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

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ABSTRACT
The purpose of this study was to carry out a situational analysis of educational services for learners with Hearing Impairments (HI) in Oriental Province in the Democratic Republic of Congo (DRCongo). The study was guided by the Piaget’s Theory of Cognitive Development. The study adopted a descriptive design. Multiple approaches such as interviews, observation and documentation were used. The target population included all Head-Teachers, teachers and parents of learners with HI. A sample of 32(n) (70 %) was selected. Participants were 3 school managers, 14 teachers and 15 parents. A pilot study was conducted at Proreso School for the Deaf in Bunia District. Semi-structured interviews with open-ended questions and observations were used during data collection. Data was organized by themes, coded by categories then interpreted and presented in various forms. The study established that Special Classes are the most preferable mode of the educational service for learners with HI, there were no specific strategies for identification of learners with HI in the community and majority of teachers and head teachers received children directly from parents; there was lack of assessment service for learners with HI, only teachers and head teachers decided for placement of learners. Findings also revealed that, no Educational Assessment and Resource Centres (EARCs) were available to support educational service for learners with HI; majority of teaching staff had no qualification in special education for HI, most of them are Diploma holders in general education. The study recommended that the government of the DRC adopts and implement specific Policy on SNE to support learners with HI,. 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.

Key words: Educational services, hearing impairment, situational analysis.

Introduction
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 and 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 and 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 and Watson, 1998).

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 (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) suggested 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.

**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 stakeholders in Oriental Province (government, Churches and Privet 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 this gap, the this study sought to analyse the educational services for learners with HI in Oriental Province and the findings will contribute to the formulation of useful policies and guidelines that may promote the educational opportunities for learners with HI as well as the establishment of appropriate support services.

**Purpose of the study**

The purpose of this 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.
Objectives of the Study

This study was guided by the following objectives:

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

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

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

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 and 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, Flusberg (1994) in his theory of language development, states 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.
Conceptual Framework

**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 implemented 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 EARC should assess children, place them in school and refer for further investigation and 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 in conjunction with EARCs to provide successful educational services for learners with HI.

**Research methodology**

This qualitative study adopted a descriptive design to give a holistic situation of educational service of learners with HI in Oriental Province.
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 by the Central African Republic and Sudan to the north, Uganda to the east and the Equator Province in 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 sqkm. 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 (Governor at 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.

Target Population
The target population for the study were three (3) school managers, because of their position as administrator, planner and implementer, 28 special teachers 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 well-established schools for HI in Oriental Province. The schools were categorized as private, public and church managed.

Sampling Techniques
The selection of school managers (Head teachers and Principals), 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 headteachers and teachers who specifically met some criteria to be eligible. The following criteria were considered; headteachers/principals 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 rational of selecting teachers, headteachers and principle and establishing few criteria 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, (2001) 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.

Sample Size
The sample size comprised 32 respondents in total among them 3 school managers, 14 teachers, and 15 parents of learners with HI. The 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. Mngrs</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>6</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>Ehpphatha school for the deaf (BUNIA)</td>
<td>Church</td>
<td>1</td>
<td>6</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>Complexe Esperie Kisangani</td>
<td>Public</td>
<td>1</td>
<td>16</td>
<td>8</td>
<td>5</td>
<td>5</td>
<td>22</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>3</td>
<td>28</td>
<td>14</td>
<td>15</td>
<td>15</td>
<td>46</td>
</tr>
</tbody>
</table>

| %                                            |            | 100         | 50       | 100         | 70            |

In this study, all the school managers or principals and 50 % of the teachers were considered. Five parents of learners with HI who are 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 this 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.

Research Instruments

The study focused on a single Province, multiple approaches utilized in case study such as semi-structured interviews, observation and archives or documents (Ary, Cheser & Sorensen, 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 symbolise their experience through language when being interviewed. The rational for interview in this study was that the interviewers enabled the researcher to find out information, thoughts and intention that cannot be observed. In attempt to address research questions, interviews was 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 discussion of educational issue, 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 can be learned directly from them but also as stimulus for paths of inquiry that can be pursued through direct observation and interview (Merriam, 2009).

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 is appropriate (Yin, 2011; Orodho, 2012). This school was not included in the actual data collection exercise.

Data Collection techniques
During the study, the researcher 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). Three techniques were used to collect data:

Semi structured interview with open ended questions was used for Principal or Headteachers, teachers and parents of learners with HI; 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 objective oriented.
Note that, Interview was conducted in French and no interpreter was required as the researcher was familiar with both French and English. For parents, the interview was 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 material (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 topic 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.

Data Analysis
Data were analysed qualitatively that is they were organized by themes, coded by categories, then interpretation and presented in various forms.
Logistical and Ethical Considerations
The researcher obtained permission from relevant authorities that included an introduction letter from the Graduate School of Kenyatta University and a research permit from the Provincial Division of Education in Oriental Province of the DR Congo, to carry out the research. The researcher also got permission from the school managers and administrators of the selected schools.

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 are put into place. Originality of the research was maintained.

Major Findings of the Study

1. The findings revealed that most of the schools for HI in Oriental Province are still adopting the special Classes where no other categories of disability is admitted (75%); While only (25 %) have recently adopted integrated educational service.
2. Majority of the respondents (81%) from the selected schools confirmed that there is no specific Policy to support learners with HI, few of them mentioned the exiting of general policy for SNE, but not oriented to suit the needs of learners with Hearing Impairments.
3. The findings showed that most of the teachers in the selected schools and parents are less informed about some progress that are 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 have be instrumental for the development of appropriate policy, the political will is likely not flexible for its consideration and adoption.
4. It was established that, majority of the head teachers and teachers received children directly from parents (66%), especially those who are informed a bit about the education of learners with HI in one way or another, while more than quarter of the respondents (34%) confirmed some time the schools adopt community based strategies whereby teachers are sent house to house to identify learners who are having hearing deficit in their respective communities. This is occasionally organised during holydays and it is usually the initiative of the school not from the government.
5. The findings revealed that (81 %) of the despondence confirmed the nonexistence of the assessment service for learners with HI in oriental Province and (19%) of the respondents (19%) were aware of the Audiology Service which is located in Aru Sub-District were some of the parents used to take their children for audiometric test. Even if some of respondents are aware of the Audiology Service, there is still lack of information about the importance of assessment service as a way for better school placement and rehabilitation as it has never been introduced or advertised by the MoE, as one of the educational service in Special education.
6. The study showed that(97%) of teachers and head teachers decide for placement of learners with HI;
7. It was established that there are no EARCs available for assessment of learners with HI in Oriental Province (100%). The responsibility of the central government has 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;
8. Majority of the respondents (85%) confirmed that; total communication is the major resource to teach learners with HI in Oriental Province. Other resources are not available; this may be attributed
to the fact that some parents are not more interested to follow their children who have hearing problems simply because of misconception and cultural myths.;

9. It was found that; majority of teachers for learners with HI in Oriental Province (85%), are Diploma holders in General Education and all of them had attended locally some short courses in basics about education of learners with HI.

10. The study revealed that only (40 %) of the respondents knew the Audiology service located in Aru Territory, Ituri District, run by a private sector and it acts as a hearing aids dispenser as well.

Conclusion
Based on the study findings, it was concluded that:

Special Classes are the most preferable mode of the educational service for learners with HI in Oriental Province,
The government of the DRC doesn’t have specific Policy to support learners with HI
Most of the schools do 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 go house to house for identification.
Children when they are brought to school, they are not assessed due to lack of assessment service for learners with HI, only teachers and head teachers decide for placement of learners.
No Educational Assessment and Resource Centres (EARCs) are available to support educational service for learners with HI in Oriental Province.

85 % of teachers use total communication as major resource to teach learners with HI,
85 % of the teaching staff had no qualification in special education for HI, most of them are 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.

Recommendations
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 manage the schools should:
   • Develop appropriate tools for early identification by teachers and head teachers 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 Head teachers 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 should which can deliver basic service to learners with HI and their families where there is no audiology centre.
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