal (WHO et al., 2004).

**Early Interventions**: Services which are given after assessment and stimulation of the very young child who has special educational needs (Friend, 2008).

**Educational services for learners with HI**: Form of special education services in order to receive an adequate education. Such services may include auditory training, interpreter service and related needs (Friend, 2008).

**Hearing Impairment (HI)**: It is a condition of hearing loss ranging from mild, moderate, severe to profound. (Stach, 2010).

**Multidisciplinary Team**: Consists of staff from different professional backgrounds who have different areas of expertise. These teams are able to respond to clients who require the help of more than one kind of professionalism (Friend, 2008).

**Placement**: Placing the student in the most appropriate facility in a given institution (Friend, 2008).

**Special Education**: Provision of the needs of a child with a disability that includes the instructions which are conducted in the classroom or a facility where the individual needs are met (Friend, 2008).

**Special Needs**: Conditions, barriers or factors that hinder normal learning and development of individual. These conditions may include disabilities, social emotional and health related needs (MOEST, 2003).

**Special Needs Education**: Education for learners with disabilities and special needs (MOEST, 2003).

**Special School**: A school that is organised to exclusively provide educational services to learners with disabilities (MOEST, 2003).

**Special Unit**: Classroom that is attached to a regular school, but set aside for educating learners with specific type of disability (MOEST, 2003).

**Educational services**: methods or process of helping the learner in the pursuit of personal and academic growth (Uppal, Kohen & Khan, 2006).
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction
This chapter reviewed what other researchers had done and published in relation to
the provision of the educational services for learners with hearing impairments in
general and in Oriental Province in DRC. The literature review was based on the
objectives and the conceptual framework.

2.2 Educational System for Learners with Hearing Impairment
2.2.1 Existing Management Structure for the Education of Learners with HI
In some countries like the United States, education for children with disabilities is
well structured and documented (Gargiulo, 2012; Jenkinson, 2002; Steven, et al.,
2004). The government has put more effort to develop an effective policy, curriculum
development and good educational delivery system. For example, many schools for
learners with HI have adequate resources, integrated audiology service and children
have access to hearing aids and speech therapy services to enhance their academic
development. Their status is protected by Section 504 of the Vocational Rehabilitation
Act and the American Disabilities Act (ADA) (Gargiulo, 2012). The same way, in
India, children with disabilities in special schools fall under the responsibility of the
Ministry of Social Justice and Empowerment (Naidhu, 2008). With the support of
Rehabilitation Council of India, the program that houses the education of learners
with HI, good structured educational system has been put in place to cater for the
needs of learners with Special need. In Kenya, SNE falls under the Ministry of
Education, Science and Technology and has a clear national special education policy
(MoEST-Kenya, 2009).
In the DRC, special education is one of the divisions in the Ministry of Education. As more schools for children with disabilities in general and those for persons with HI in particular are organized by non-profit organizations aiming at vocational training, then they fall under the Ministry of Social Affairs (Ministry of Education – DRC, 2005). The gap that may be observed in the DRC compared to other countries as mentioned is that, there is no clear policy where the national programme and plan could be drawn to promote and facilitate full and equal right of learners with HI.

2.2.2 Policies and National plan for the education of learners with HI

The right to education for all was first defined in the United Nation’s Universal Declaration of Human Rights of 1948; further elaborated in a range of international conventions, including the Convention on the Rights of the Child (1989) and more recently in the Convention on the Right of Persons with Disabilities (UN, 2007). In 1994, the World Conference on Special Needs Education in Salamanca, Spain, the first international Consensus document on learners with special education needs was drawn up. The Salamanca Declaration guidelines encouraged governments to design educational systems that respond to diverse needs of people so that students, including those with disabilities, can access schools that accommodate them in child-centered pedagogy (UNESCO, 1994; Kormos & Kontra, 2008).

Similarly, the Dakar framework (UNESCO, 2000) emphasized on the Education for All as a global movement to provide quality basic education for all children. Article 24 of the Convention on the Right of Persons with Disabilities (CRPD) and Optional Protocol stresses the need for governments to ensure equal access to an “inclusive education system at all levels” and provide reasonable accommodation and individual
support services such as hearing aids, interpreters, etc to persons with disabilities to facilitate their education (United Nations, 2006). In addition, the Millennium Development Goal (MDG) on education requires that universal primary education is realized by 2015 and there is a thriving learning environment that allows every child to develop to the best of his/her abilities.

In 1993, the United Nations (UN) adopted the standard rules on equalization of opportunities for people with disabilities. In this document, the UN provided policy guidelines which served as model legislation for a number of countries. It covers a number of key areas such as accessibility for personal mobility, health and education, employment and rehabilitation. The convention also marks a shift in thinking about disability from social welfare concern to a human right issue, which acknowledges that, societal barriers and prejudices are themselves disabling (UN, 1993). The Article 24 of the Convention on the Right of Persons with Disabilities and Optional Protocol (2006) stresses that, the deaf are to receive their education in the most appropriate modes of communication from teachers who are fluent in sign language.

In other African countries such as Kenya, its current national policy on special needs education is that free education for all children with disabilities is provided. Consequently, considerable effort has been made in this direction, including the development of Kenyan Sign Language Syllabus for schools. The State also emphasizes the development of curricula for sign language interpretation. In Uganda, a policy and regulations for the education of deaf children have been adopted. Uganda is also one of few countries in the world to recognize sign language in its Constitution (Terre des Hommes, 2007).
2.2.3 Educational System for learners with HI in the DRC


The Commission argues that, Education for special children should be provided in special schools or in special units in mainstream schools at nursery, primary, secondary, vocational and university levels. Furthermore, it stresses that, the duration of primary education in special schools should vary depending on the type of disability of the children: for the Physically Disabled: 6 years, for the Visually Impaired: 8 years (6 years + 2 years of learning Braille), for the Hearing Impaired: 8 years (6 years + 2 years to learn sign language). As for the programme, the national programme should be adapted to these different types of education so that all special primary schools should begin with the apprenticeship, which lasts about 2 years, and aims at introducing the newcomer to educational technology that involves sign language for learners with HI, and Braille for learners with Visual Impairment.
According to the State Regulation as stipulated in the National Commission, the teaching methods should be focused on the child’s need and the number of learners with HI should be limited in a class to allow higher performance. Examples: Deaf children: minimum 1, maximum: 6 in class, blind children: minimum 1, maximum: 6 in class and physical disability: Minimum 5, maximum: 15 (Commission National Zaïroise pour l’UNESCO, 1996).

Considering the current National Action Plan for Education for All (2005) and the Development Strategy for Primary, Secondary and Vocational 2010/11 - 2015/16 of the DRC, the current status of special education does not correspond to that of the second republic of the Mobutu regime, as described by the Commission National Zaïroise pour l’UNESCO, 1996). No clear policy is defined to take into account the case of learners with special needs; there is no national strategy for identification, monitoring and supervision of children with special needs. Special Education in its current state is organized mainly by religious and private organizations (Ministry of Education – DRC, 2005, 2010). This shows that there are considerable gaps in the implementation of Special Needs Education and service provision for learners with HI in the country. In addition, the new Constitution of the DRC of 2006, article 52 states that, person with disability and old person, have right to special measures of protection regarding their physical needs, intellectual and moral (Government of DRC, 2006). This statement seems not to define clearly the future of people with disabilities as they are still subjected to social stigma that is affecting the recognition of the needs of children with HI in terms of early intervention measures, educational and rehabilitation services and provision of resources.
2.3 Strategies Used for the Effective Identification, Assessment and Placement of Learners with HI

The World Health Organisation (WHO) (2012) estimates that, there are 360 million persons in the world with disabling hearing loss (5.3% of the world’s population). Three hundred and twenty eight million (91%) of these are adults (183 million males, 145 million females), 32 (9%) million of these are children and the prevalence of disabling hearing loss in children is greatest in South Asia, Asia Pacific and Sub-Saharan Africa (WHO, 2012). This figure concerning children is significant. To overcome this burden, early identification and intervention measures are needed so that, hearing impairment can be reduced by improving language development and also improve education during childhood to avoid poor remediation when it is late.

2.3.1 School and Community- Based Screening

2.3.1.1 School Hearing Screening

Tshimbadi, Tshiswaka & Matanda (2011), conducted a cross-sectional study with a random sample of 2298 students attending schools in the nursery, primary and secondary schools in Kinshasa (DRC), with the aim to determine the prevalence and etiology of hearing problems among students. The findings revealed that 22 students (0.96%), were identified as having a hearing threshold over 30 dB in one ear and 18 (0.78%) having chronic supurative otitis media; 87 students (3.8%) had a tympanic membrane perforation and 444 students (19.3%) had earwax. Hearing loss was estimated at about 1% of apparently healthy students in schools in Kinshasa. The main cause (82% of cases) of this hearing disorder was chronic supurative otitis media. Hearing examination and audiometry tests, were used to screen students from
different schools in a quiet classroom. The average threshold ≥ 30 dB HL at 1, 2 and 4 kHz was defined as significant hearing loss.

2.3.1.2 Community- Based Hearing Screening

McPherson and Olusanya (2008) conducted another cross-sectional study in Lagos Nigeria on infant hearing screening for early detection of permanent hearing loss. They found that, community health workers with focused training can successfully screen infants for Permanent Congenital and Early-onset Hearing Loss (PCEHL). This supports the view that, non-specialists could play an increasing role in the provision of basic community-oriented hearing healthcare services. In the country like the DRC where with the support of some international NGOs such as Christian Blinden Mission, Handicap International, the Lillian Funds and so on, have tried to implement Community Based Rehabilitation (CBR) services. More importance could be put in strengthening Community Based Rehabilitation Workers in order to promote early identification through community based screening.

2.3.2 Education Assessment Resource Centres (EARC)

Assessment, historically, was based on medical criteria (Ronald, Jerry & Steven, 1997; Lake, 1956) and in Special Education; assessment was focussed primarily on informal data collection based on teacher observations of functional life skills (Erika, 2008). The focus now is more on support needs to improve functioning. In the United Kingdom, assessment has shifted from being service-led (fitting the individual to the available service) to needs-based (with services appropriate to meet the need), and then, to focus on outcome (with personalized social care through enhanced choice). According to Ndurumo (1993), early detection, assessment, intervention and
programming are indispensable prerequisites for the successful development and integration of a child at risk or the child with disability. Barrett (1994) states that the goal of any school hearing screening programme should be to accurately and efficiently identify those students whose hearing is impaired resulting from either conductive and/or sensorineural pathology. Thus, screening programme for these pathologies should be a part of screening program because they may interfere with the child’s physical wellbeing that can possibly hinder the potential to learn.

In Kenya, there was more than 52 district-based Educational Assessment Resource Centres (EARC) and 345 sub-centres, all involved in the assessment and advice of the parents of children with disabilities (MoEST-Kenya, 2003). In Uganda, EARCs had been set up in 39 districts in order to provide adequate skills for teachers to identify and cater for children with special needs (Terres des Hommes, 2007). Educational Assessment Resource Centres’ main objective was to equalize education opportunities for children with special needs and facilitate their full integration into the school system and their communities. This approach includes early identification of children with special education needs, sensitization, counselling and training of children with disabilities and their families, teachers, the local administration and others in meeting the special needs of these children.

2.3.3 Parent and Family Support Services

Hardman, Drew and Egan (2011) state that, some conditions, such as Spina-bifida and Down syndrome, are readily apparent at birth, whereas others, such as hearing impairments and learning disabilities, are not immediately identifiable. In most cases, if a child’s impairment is identified, the mother often becomes primarily responsible
for relating to the child and attending to his/her needs. Evidence clearly indicate that family’s ability to adapt to the child’s hearing loss could be hindered by the lack of information about available services (Mukuria & Eleweke, 2010). Lacking information, support and knowledge make many parents unable to make appropriate choices about the communication avenues and educational needs of their children. The role of parents, particularly mothers and families of children with disabilities is vitally important to community-based approach in working with children. Mothers in general are often the main caregivers also become the key persons to ensure services and programs reach their children. According to Christian Blinden Mission (2011) parents should be more targeted and stimulated as key caregivers so that they understand service options and are able to provide supportive care to their children with disabilities. They can make informed decisions once all information is shared, and actively participate in planning and implementing programs concerning them or their children. Caregivers from other families usually organize to support each other and learn through the Parent to Parent support group; empower themselves and form Self-Help Groups (SHG). The SHGs may become an essential stakeholder in planning, implementing, managing and evaluating programs as well as a mechanism for lobbying, gaining access to financial services and engaging in livelihood activities which have a direct impact on child and family wellbeing.

Community awareness for parents and teachers in health and education is vital for regular screening, to help target preventive measures that may improve the potential of a child with HI, in terms of social interaction and academic achievement. That is why good collaboration between the parent’s organizations, schools and the
Education Assessment Resource Centres (EARC) is of great importance to join effort for the development of a child. The current study sought to determine different strategies that are used for effective identification of learners with HI in Oriental Province.

2.3.4 Placement for Learners with Hearing Impairment

Appropriate placement is another requirement in providing educational services to children with special needs in general and particularly to learners with HI. Ndurumo, (1993) states that, children who are about to be assessed for educational needs must be carefully and comprehensively assessed. Those who are already in special schools and are suspected to be inappropriately placed must undergo another assessment. Miles and McCracken (2008), reveal that most of the schools for the deaf do not have a school-based audiology and in some countries there are no EARCs. With such conditions, both parents and special teachers lack proper orientation regarding the placement of children and the evaluation of the outcomes can be difficult. Therefore, teachers cannot provide the necessary support for learners.

According to Friend (2008), placement is the final decision of a multidisciplinary team, in order to determine the setting in which the student will be educated. Multidisciplinary team in special education settings may comprise of special and regular teacher, parent, and other professionals such as audiologist, speech therapist, occupational therapist and so on; who collaborate and determine the appropriate placement according to the needs of the child and the severity of hearing loss. Ramsey, (1997), categorised and described the most common types of placement for learners with HI as follows: a) Residential schools, b) Day schools, c) Resource
rooms and d) Itinerant Programmes, where learners with HI attend regular school classes and receive necessary support. Researchers such as Northern and Downs, (2002); Friend, (2008); Hardman, (2011) and Gargiulo, (2012) emphasize on the Americans with Disabilities Act (ADA), (1990) and the Individuals with Disabilities Education Act (IDEA) (1997) that placement would be considered the least restrictive option. Deviation from general education classroom should occur only when it is educationally necessary for the student to receive an appropriate education. Furthermore, the IDEA states that, for learners with HI, the Least Restrictive Environment (LRE) may be different because, their communication needs set them apart from other children. The multidisciplinary team during the assessment shall also consider the child's language and communication needs, the academic level, including opportunities for direct instruction in the child's language and communication mode (IDEA, 1997). Out of the strategies used for effective identification of children with HI, this study sought also to determine the placement option for learners with HI in the Oriental Province.

2.4 Provision of Resources for Learners with HI

There are different approaches around the world that are used to provide education for people with disabilities. Most of the models adopted for learners with Hearing Impairments and others include special schools, integrated schools and inclusive schools. According to WHO (2011), in European countries, 2.3% of pupils within compulsory schooling are educated in a segregated setting, either a special school or a separate class in a mainstream school. Examples of Belgium and Germany rely heavily on special schools in which children with special needs are separated from their peers. In some countries in east Africa like Kenya, Uganda and Tanzania,
children with hearing impairment are mostly educated in special schools or special units attached to a regular school.

2.4.1 Human Resource Provision

2.4.1.1 Interpreting services
People with hearing impairments need assistance and support to achieve a good quality life and to be able to participate in social and economic life on an equal basis with hearing society. Researchers such as Hallahan, Kauffman and Pullen, (2009) stress that having a sign interpreter is one of the best accommodations. A sign language interpreter for instance is a key service provider that enables a deaf person to work and participate in all activities in a mainstream professional environment. Such service requires educational interpreters. According to Friend (2008), educational interpreters are educational professionals who have good understanding of deafness and the needs of learners with HI. They have to be familiar with all aspects of entire curriculum. Hallahan, Kauffman and Pullen (2009) suggest that instructors and interpreters work closely to provide the optimum learning experience for learners with HI. Other provisions for supporting learners with HI have been highlighted by Gregory, Knight, McCracken, Powers, and Watson, (1998); Foster & Walter (1992) and Ndurumo, (1993), include: Oral approach, Total Communication, peripatetic service or Itinerant support teacher.

2.4.1.2 Special Teachers training
The issue of human resource is significant in the provision of Special Needs Education (SNE) services in any country. According to the UNESCO (1995), out of the 63 countries, 48 had adequate information on teacher training programmes and in 26 countries, general teacher training included some elements of special education
and that special education training was offered at the diploma level in 7 countries, and at the degree level in 15 countries. In East Africa, there is also an improvement in terms of teacher training for learners with HI. In Kenya for example, special teachers for HI are trained at the diploma and Certificate levels at Kenya Institute for Special Education (KISE), and degree levels at Moi University, Maseno, Narok and Kenyatta University respectively. In Uganda, most of the teachers in special education for HI are trained at the Uganda National Institute for Special Education (UNISE) currently Kyambogo University (Terre des Hommes, 2007). This study sought to investigate the adequacy of resources especially human resources which are available to teach learners with HI in Oriental Province.

2.4.2 Provision of material Resources

2.4.2.1 Hearing Aids

According to MoEST-Kenya (2003), learners with Special Needs Education require more material resources for their education than their non-disabled peers. These learners need resources at individual level as well as at classroom level. For learners with Hearing Impairments, provision of individual hearing aids is a major form of rehabilitation. In Kenya, hearing aids can be obtained from a number of governmental and private institutions, the most recognised ones are: Kenyatta National Hospital at the Audiology section, Nairobi Audiology Centre, Beam Hearing Centre, Hear Better Centre, Giants Hearing Centre, House of Hearing, and Kenya Society for the Deaf Children. Other Nongovernmental organizations that donate hearing aids include; Operation Ear Drop Kenya, Voluntary Service Overseas (VSO), National Fund of the Disabled through the support of some International NGOs such as Starkey Foundations, among others (Kenya Federation of Deaf Teachers, 2004). This study
sought to determine the available material resources provided to support the education of learners with HI in Oriental Province.

2.4.3 Other Services for Learners with HI

2.4.3.1 Audiological Services
According to Gregory *et al.*, (1998), audiology service is one of the central aspects of the education of the deaf children; failure to attend to this aspect of deaf education is failure to attend to the needs of deaf children and their parents. Most of the schools for children with HI in developed countries such as the United Kingdom have an audiology service included in the services provided. But in many developing countries, audiology services are not directly attached to schools for learners with Hearing impairments. Miles and McCracken (2008), argue that, school-based audiology services can deliver considerable benefits to deaf children and their families where audiology clinics may not be available, or not established or where they are only based in major cities. The importance of developing audiology skills among teachers of deaf children is also recognised because they are able to provide audiological services alongside their teaching commitments. Teachers are expected to assess the functionality of hearing aids in terms of changing batteries, cleaning the earmould, control picking of sound in the environment, among others.

2.4.3.2 Aural Rehabilitation
According to WHO (2004), approximately 186 million people with hearing loss reside in developing countries. Their access to aural rehabilitation services that can significantly reduce the effects of hearing loss and improve communication is largely non-existent or very limited. Aural rehabilitation includes counselling, device fitting, communication intervention and follow-up services that take place after the accurate
identification and assessment of hearing loss. It is an essential component of any hearing healthcare process, but access to these services is extremely limited in many developing countries (Brouillette, 2008). This study sought to investigate and determine the availability of resources that are used to teach learners with HI in Oriental Province.

2.5 Summary

The literature reviewed shows that educational service for learners with HI was crucial for their integration into society. In Africa in general, there are at least a minimum of services delivered to learners with HI and each country adapted education strategies according to its national policy. Different studies have shown that in countries like Kenya and Uganda, the government has established a clear policy for special needs education for quality education for learners with HI. The improvement has been observed in the development of Educational Assessment and Resource Centres (EARCs) in every district for early identification, assessment, referral and placement. In addition, the government emphasizes on the training of human resources in various programmes related to special education offered at diploma and degrees at the university level. The Government of Kenya for example has recognized Kenyan sign Language as a national language and as examinable subject. There is availability of minimum resources such as hearing aids, interpreter service, audiology and speech therapy service to enhance the education for learners with HI.

In the DRC, the government does not have a clear national policy for the education of learners with HI. Most of schools for learners with HI are the initiatives of private
sectors and churches. The Ministry of Primary, Secondary and Vocational Training took at least the responsibility to coordinate these private initiatives but still had low coverage especially as the government has not yet signed and ratified the Convention on the Right of People with Disabilities Acts (CRPDA). This study sought to determine the current system of education for learners with HI particularly in Oriental Province and the extent to which it served the learners with HI in Oriental Province; Furthermore, no scientific authorities indicated the availability of services for early identification, assessment and placement option for learners with HI in Oriental Province compared to Kenya and Uganda. This constituted a considerable gap in the educational services for learners with HI. This study had particular attention to determine the availability of those services in Oriental Province.

Another weakness in Oriental Province compared to Kenya and Uganda was observed in human resource provision, provision of rehabilitation devices such as hearing aids and technical support services such as audiology, speech therapy and so on to support and maintain learners with HI in school. The lack of provision of such services revealed clearly that there was a huge gap in educational services for learners with HI in the DRC in general and the Oriental Province in particular. Although there was only bits and pieces of information which were available in the DRC, radical increase of research efforts in this area is necessary to fill these gaps and meet the needs of learners with HI. This study sought to analyze the educational services provided to learners with HI in Oriental Province. It was based on three major parameters that included the existing education system, the different strategies used for identification, assessment and placement of learners with HI as well as the availability of resources:
human and material resources for quality education of learners with Hearing Impairments.
CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction
This chapter presents the research design, variables, location of the study, the target population, sampling techniques and sample size, research instruments, piloting, determination of validity and reliability, data collection techniques and analysis as well as the ethical considerations.

3.1 Research Design
Research design is the argument for the logical steps (Creswell & Plano, 2011; Hartley, 2004). This qualitative study adopted a descriptive design to give a holistic situation of educational service of learners with HI in Oriental Province.

3.1.1 Variables of the Study
Ary, Cheser, and Sorensen, (2010), state that qualitative research does not identify, define or test the relationship between independent and dependent variables in a particular setting. It focuses on human experience holistically. In this study, independent and dependent variables were to be well determined as the design continued to emerge. This could be explained in the sense that qualitative inquirer is never quite sure just what would be learned in a particular setting (Ary et al., 2010), because what can be learned or found out in that particular setting depends on the nature and types of interactions between the researcher and participants.
3.2 Location of the Study

The locale of the study was Oriental Province in the North-Eastern of the DRC, which is one of the eleven (11) provinces in DRC. It is located in the North-Eastern part of the country. It borders the Central African Republic and Sudan to the north, Uganda to the east and the Equator Province to the West, by the Province of North Kivu in the south-east, by Provinces of Maniema and Kasai Oriental in the South. The Oriental Province has an area of 503,239 sq km. It is almost entirely located in the Congo River basin and other parts of the territories such as Aru, Mahagi, Djugu and Irumu in the East are part of the Nile Basin. The population is estimated at 8,197,975 million inhabitants (Governorat Provincial, 2008). This area has been selected for the study because of its geographic position and convenience. The study area was accessible and familiar to the researcher as a native of the area.

3.3 Target Population

The Oriental Province has only four recognised special schools for learners with HI and each has one head teacher and 6 to 8 teachers according to the number of classes organised. One of the schools served for the pilot study. Thus, the target population were all the head teachers (3), because of their position as administrator, planer and implementer, all the special teachers (28), because of their role in instructional responsibility. Sacks, (2001) states that, Special Education Teacher should have multiple responsibilities such as determining eligibility for services which involves diagnosis, following IEP progress and also collaborate with the multidisciplinary team for pre-referral observations and screening for possible placement. The study also included 15 parents as direct and indirect beneficiaries from the three schools for HI. The schools were categorized as private (1), public (1) and church managed (1).
3.4 Sampling Techniques and Sample Size

3.4.1 Sampling Techniques

The selection of Headteachers, teachers, learners with HI and their parents in three schools for learners with HI in Oriental province was based on purposive sampling. Evidence indicates that, purposive sampling is where the researcher relies on experience and knowledge of the group to be sampled (Gay, Mills & Airasian, 2010; Orodho, 2012). The researcher targeted head teachers and teachers who specifically met some criteria to be eligible. The following criteria were considered; headteachers and teachers should have at least basic training in special education for HI, they should be registered teachers, and they should be fully employed by the school and with experience of at least one year or more in serving learners with HI. The rationale of selecting teachers, headteachers and Principal was that, the researcher could get more positive and reliable information from them. Their experiences and knowledge about the educational services for learners with HI in Oriental Province was a clue to determine the effective education system, the strategies for identification, assessment, placement options and the availability of resources that they use for effective educational services for learners with HI. Cuba and Lincon, (1981) state that in a classic work, sampling is almost never representative or random but purposive, intending to exploit competing views and fresh perspectives as fully as possible.
3.4.2 Sample Size

The sample size comprised 32 respondents in total among them 3 Headteachers, 14 teachers, and 15 parents of learners with HI. Table 1 gives the detail of the target population and the sample size.

Table 3.1: Sample Size

<table>
<thead>
<tr>
<th>Schools</th>
<th>Sch. Mangers</th>
<th>Sample size</th>
<th>Teachers</th>
<th>Sample size</th>
<th>Parent sample</th>
<th>Total</th>
<th>Total sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aru School for the Deaf (ESMA)</td>
<td>Private</td>
<td>1</td>
<td>1</td>
<td>6</td>
<td>3</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Ephphatha school for the deaf (BUNIA)</td>
<td>Church</td>
<td>1</td>
<td>1</td>
<td>6</td>
<td>3</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Complexe Espoire Kisangani</td>
<td>Public</td>
<td>1</td>
<td>1</td>
<td>16</td>
<td>8</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>3</td>
<td>3</td>
<td>28</td>
<td>14</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td>100</td>
<td>50</td>
<td>100</td>
<td>100</td>
<td>70</td>
<td></td>
</tr>
</tbody>
</table>

In this study, all the school managers or principals and 50 % of the teachers were considered. Five parents of learners with HI who were living not far from the selected school were included. A total sample of 32 (n) (70 %), of the 46 (N) population constituted the sample size of the study. The purpose of including parents was that the researcher could get more positive information about strategies for effective early identification of their children, the existence of collaboration with the multidisciplinary team for assessment and placement as well as the collaboration of other community supporting programme.
3.5 Research Instruments

The study focussed on a single Province, multiple approaches utilized in case study such as semi-structured interviews, observation and archives or documents (Ary et al., 2010; Creswell, 1994) were used to gather data from school managers, teachers and parents from three established schools.

a. **Interview:** Some scholars (Gay, Mills & Airasian, 2010; Fetterman, 2010) describe interview as the most important data collection technique that is at the disposal of the researcher. Seidman, (2013) argue that, at the very heart of what it means to be human, is the ability of people to symbolize their experience through language when being interviewed. The rationale for interview in this study was that the interviewees enabled the researcher to find out information, thoughts and intention that could not be observed. In an attempt to address research questions, interviews were conducted using a predetermined set of questions (see Appendix A) the questions were developed by the researcher in line with the objectives and with the support of the Supervisors. The questions provided information in the following areas: Educational system, strategies for effective early identification, assessment procedures, placement option and availability of resources for learners with HI.

b. **Observation:** This is a basic method for obtaining data in qualitative research (Ary et al., 2010). In an effort to closely examine how Principals or Headteachers and teachers provide and deliver services to learners with HI, especially teaching approach such as interpreting, Total Communication, Oral and itinerant service. The researcher observed the use of hearing aids by learners with HI in class, the education model if integrated, inclusive or special unit.
c. **Documents:** Despite limitations, documents are a good source of data; they can provide good descriptive information and can help ground a study in its context (Ary et al., 2010). For further investigation on the educational system, strategies for early identification, assessment procedures and placement options, the researcher also used documents to explore available public records, especially those in relation to special education with focus on HI questions. This included public documents, discussions on educational issues, national and international agencies reports, published and unpublished studies from local universities and any other official or unofficial documents generated by or for the programme. The researcher requested the Headteachers to provide all related documents. Such documents were valuable not only because of what could be learned directly from them but also as stimulus for paths of inquiry that could be pursued through direct observation and interview (Merriam, 2009).

### 3.6 Pilot Study
A pilot study was conducted in Proreso School for the Deaf in Bunia. A total of 9 participants were considered for piloting: 1 Headteacher, 3 teachers and 5 parents. Piloting helped the researcher to test and refine some aspects of the instrument. The information from the pilot study could raise logistical topic e.g. the field time needed, refine a study’s research questions, wrong phrasing of question could also be detected and state if the instrument was appropriate (Yin, 2011; Orodho, 2012). This school was not included in the actual data collection exercise.
3.6.1 Validity
The term which is most frequently used by qualitative researchers to refer to this characteristic is “credibility”. The term credibility is analogous to internal validity in quantitative research (Ary et al., 2010; Patton, 2002; Johnson, 1997; Stenbacka, 2001). Credibility involves how well the researcher has established confidence in findings based on the research design (Ary et al., 2010; Lincoln & Guba, 1985; Kirk & Miller, 1986). The mechanism for meeting the criteria for trustworthiness was the triangulation to establish credibility. Triangulation is a technique for judging the accuracy of data and requires the use of multiple data sources. In this study the researcher used triangulation to establish credibility by using interviews, observations and documents to collect data.

3.6.2 Reliability
Healy and Perry (2000) assert that the quality of a study in each paradigm should be judged by its own paradigm's terms. For example, while the terms Reliability and Validity are essential criterion for quality, in qualitative paradigms the terms Credibility, Confirmability or Consistency are to be the essential criteria for quality (Lincoln & Guba, 1985). To be more specific Lincoln and Guba (1985) use “dependability” in qualitative research which closely corresponds to the notion of “reliability” in quantitative research.

In order to meet the criteria for dependability, the researcher worked closely with the supervisors who examined carefully the process to ensure they were reliable. Spradley (1980) point out that validity of qualitative study can be increased by writing down the exact words used by participants and also by letting the participants read and
comment upon the case study once it is completed. In this study, the researcher kept thorough notes of activities and he provided information on the participants, the selection process, methods of data collection, detailed field notes and other descriptive material that could be reviewed by other people.

**3.7 Data Collection techniques**

During the study, data were collected by the researcher who was assisted by one teacher as a second observer during interviews and observation. This inter-rater Agreement approach helped to improve reliability of the data that was collected (Graham, Milanowski & Miller, 2012; Brain, 2002). Note that, arrangement was done before through phone calls between the researcher and the Headteachers about the date and time for each school separately. All the respondent were interviewed at school individually starting by the Headteachers, teachers and parents. Three techniques were used to collect data:

**Semi structured interview** with open ended questions was used for Headteachers, Teachers and parents of learners with HI at schools; based on the topic areas the researcher wanted to cover. Questions were structured in a way that the respondents provided detailed answers, rather than simple ‘Yes’ or ‘No’ answers (Ary et al., 2010). Those areas were objectively oriented. Note that, Interview was conducted in French by the researcher himself and no interpreter was required as the researcher was familiar with both French and English. For parents, the interview were conducted in other local languages such as Lingala or Swahili depending on the District where the school was located and no interpreter was required to assist in the interview process.
Direct observation; was conducted by the researcher and his assistant in class, especially to determine the availability of resources used to teach learners with HI, the teaching approach and model. The information was gathered through note taking of the aspects related to the study objectives.

Documents analysis; all important existing written materials (school reports and minutes, newsletters, government and NGOs reports, research generated documents) related to the study objectives were analyzed by the researcher to corroborate the two other instrument; interview and observation. The researcher focussed on some specific topics such as the purpose of the document, policy related to learners with HI, provision of resources and knowledge through training of special teachers and roles of the stakeholders in supporting learners with HI as well as the school improvement programmes.

3.8 Data Analysis
The first stage in analyzing qualitative data involved familiarization and organization. The researcher familiarized himself with the data through reading and rereading notes taken during data collection. This helped the researcher to identify the key questions to be answered. Then, data was organized by themes and they were coded. This involved the identification of categories and themes and their refinement (Wimmer & Dominick, 2011; Ary et al., 2010; Powel & Renner, 2003). At its simplest, this labelling or coding process enabled the researcher quickly to retrieve and collect together all the text and other data that were associated with some thematic idea so that they could be examined together and different cases could be compared in that respect. After the data were coded, the findings were interpreted and presented in various forms.
3.9 Logistical and Ethical Considerations

The researcher obtained permission from relevant authorities that included the research authorization letter from the Dean of the Graduate School of Kenyatta University and a research permit from the Chief Officer of the Provincial Division of Education in Oriental Province of the DR Congo, to carry out the research. Head teachers were contacted on phone by the researcher to schedule appropriate time and day for interview.

The researcher ensured that all the respondents were assured of identity anonymity and confidentiality of the responses they provided in the study. Other documents which were for the research were used and only for the purpose of the research. The research was also conducted in a way that all the ethical considerations were put into place. Originality of the research was maintained.
CHAPTER FOUR

DATA ANALYSIS RESULTS AND DISCUSSION

4.1 Introduction
The purpose of the study was to carry out situational analysis of educational services provided for learners in Special Primary Schools for hearing impairments in Oriental Province in the Democratic Republic of Congo. In this chapter, the researcher presents general and demographic information as well as describe and explain the methods that were used to analyze data, presents and discusses the study findings which are organized in three sections according to the study objectives: the current education system, the effectiveness of identification, assessment and placement and adequacy of available resources.

4.2 General and Demographic Information

4.2.1 General information of respondents
The sampled population consisted of 3 (9%) registered head teachers, 14 (44%) teachers, who had at least basic training in special education and experience of at least one year or more in serving learners with HI, and 15 (47%) parents. The data collected by use of Semi structured interview with open ended questions from Head teachers, teachers and parents, were organized by themes and they were coded. This labelling or coding process enabled the researcher to collect together all the data so that they could be examined together. After the data were coded, the findings were interpreted and presented in Tables.
4.2.2. Demographic Data

Table 4.1 Number of respondents by sampling units

<table>
<thead>
<tr>
<th>Schools</th>
<th>Sch. Managers</th>
<th>Sample size</th>
<th>Teachers size</th>
<th>Sample size</th>
<th>Parent sample</th>
<th>Total</th>
<th>Total sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aru School for the Deaf (ESMA)</td>
<td>Private</td>
<td>1</td>
<td>1</td>
<td>6</td>
<td>3</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>Ephphatha school for the deaf (BUNIA)</td>
<td>Church</td>
<td>1</td>
<td>1</td>
<td>6</td>
<td>3</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>Complexe Espoire Kisangani</td>
<td>Public</td>
<td>1</td>
<td>1</td>
<td>16</td>
<td>8</td>
<td>5</td>
<td>22</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>3</td>
<td>3</td>
<td>28</td>
<td>14</td>
<td>15</td>
<td>46</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td>100</td>
<td>50</td>
<td>100</td>
<td>100</td>
<td></td>
<td>70</td>
</tr>
</tbody>
</table>

As shown in Table 4.1, the study established that the total number of respondents were 32 (n) (70 %), of the 46 (N) population constituted the sample size of this study. The respondents were selected from 3 primary schools for learners with Hearing Impairments, one being managed by a local NGO as private school, the second managed by the Church and the last one was a public school managed by the government.

The first task of this study was to investigate the extent to which the current education system served the learners with HI in Oriental Province. The respondents were asked to indicate and describe the existing educational services for learners with HI and the extent to which it was serving through the governmental strategic plan for Special Needs Education, especially for learners with HI. The results are indicated in Table 4.2 and Table 4.3.
4.3 Study Findings

4.3.1 Current educational service for learners with HI in the Oriental Province

Table 4.2: Current educational service for learners with HI (March 2014)

<table>
<thead>
<tr>
<th>Existing educational Services</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Nbr of existed services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special unit for HI attached to regular schools</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Special classes for HI</td>
<td>24</td>
<td>75</td>
<td>2</td>
</tr>
<tr>
<td>Integrated Schools</td>
<td>8</td>
<td>25</td>
<td>1</td>
</tr>
<tr>
<td>Inclusive education</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
<td><strong>100</strong></td>
<td><strong>3</strong></td>
</tr>
</tbody>
</table>

Table 4.2 revealed that about three quarters (75%) of respondents confirmed the special classes were the most preferable educational service for learners with HI in Oriental Province followed by the integrated school confirmed by one quarter of correspondents, which was applied in one school out of three. The school which was using the integrated system was a private one managed by a local Non-governmental organization, while the two others which were still focused on Special classes, one was church based and the second was public school.

As indicated earlier in the literature, Special Education in the DR Congo is organized mainly by religious and private organizations (Ministry of Education – DRC, 2005, 2010). The findings shown in Table 4.2, private sectors were likely to be more advanced through their innovations toward inclusion as they were not restricted in implementing new educational strategies compared to public schools where there was still lack of appropriate guidelines for educational service for learners with HI at the central government.
Table 4.3: Governmental strategies to support learners with HI

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy implemented for the education of learners with HI</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Development of Curriculum for learners with HI</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No specific Policy for learners with HI</td>
<td>26</td>
<td>81</td>
</tr>
<tr>
<td>There is Policy for SNE in general</td>
<td>6</td>
<td>19</td>
</tr>
<tr>
<td>Recognition of Congo Sign Language as a National language and examinable</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Majority of the respondents 26 representing (81%) reported that, there was no specific Policy for learners with HI in Oriental Province and very few respondents 6 (19 %) confirmed that there was at least Policies for SNE in general but not specific for HI.

The findings showed clearly that, nothing could be done more to influence the educational service to improve the education of learners with HI, if there is no official Policy where different educational strategies and curriculum may emanate. The findings had clearly revealed the gap that might be addressed and be fulfilled by the Government to support learners with HI and achieve equity and retention in education for all its citizens as stipulated in the millennium development goals (MDGs) and Education for All (World Bank, 2009; UNICEF, 2007; UNESCO, 2000a).
4.3.2 Strategies used for effective identification for learners with HI

Table 4.4: Strategies used for effective identification

<table>
<thead>
<tr>
<th>Strategies for identification</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community program that refers children to school</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>School screening by teachers</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Community based-screening by teachers</td>
<td>11</td>
<td>34</td>
</tr>
<tr>
<td>Identification is done by Ear Assessment Resources Centre (EARC)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Children are brought to school by parents individually</td>
<td>21</td>
<td>66</td>
</tr>
<tr>
<td>There is Parents and Family Support service</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No strategy for identification exists</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Twenty one respondents representing (66%) indicated not having proper identification strategies and that most of children with hearing impairments were brought to school by parents themselves. Only 11 (34%) of respondents confirmed the Community based-screening strategy that sometimes teachers did house to house screening mainly during holidays to identify children with HI in their respective communities.

Strategies for early identification should be well defined at all level. The findings in Table 4.4 reveal certain weakness and limitations in the schools regarding identification of learners with HI compared to different strategies highlighted in the literature. Headteachers and Teachers had useful skills but collaboration with other specialised and multidisciplinary team could reinforce and build their creativity for appropriate strategies; such as school hearing screening test as reported by Tshimbadi, Tshiswaka, and Matanda, (2011) in Kinshasa the capital city of the DRC among school going children. It was found that about 1 % of learners were identified as
having hearing threshold over 30 dB which is an indicator that those learners had moderate hearing loss.

The Community based hearing screening strategies should also be emphasized among teachers as some of them have already initiated it. McPherson and Olusanya (2008) have demonstrated that Community Health Workers can be initiated and they can successfully screen infants at community level. Schools for learners with HI need to extend their collaboration with Health professionals to incorporate Community Health Workers (CHW) and to CBR programs run by some local and International NGOs in Oriental Province for successfully initiated strategies for early identification of learners with HI.

Table 4.5: Assessment methods for learners with HI

<table>
<thead>
<tr>
<th>Methods</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audiology unit attached to school</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Audiology Centre or Hospital</td>
<td>6</td>
<td>19</td>
</tr>
<tr>
<td>Assessment is done at EARCs</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No assessment service available</td>
<td>26</td>
<td>81</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The study revealed that majority of respondents 26 (81%) confirmed that there was no assessment service available in Oriental Province, to assess children with HI before their placement. Only less than a quarter of respondents 6 (19%) were aware of the Audiology clinic especially in Aru school for the deaf where there was an Audiology Service and some of children with HI were assessed.
Table 4.6: Placement strategies for learners with HI

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Frequency N (32)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Done after assessment from EARC</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Done by Parents</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Teachers &amp; parents in collaboration with other professional team</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Only teachers decide for placement according to the age and intellectual ability of the child</td>
<td>31</td>
<td>97</td>
</tr>
<tr>
<td>No specific placement strategy</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The study findings in Table 4.6, shows that about the great majority of respondents 31 (97%) reported that teachers and headteachers decided for placement of learners with HI. This was done according to the age and the intellectual ability of the child observed by teachers and headteachers when the child was brought by the parents to school.

Table 4.7: Available EARCs in different Districts in Oriental Province

<table>
<thead>
<tr>
<th>Districts with Educational Division</th>
<th>Numbers of EARC available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ituri</td>
<td>0</td>
</tr>
<tr>
<td>Haut Uele</td>
<td>0</td>
</tr>
<tr>
<td>Bas-Uele</td>
<td>0</td>
</tr>
<tr>
<td>Tsopo</td>
<td>0</td>
</tr>
<tr>
<td>Ville de Kisangani</td>
<td>0</td>
</tr>
</tbody>
</table>
Table 4.7 indicates respondents’ awareness about the existence of EARCs in different Districts in Orientale Province. All the respondents: teachers, headteachers and parents confirmed that there were no EARCs available for assessment of learners with HI in the five Educational Districts of the Oriental Province. And they felt that this should have been the responsibility of the central government as one of the key support services to promote Special Needs Education and especially to promote the educational service for learners with HI.

The lack of assessment service confirmed in (Table 4.5) and the lack of EARCs shown in (Table 4.7) have led Headteachers and Teachers to decide for placement of learners with HI confirmed in Table 4.6. On the light of the literature, these findings described clearly the gaps in the educational services for learners with HI that result from lack of indispensable prerequisites for the successful development and integration of a child with disability as raised by Ndurumo (1993). Miles & McCracken (2008) and Barrett (1994) support these findings that, schools for the deaf which lack a school-based audiology for basic assessment or EARCs in some countries may lead to both parents and special teachers to lack proper orientations regarding the placement of children and the evaluation of the outcomes could be difficult. Therefore, teachers cannot provide the necessary support for learners.
4.3.3 Resources available to teach learners with HI

Table 4.8: Available resources to teach learners with HI

<table>
<thead>
<tr>
<th>Resources</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Nbrs of Sch. With Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpreter services</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Itinerant teacher service</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Use of hearing Aids</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Use of Total Communication</td>
<td>27</td>
<td>85</td>
<td>3</td>
</tr>
<tr>
<td>Use of Oralism</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No resources known</td>
<td>5</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
<td><strong>100</strong></td>
<td><strong>3</strong></td>
</tr>
</tbody>
</table>

As summarized in Table 4.8, majority of the respondents 25 (85%) confirmed that Total Communication was the major resource to teach learners with HI in Oriental Province. Only 5 (15%) did not know of any resources. This may be due to the fact that some parents were not more interested to follow their children who had hearing problems simply because of misconceptions.

Total Communication was one of the required strategies for communication intervention for learners with HI as described by Brouillette (2008) that could take place after the accurate identification, assessment and placement. In Kenya, in order to improve communication for learners with HI, proper policy was put in place and the National Examination Council was able to issue a circular making Kenyan Sign Language (KSL) an examinable subject for class 8 and Form 4, in equal stature with English and Kiswahili (MOEST-Kenya, 2003).

For instance, having Total Communication as one of the major resources to teach learners with HI in Oriental Province may be acceptable despite the lack of
Governmental strategies and Policy for learners with HI as well as the lack of appropriate trained manpower in the same field who should bring more adaptations in the program. More resources such as interpreting service, Itinerant Teacher Program and use of Hearing Aids may be addressed as a way forward to inclusive education. Despite this little progress in the use of Total Communication, the issue of human resource was significant in SNE, capacity building of Special Teachers for Learners with HI in Oriental Province was highly needed and also different approaches that were used to provide quality educational service for learners with HI.

In the three sampled schools, the teachers’ and headteachers’ training in special needs education is as shown in Table 4.9.

**Table 4.9: Professional qualification and areas of specialization of Head Teacher and Teachers for HI in three school in Oriental Province**

<table>
<thead>
<tr>
<th>Professional qualification</th>
<th>Teachers</th>
<th></th>
<th>Head Teachers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frq</td>
<td>%</td>
<td>Frq</td>
<td>%</td>
</tr>
<tr>
<td>Cert. Level in SNE</td>
<td>2</td>
<td>15</td>
<td>2</td>
<td>67</td>
</tr>
<tr>
<td>Dip. General Ed</td>
<td>12</td>
<td>85</td>
<td>1</td>
<td>33</td>
</tr>
<tr>
<td>Dip. SNE</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Bachelor in SNE</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Master in SNE</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>PhD in SNE</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>14</strong></td>
<td><strong>100</strong></td>
<td><strong>3</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Areas of Specialization</th>
<th>Teachers</th>
<th></th>
<th>Head Teachers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hearing Impairment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Short course</td>
<td>12</td>
<td>85</td>
<td>1</td>
<td>33</td>
</tr>
<tr>
<td>- Certificate</td>
<td>2</td>
<td>15</td>
<td>2</td>
<td>67</td>
</tr>
<tr>
<td>- diploma</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Degree</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inclusive Ed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early Childhood Ed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>14</strong></td>
<td><strong>100</strong></td>
<td><strong>3</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
According to the results in Table 4.9, it was established that majority of teachers 12 (85%) for learners with HI in Oriental Province were Diploma holders in General Education and all of them had attended short course training in basics about education of learners with HI. Only 2 (15%) of the teachers were certificate holders majoring in HI. The study also revealed that among the Headteachers 2 (67%) were certificate holders in HI and only 1 (33%) attended a short course in basics about learners with HI.

The results demonstrated clearly the gap that needed to be filled. Teachers should be well-equipped with skills and knowledge on different aspects of hearing impairments, the psychology of the deaf and the deaf culture. Gargiulo (2012) stresses that special education teachers must have professional qualifications that will enable them to help children with special needs. The findings in this study revealed that special educators for learners with HI in Oriental Province did not possess sufficient content knowledge to address the educational needs of learners with HI while in Kenya for example, special teachers for HI are trained at Certificate, diploma and degree levels in Universities. In Uganda, most of the teachers in special education for HI are trained at the Uganda National Institute for Special Education (UNISE) currently Kyambogo University (Terre des Hommes, 2007).

The lack of training curriculum for special teachers especially for learners with HI in Oriental Province could lead to inadequacy of provision of quality educational service that could affect the promotion of their education in the community. This calls again for proposal for improvement in teacher training curriculum so that Headteachers and
Teachers could be equipped with appropriate skills to handle learners with HI effectively.

**Table 4.10: Other available support services for learners with HI in Oriental Province**

<table>
<thead>
<tr>
<th>support services</th>
<th>Frqcies</th>
<th>%</th>
<th>Nbr of service</th>
<th>Location By Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audiology Service (Government Hospital)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Audiology Centre/Hospital (Private Sector/ NGO)</td>
<td>13</td>
<td>40</td>
<td>1</td>
<td>ARU/Ituri</td>
</tr>
<tr>
<td>Speech Therapy Service (Government Hospital)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Speech Therapy Service (Private Sector/ NGO)</td>
<td>4</td>
<td>12</td>
<td>1</td>
<td>ARU/Ituri</td>
</tr>
<tr>
<td>Training centre for special teachers at certificate level</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Training centre for special teachers at Diploma level</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Training centre for special teachers at degree level</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Hearing Aids dispenser (Government Hospital)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Hearing Aids dispenser (Private Sector/ NGO)</td>
<td>8</td>
<td>25</td>
<td>1</td>
<td>ARU/Ituri</td>
</tr>
<tr>
<td>Don’t know any other support service for learners with HI</td>
<td>7</td>
<td>23</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
<td><strong>100</strong></td>
<td><strong>3</strong></td>
<td></td>
</tr>
</tbody>
</table>

In this study, Table 4.10 shows that nearly half of respondents 13 representing (40%) were aware of other available support services for learners with HI in Oriental Province especially the Audiology Centre located in Aru Territory, Ituri District, run by a private sector. Less than a quarter of the respondents 4 (12%) confirmed the existence of speech therapy service again in the same Territory, one quarter 8 (25%) confirmed that the Audiology Centre in Aru acts as a hearing aids dispenser and nearly one quarter of respondents 7 representing (23%) did not have any idea of other support services available for learners with HI in other Districts in Oriental Province.
In summary, 3 available support services for HI were at least organized as a comprehensive service in Aru Territory in Ituri District in Aru Audiology Centre, a Non-Governmental Organization.
CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

In this chapter, the summary, conclusions, recommendations and suggestions for further research are discussed. The purpose of the study was to carry out situational analysis of educational services provided for learners with hearing impairments in Oriental Province in the Democratic Republic of Congo.

This study objectives sought to:

i. Investigate the extent to which the current education system serves the learners with HI in Oriental Province;

ii. Determine effectiveness of identification, assessment and placement currently used for learners with HI;

iii. Investigate the adequacy of resources available and devoted to learners with HI;

5.1 Summary

The study was conducted in three special schools, specifically primary Schools for learners with Hearing Impairment in Oriental Province, in the DR Congo. The Schools were; Aru School for the Deaf (Aru), Ephatta School for the Deaf (Bunia) and Complex Espoire (Kisangani).

The study targeted Headteachers, Teachers and Parents of learners with HI in the sampled schools; a sample size of 32 respondents were selected for the study based on their availability from a possible 46 respondents; 3 Headteachers, 14 teachers and
Parents of Learners with HI. For data collection, semi-structured interview with open-ended questions were used to encourage free response from participants and direct observation during data collection from Headteachers and teachers for further investigation on the educational system and teaching methods. Documents analysis was used to explore available public records, especially those in relation to special education with focus on learners with hearing impairment.

The following is a summary of the research findings:

5.1.1 Existing educational service for learners with HI in the Oriental Province
The educational services available for learners with HI in Oriental Province was;

i. Special Classes no residential

ii. Integrated Class, residential with a minimum of four categories of learners (HI, VI, PH and learners who are not disabled)

The findings revealed that most of the schools for HI in Oriental Province were still adopting the special classes where no other categories of disability was admitted.

5.1.2 Governmental strategies to support learners with HI
Most of the respondents from the selected schools confirmed that there was no specific Policy to support learners with HI. Few of them mentioned the existing of general policy for SNE, but not oriented to suit the needs of learners with Hearing Impairments. In the selected schools, most of the teachers and parents were less informed about some progress that were being done by the government or some international NGOs to lobby for the implementation of useful strategies to support learners with HI. In addition, even though the National and International NGOs such as UNICEF, UNESCO, Handicap International had been instrumental for the
development of appropriate policy, the political will was likely not flexible for its consideration and adoption.

5.1.3 Strategies for effective identification
Majority of the head teachers and teachers received children directly from parents especially those who were informed a bit about the education of learners with HI in one way or another, while more than quarter of the respondents confirmed some time the schools adopted community based strategies whereby teachers were sent house to house to identify learners who were having hearing deficit in their respective communities. This was occasionally organised during holydays and it was usually the initiative of the school not from the government.

5.1.4 Assessment methods
Majority of the respondents confirmed the nonexistence of the Assessment service for learners with HI in Oriental Province, very few were aware of the Audiology Service which was located in Aru Sub-District where some of the parents used to take their children for audiometric test. Even if some of respondents were aware of the Audiology Service, there was still lack of information about the importance of assessment service as a way for better school placement and rehabilitation as it had never been introduced or advertised by the MoE, as one of the educational service in Special education.

5.1.5 Placement strategies
The study revealed that teachers and head teachers decided for placement of learners with HI.
5.1.6 Availability of EARCs in Oriental Province
The study revealed that there were no EARCs available for assessment of learners with HI in Oriental Province. The responsibility of the central government had been highlighted by the respondents as one of the key support services that could be offered to promote Special Needs Education and especially to promote the educational service for learners with HI.

5.1.7 Resources to teach learners with HI
Majority of the respondents confirmed that; total communication was the major resource to teach learners with HI in Oriental Province. Other resources were not available; this may have been attributed to the fact that some parents were not more interested in following their children who had hearing problems simply because of misconception and cultural myths.

5.1.8 Professional qualification and areas of specialization of Head Teacher and Teachers
In this study, it was found that;

- Majority of teachers for learners with HI in Oriental Province were Diploma holders in General Education. All of them had attended locally some short courses in basics about education of learners with HI.

5.1.9 Support services available for learners with HI in Oriental Province
The study revealed that;

- There was only one Audiology service known by less than half of the respondents located in Aru Territory, Ituri District, run by a private sector.
- Very few respondents reported that there was one speech therapy service attached to the Audiology Service in the same Territory.

- About a quarter of respondents confirmed that the Audiology Centre in Aru acts as a hearing aids dispenser as well.

- Less than a quarter of respondents did not have any idea of other support services available for learners with HI in other Districts in Oriental Province.
5.2 Conclusion

Based on the study findings, it was concluded that:

Special Classes were the most preferable mode of the educational service for learners with HI in Oriental Province,

The government of the DRC did not have specific Policy to support learners with HI

Most of the schools did not have specific strategies for identification of learners with HI in the community; majority of teachers received children directly from parents, only few teachers occasionally went house to house for identification.

Children when they were brought to school, they were not assessed due to lack of assessment service for learners with HI, only teachers and head teachers decided for placement of learners.

No Educational Assessment and Resource Centres (EARCs) were available to support educational service for learners with HI in Oriental Province.

85 % of teachers used Total Communication as major strategy to teach learners with HI.

85 % of the teaching staff had no qualification in special education for HI, most of them were Diploma holders in General Education and had attended some short courses locally in basics about education of learners with HI.

The Audiology service based in Aru Territory was found to be the only support service known by 40% of the respondents, with the minimum of other services such as speech therapy and hearing aids dispenser.
5.3 Recommendations

The following recommendations were made based on the findings of the study;

1. **The Government (Central and Provincial) should:**
   - Adopt and implement specific Policy on special education to support learners with HI.
   - Engage the non-governmental organizations, the faith based organizations and the community in mobilizing resources to implement structures for the Training of Special Teachers for HI at different level: In-service training, Diploma Training, Degree, for quality service.

2. **Ministry of Education, NGOs and churches which managed the schools should:**
   - Develop appropriate tools for early identification by teachers and headteachers in schools in order to facilitate proper identification.
   - Emphasize on the implementation of Educational Assessment and Resource Centres (EARCs), training of human resource and provision of minimum equipment in educational districts, to ensure that learners with HI have access to the assessment service and are placed accordingly.
   - Equip Teachers and Headteachers with adequate knowledge in the area of HI on various teaching resources for learners with HI according to the needs of the learners and the degree of hearing loss as well.
   - Integrate school-based audiology services in Special Schools for Learners with HI which could deliver basic service for them and their families where there is no audiology centre.
5.4 Suggestion for Further Research

The following suggestion was given as problem for future further research:

i. A similar case study should be carried out in other provinces to establish the educational service for learners with HI for better comparison.
REFERENCES


Healy, M., & Perry, C. (2000). Comprehensive criteria to judge validity and reliability of qualitative research within the realism paradigm. Qualitative Market Research,


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APPENDICES

APPENDIX A: SEMI STRUCTURED INTERVIEW

Educational system for learners with HI

1. What is the current system of education of learners with HI in the Oriental Province?

2. What is the current policy concerning the education of learners with HI?

3. What does the central or provincial government do to promote the education for learners with HI?

4. What alternative strategies does the government use to deal with learners with HI?

Strategies used for effective identification, assessment and placement of learners with HI

1. How do the principals and teachers identify learners with hearing disabilities in the community?

2. How do the principal and teachers assess learners with HI?

3. What are available EARC in Oriental Province?

4. How is the placement of learners with HI done in the Oriental Province?

5. What are the roles of other local organizations (parents support services, CBR) in the education of learners with HI?

6. What other community strategies offered by the school which have created maximum access for identification, assessment and placement of learners with HI in Oriental Province?

Available resources for learners with HI

1. How does the school assist learners with HI to participate and optimize their learning experience in activities in a mainstream environment?

2. What is the status of teacher preparation for preparing teachers of learners with HI in the Province?

3. How many teachers trained in special education for learners with HI in the school and at which level?
   What are individual rehabilitation resources offered by the school to learners with HI?

4. How does the school get hearing aids and what types are they?
5. What are other available services that are being offered by the school which have created maximum access to learners with HI?

6. How many audiology services are available in the area that collaborates with the school and cater for auditory and otological manifestations?

**Recommendations from participants**

What would you recommend as needed to ensure there is adequate system with appropriate strategies, and resources services for learners with HI in your school?

- What do you think the challenges would be in seeking to achieve this recommendation?
- Other observation/suggestions
APPENDIX B: OBSERVATION SCHEDULE

1. Name of the school:...........................................

2. Grade:...........................................

3. Type of the class: a. Integrated; b. Inclusive; c. residential special school; d. special school attached to a regular school; e. Other

4. Classroom environment:
   a. Posters and chart display (available) (not available)
   b. Desk and benches (available) (not available)
   c. Lighting (available) (not available)
   d. Posters handling on the wall (available) (not available)

5. Teaching Methods:
   a. Student Centered; b. teachers centered; c. Play way; d. Lecture; e. Role play; f. Demonstration;

6. Teaching approach:
   a. Interpreting; b. total communication; c. Oral; d. Peripatetic/itinerant e. Other
APPENDIX C: Map of the DRC

O. Province in yellow
APPENDIX D: APPROVAL OF RESEARCH PROPOSAL

KENYATTAA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke
Website: www.ku.ac.ke

FROM: Dean, Graduate School
TO: Byaruhanga K. Ismael
C/o Special Needs Education
Dept.

DATE: 19th January, 2014
REF: E55F/20367/10

SUBJECT: APPROVAL OF RESEARCH PROPOSAL

This is to inform you that Graduate School Board, at its meeting of 15th January, 2014, approved your Research Proposal for the M.Ed Degree Entitled, “Situational Analysis of Educational Services for Learners with Hearing Impairments: A Case Study of Oriental Province in the Democratic Republic of Congo.”

Thank you.

DAVID NJOROGE
FOR: DEAN, GRADUATE SCHOOL

C.c. Chairman, Department of Special Needs Education

Supervisors:

1. Dr. Beatrice Bunyasi
   C/o Department of Special Needs Education
   Kenyatta University

2. Dr. Mary Runo
   C/o Department of Special Needs Education
   Kenyatta University

18 FEB 2014
APPENDIX E: RESEARCH AUTHORIZATION LETTER

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke
Website: www.ku.ac.ke
P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 8710901 Ext. 57530

Our Ref: E55F/20367/2010
DATE: 19th January, 2014

The Permanent Secretary,
Ministry of Higher Education, Science & Technology,
P.O. Box 30040,
NAIROBI

Dear Sir/Madam,

RE: RESEARCH AUTHORIZATION BYARUHANGA K. ISMAEL— REG. NO.
E55F/20367/2010

I write to introduce Mr. Byaruhanga K. Ismail who is a Postgraduate Student of
this University. He is registered for M.Ed degree programme in the Department
of Special Needs Education.

Mr. Byaruhanga intends to conduct research for a M.Ed proposal entitled,
“Situational Analysis of Educational Services for Learners with Hearing
Impairments: A Case Study of Oriental Province in the Democratic Republic of
Congo.”

Any assistance given will be highly appreciated.

Yours faithfully,

MRS. LUCY N. MBAABU
FOR: DEAN, GRADUATE SCHOOL

18 FEB 2014
APPENDIX F: AUTHORISATION FOR DATA COLLECTION

[Text of the authorization document in French]

Je soussigné Monsieur Aloys BANDLENGWE -DIKOSSI
Directeur Provincial Intérimaire de la Division Provinciale de l’Enseignement Primaire, Secondaire et Professionnel de Bunia, autorisé par la présente Monsieur B. Y. ARUHANGA K. ISRAEL - R.E.G. no 855F/20367/2010 à récolter des données dans les écoles spéciales de la Province Orientale II.

Il s’agit de :

a/ PHATA dans la Sous-Division Urbaine de BUNIA.
b/ PRO RESO dans la Sous-Division Urbaine de BUNIA.
c/ ESMA dans la Sous-Division d’ARU.

N.B. : Les autorités scolaires citées ci-haut sont priées d’apporter assistance à l’intéressé en cas de nécessité.

Ainsi fait à Bunia, le 20/03/2014

LE DIRECTEUR PROVINCIAL INTERIMAI'RE
DE L’E.P.S.P. / ORIENTALE II

Aloys BANDLENGWE - DIKOSSI
CHEF DES SERVICES GÉNÉRAUX.