

**ANALYSIS OF INDIVIDUALISED EDUCATION PROGRAM IMPLEMENTATION
FOR SUPPORTING THE ATTAINMENT OF FUNCTIONAL ABILITIES IN
LEARNERS WHO ARE DEAF BLIND IN SELECTED SCHOOLS IN KENYA.**

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**A THESIS SUBMITTED IN FULFILLMENT FOR THE AWARD OF DOCTOR OF
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DECLARATION

I confirm that this thesis is my original work and has not been presented in any other university/institution. The thesis has been complemented by referenced works dully acknowledged. Where text, data, graphics, pictures or tables have been borrowed from other works including the internet, the sources are specifically accredited through referencing in accordance with anti-plagiarism regulations.

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DEDICATION

This work is dedicated to him who is silent, invisible but fights all my battles, guides my steps and ensures my victories. To him who says I will never leave you nor forget you. To the three in one. And to the one who has brought change in my life, Mukungu Heather Alice Mbogani.

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And yes, we shall be highly educated.

ABBREVIATIONS AND ACRONYMS

ADDIE	Analysis Design Development Implementation Evaluation
AI	Auditory Impaired
CEC	Centre for Exceptional Children
CBM	Cristofel Blinded Mission
DB	Deaf Blindness
DEO	District Education Officer
EARC	Educational Assessment and Resources Centre
HI	Hearing Impaired
IDEA	Individuals with Disabilities Education Act
IE	Individualized Education
IEP	Individualized Education Program
KBSDB	Kabarnet School for Deaf Blind
KNAD	Kenya National Association for the Deaf
KNCHR	Kenya National Commission of Human Rights
KPL	Kilimani Primary School
KSDC	Kenya Society for Deaf Children
KNSPWD	Kenya National Survey on Persons With Disabilities
MoE	Ministry of Education
MSHI	Maseno School for the Hearing Impaired
PEPSE	Program Evaluation for Procedural and Substantive Efficacy
PWD	Persons with Disabilities
PWDB	Persons with Deaf Blindness

SBI	Standards Based IEPs
SENCO	Special Education Coordinators
SGS	School of Post Graduate Studies
SNE	Special Needs Education
SPSS	Statistical Package for Social Sciences
USA	United States of America
VAPC	Virilister Age Presentation College
VI	Visually Impaired

ABSTRACT

Persons who are deaf blind experience a lot of challenges in both hearing and sight that limit their interaction with the environment. This makes them dependent on the support of able bodied persons in order to perform daily activities. When appropriate and relevant education is given, and their needs adequately identified and addressed, these learners could be supported to acquire functional abilities that could enhance their independent to a certain degree. One of the goals of the Kenyan education for them is to help them gain functional skills that would enable them maneuver their environment. This study was done in order to analyze individualized educational program implementation in supporting the attainment of functional abilities in learners who are deaf-blind. The study analyzed the strategies that were used in the formulation and implementation of IEPs, the personnel who were involved, the quality of the formulated goals in identifying and addressing the needs of learners, the evaluation and reevaluations of IEPs and the challenges encountered in the whole process and how they were addressed. The study employed document analysis and survey design in a mixed method research approach. A total of 54 IEPs for learners who were deaf blind were analyzed using adapted Program Evaluation for Procedural and Substantive Efficacy (PEPSE), ICF –CY, and R-GORI, while 18 teachers were interviewed. Saturated, simple random and Purposive sampling techniques were used respectively to obtain the samples. Data was collected using a questionnaire and an interview schedule from teachers. Qualitative data was analyzed using deductive content analysis while information from interviews were organized and reported in an ongoing process as themes and sub-themes emerged. Findings of the study revealed that, there were no specific strategies that were used to formulate IEP goals and implement them. A multi-disciplinary approach was not used in IEP formulation, implementation and reevaluation. The goals that were formulated did not capture adequately the needs of the learners that would have supported the attainment of functional abilities. The IEPs were neither evaluation nor reevaluation which further contributed to difficulties in identifying the needs to be addressed. Teachers experienced contextual challenges that impeded the provision of services that could also enhance functional ability development. The study recommended that a policy that had clear stipulation on the whole process of IEP writing and capture the evaluation procedures with stipulated roles of personnel involved should be developed.

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1.0 CHAPTER ONE: INTRODUCTION

This chapter presents the background of the study, the problem of the statement, the research questions that guided the study and the objectives, the limitation of the study, the theoretical and conceptual framework upon which the study was based, and finally definition of the terms. In the background of the study, the development of deaf blind education and the need for IEP is captured. The theoretical frame work based on the ADDIE (Analysis Design, Development, Implementation and Evaluation)has been also discussed at length. The conceptual framework highlights the independent variables as the strategies that were used to support the development of functional abilities, the specific roles played by the personnel, the quality of the goals formulated, formative and summative evaluation and the challenges experienced by teachers.

1.1 Background to the Study

Deaf blindness is a term that contains two key words ‘deaf’ and ‘blindness’. Deaf refers to hearing loss so severe that there is very little or no functional hearing while blindness refers to a condition of lacking visual perception due to physiological or neurological factors (Barbara 2008, Larsen and Damen 2014). A combination of the two terms gives the impression that a person with deaf blindness has neither functional vision nor hearing. The state of Indiana defines children who are Deaf Blind (DB) as ‘...those with severe multiple disabilities due to generalized nervous system dysfunction, who exhibit auditory and visual impairment or deficits in auditory visual functioning, and who may demonstrate inconclusive responses during hearing and vision evaluation or inconsistent responses to auditory and visual stimuli in the environment’. This definition reveals that persons who are DB have a multisensory impairment in both hearing and sight.

Persons who are DB have not been mentioned until the nineteenth century. It is believed that most of them did not survive the extermination era which was marked by the killing of children born with defects. However, in the 19th century, most of them started receiving education courtesy of individual efforts. Some of the pioneers in the education of persons who are DB were Howe who taught Laura Bridgman to read write and express simple ideas using embossed alphabet type method (McGinnity, Seymour-Ford, Andries, 2004). The education of Laura was so successful that she was later able to teach needlework to learners who were deaf blind. Her education created a model curriculum that was used to teach learners who were deaf blind.

Hofgaard taught Ragnhilds by placing her hands on his lips so that she could read. Alcon taught Ted and Oma successfully using Tadoma vibrotactile method. This involved feeling the air, lip and jaw movement and the vibration of the speaker's vocal cords. Sullivan made a success of Hellen Keller who became the first professor who was deaf blind. He taught Keller the manual alphabet making her to communicate by finger spelling (Tremblay, 2007 and Tepe and Niku, 2008). She was also taught oral speaking. Sullivan noted that the Laura method was not appropriate for Keller due to individual differences. This was a clear indication that persons who are DB can acquire education to a point of being independent. Some teaching approaches which were successful with one person were not appropriate with another. This made Individualized Education (IE) on a one to one basis key to this group of persons.

There have been philosophical changes in the field of special education. Some of these changes impacted on the education of learners who were deaf blind. In the 1960s the behaviorist approach was stressed (McGinnity, Seymour-Ford, Andries, 2004). In this case, learners who were deaf blind (LWDB) were being taught by things being done to them (Blaha, 2013). During this

period, the curriculum for these learners emphasized classroom activities which included sensory motor skills like sorting of objects and communication. The medical model which emphasized combining vision and hearing was stressed.

The above approach did not work with learners who were withdrawn. In fact, it was discovered that those learners who had Rubella had slowed motor development and were withdrawn. Reciprocal social togetherness was therefore encouraged (McGinnity, Seymour-Ford, Andries, 2004). This involved following a child's leading and building positive relationships that contributed to the development of communication and other skills. In this case, even those learners who had poor motor development could attain a measure of independency. This approach enabled the child to have influence on the environment. It took on the Montessori approach to learning.

Currently the total communication approach and the use of a combination of a variety of methods have been advocated for. These include sign language, use of objects, pictures, gestures Tadoma, speech and lip reading. The best method for teaching learners who are deaf blind (LWDB) depended on the nature and needs of an individual learner. As such, individualized education that captured individual needs of learners and produced the desired outcome was emphasized. This made the individualized education program (IEP) an inevitable tool for LWDB education. The IEP had to capture the real needs that learners needed. The IEP therefore would reveal whether the documented needs that were addressed supported the development of functional skills.

An IEP could be defined as a written document that directs the provision of special education services in a wider variety of categories for Persons with Disabilities (PWDs) (Thurlow 2009, Gregory 2015). It is considered as a center piece of special education that is mandatory in

obtaining any perspective on special education. It was introduced around the world in 1975 (Smith-Woofter, 2010). The purpose of the IEP was and still is to ensure that learners with disabilities have equal opportunities to get the same education as other students. Before the 1970s, the education provided to persons with disabilities was considered dismal. Most PWDs were denied public education; some received education at home, while others did not receive any education at all. Those counted lucky were institutionalized (Special education news article, 2013). The IEP was therefore introduced to check the above and facilitate modifications to suit individual needs, establish the best ways in which a child could learn, show full potential, be supported and attain educational goals. In fact, IEPs protected the rights of, met the individual needs of, and improved the results of PWDs. The IEPs are supposed to be evaluated to ensure that they serve their intended purpose.

There are documented procedural and substantive requirements for the formulation and implementation of IEP which, when violated, may result in court cases in the United States of America (USA) (Gates, 2014). Procedural requirements ensure that the structure and process that compels adherence to a set of specified rules when designing a program are observed thereby guiding the formulation. Substantive requirements ensure that quality is adhered to thus students receive meaningful educational benefits that guide the implementation (Mitchell, Morton and Hornby, 2011). This prevents the abuse of IEPs and the general education for persons with disabilities. However, they are only realized in the USA and not in other countries. This left room for abuse of educational service provision for PWDs in most countries.

In New Zealand, a special team from the Ministry of Education was established which examined the literature of IEP worldwide in details. The report provided by this team has relevant information on the composition of the IEP team, policies and principles that stress on ‘the no

child left out' and assessment. The assessment captured in this review was general, thus applying to all students. The focal point of special education assessment was identification of the strength and weakness of learners' and the work of the IEP team. The evaluation of the IEP itself and the implementation of the same was not mentioned in the report, leaving a gap that could lead to its abuse (New Zealand Ministry of Education Bulletin, 2014).

The Kenyan government has made strides in special education. The Ministry of Education raised hope for those actively involved in special needs education, when it stated in its draft policy that the development of a national policy could comprehensively define and identify areas of special needs which could guide the work of all actors involved and ensure consistency and coordinated implementation (MoE, 2010). The opposite was realized instead when the policy developed in 2013 did not address in-depth issues on assessment and IEP writing. This left a gap in relation to official documentation on IEP. The same policy led to concerns being raised regarding the importance attached to IEP. The policy only captured the multidisciplinary team that evaluated the learner, monitored, supervised and inspected Special needs education (SNE). Issues to do with the IEP were not addressed. The situation was compounded by the fact that there were few qualified personnel who could monitor, supervise and evaluate special education (Walingo, 2010). The IEP was therefore left at the discretion of the teachers, an aspect that could compromise its development and implementation.

Reporting on the education of the deaf blind, Osundwa (2013) noted that, '...Many specialist teachers were struggling without a curriculum. The classroom could be chaotic, lacking in direction...' This could have been a repercussion of the absence of well formulated IEP which could have given direction to the implementation of the same by the stakeholders involved. In cases whereby suggestions were being forwarded so that parents of the DB be absorbed to teach

due to shortage of manpower, and with no official document on IEP by the Kenyan government, the efforts of a collaborative team in IEP formulation would have strongly complemented the implementation. The silence of the education sector on the above issue may have pointed to a state of negligence which could have resulted in poorly prepared students who could never attain independence in living, hence, negating the objectives of special needs education in Kenya. However, with the introduction of a curriculum for learners with deaf blindness in 2013, by sense international and Kenya Institute of Education (KIE) (Osundwa, 2014), things were bound to change. This made the current study necessary.

1.2 Statement of the Problem

Historically, persons with disabilities suffered a lot of injustices which ranged from extermination to poor provision of service. Any efforts made had a short-lived impact and the situation seemed to relapse to the awkward practices. The protective care and management offered to PWDs instead of education and treatment also yielded asylums with dehumanizing experiences. In Kenya, the earliest established institutions for PWDs had vital services of very relevant personnel seconded to special education programs (Para medical personnel) by the government withdrawn. To date, government support in terms of advocacy campaigns, grants, equipment among others for education assessment and resource center officers (EARCs) have been withdrawn. Para medical personnel contribute a lot to the identification of the needs of learners and in suggesting the intervention required which could enhance attainment of functional abilities.

The above scenario clearly indicated that SNE in Kenya was experiencing problems in terms of its provision. The withdrawal of vital personnel and services undermined the efficacy and

effectiveness of IEP formulation and implementation in educational institutions for PWDs. This was compounded by the fact that IEP process for the deaf blind was complicated and labor intensive. The population for LWDB is also small and can be easily overlooked. It is in this context that the study was conceptualized to evaluate IEP implementation for supporting the attainment of functional abilities in favor of deaf blind education.

1.3. Purpose of the Study

The purpose of the study was to analyze the Individualized Educational Program implementation in supporting the attainment of functional support to learners who are deaf blind in selected Kenyan schools.

1.4. Objectives

The specific objectives that guided the study to attain its purpose were;

- i. To establish whether the strategies used in IEP development and implementation support the acquisition of functional skills for learners who are deaf blind
- ii. To find out the role played by different personnel in IEP formulation and implementation
- iii. To investigate the quality of IEP statements in identifying the needs of learners that support the development of functional abilities
- iv. To establish the criteria used for evaluation and re evaluation of IEPs for learners who are deaf-blind.
- v. To investigate the challenges encountered in the formulation and implementation of IEPs for learners' who are deaf-blind.

1.5. Research Questions

- i. What strategies were used in the IEP development and implementation that support the development of functional skills in learners who are deaf-blind?
- ii. What roles did the personnel involved in the IEP formulation and implementation play?
- iii. What quality of IEP statement identifies the needs of learners who are deaf-blind that support the development of functional abilities?
- iv. What criteria were used in evaluation and re evaluation of learners who are deaf-blind?
- v. Which challenges were faced in the formulation and implementation of IEP for learners who are deaf-blind?

1.6. Assumptions of the Study

The first assumption was that all students in the sampled schools were deaf blind. The programs had learners with both vision and hearing impairments whose degree and residual senses differed a great deal. Those who had vision as their strongest residual sense tended to be placed in deaf blind programs/units for visually impaired. The same applied for students with stronger hearing residual sense who were placed in Hearing Impaired (HI) programs. The learners who were deaf blind were therefore found in units that catered for the same

The IEPs formulated were to follow the standard approach of a multi-disciplinary team. A multi-disciplinary team implied that various professionals were involved. It was assumed that at least a vision specialist, an audiologist and a special education teacher, specialist in deaf blindness could be present at an IEP meeting. The formulated IEPs were to be used in the teaching of learners who were deaf blind. However, this was not always the case. A relatively small number of students had IEPs formulated and their instruction based on them.

1.7. Limitations and Delimitations of the Study

1.7.1. Limitations of the study

Institutions for the deaf blind in the whole country were few. Most of them were established by special schools that catered for learners who were impaired in hearing. Three quarters of these institutions had only vocational classes for learners who were deaf blind. The institutions that had a vocational class for the deaf blind without any other class, did not prepare IEPs. The researcher was forced to sample those institutions with classes that had learners with lower functioning where IEPs were prepared. This resulted in the sampling of one institution practicing inclusion and integration of learners with deaf blindness, another practicing integration of LPDB with those having hearing impairments and finally the last institution practicing segregation. Thus, the sample of one institution per category yielded a small sample that may limit the generalization of the findings. However, all programs intended to offer services for the deaf blind were represented in the sample.

The IEPs formulated were to follow the standard approach of a disciplinary team, and had to be current. However, most IEPs were formulated by teachers of special programs. Most of them were also not current. This limited the study in that the current practice of development of IEPs was not properly captured. To address this limitation, the researcher focused on the developers of the IEP who were teachers. The questionnaire had to be re-structured after piloting to capture the role of other parties involved in the implementation of IEP from the teacher perspective. The IEPs that were present and addressed students who were in the institutions were used.

1.7.2. Delimitation of the Study

A total of sixty one IEPs were expected to be analyzed. However, only fifty four IEPs were analyzed. The number had to reduce because a few students did not have IEP statements. In some cases, the IEPs which were used were drafted several years earlier and recycled. The researcher therefore centered on what was being used in implementing instructional practices for the learner with deaf blindness regardless of when it was drafted.

Most of the available IEPs did not have goals. The IEPs that had goals had only one general long term goal and several objectives. This influenced the researcher to use the objectives or benchmarks to establish the quality of the goals set.

1.8. Significance of the Study

The significance of this study was as stipulated below;

The strategies employed in the drafting of IEP would provide a baseline on the state of SNE in general and how the IEPs were being implemented. The curriculum developers, who up to 2013 did not have a curriculum for deaf blind and had come up with one, could have a chance to evaluate the success of the approaches used in its implementation. This could be in terms of; the development of a relevant and functional IEP, the assessment that could capture learners' needs, what should be incorporated in the IEP tool to make it enforce accountability in services offered, and finally, come up with a policy that would improve practice. These would prevent SNE from relapsing to basic care and enhance the fulfillment of international legislations on education for persons with disabilities.

The government planners may also find this study enriching. The nature of personnel involved in the development of IEP in terms of experience, training, age bracket, their roles and the

importance of the roles taken, can be an eye opener in guiding the appropriate action to be taken to address the staffing need. The shortage of personnel and the specific skills needed guides on who should be trained, who should be posted and where one should be deployed.

The recommendations, if implemented, would assist government planners in coming up with appropriate decisions on how to manage SNE programs. The government planners will be assisted to come up with functional interventions for learners. The result, in relation to the education stakeholders, will highlight the importance of collaboration. They shall be informed regarding what works and what should be done as an intervention to that which does not work.

The evaluation of quality goals highlighted the situation in terms of learners' needs. This was done by using ICF-CY to capture all aspects of learners' needs in terms of functionality. The use of ICF-CY if implemented would improve evaluation, goal drafting and independence in learners who are deaf blind.

The findings may also awaken the re-thinking on the success of inclusion of DB learners. It will assist the planners to consider the cost of inclusion and plan for it to realize success.

1.9. Theoretical and Conceptual Framework

1.9.1 Theoretical framework

The theoretical approach that was employed in this study was based on design based theories and models of learning (Davis, 2013) in combination with the systems theory. The design based model, was advanced by Dick and Carey (1996). In the design based theories, a set of analytical techniques that balances the positivist and interpretivist paradigms and attempts to breach theory and practice in education are stressed. Under this model, specifically the ADDIE model of instruction was used. It postulates a model that has five phases namely, analysis, design,

development, implementation and evaluation (ADDIE). In analysis, the designer identifies learning problems, goals, audiences' needs, existing knowledge and any other relevant characteristics. Consideration of learning environment, constraints delivery options and timelines are also examined. Design involves a systematic process of specifying learning objectives and determining content. Development is concerned with the actual creation of content and learning material, while implementation involves putting the plan into action. At the later phase, procedures for training both teachers and learners are developed. The last stage is evaluation which encompasses both summative and formative. Each stage has an outcome that feeds the next stage in sequence which makes the systems theory relevant.

The model was quite appropriate for the study. The implementation of the IEP could be achieved in phases. There is the pre-referrals and referral stage. The purpose of this stage was to document the difficulty the child was experiencing, test the effectiveness of classroom accommodation and modification, assess the power of the intervention and monitor progress and make referrals. This screening stage could be equated to analysis. The identification phase entails a thorough assessment that identifies the nature of disability and the kinds of special needs the learner has. It was done by a multidisciplinary team who used various kinds of data. This could be equated to the design phase. The development phase could be taken as the actual writing/development of the IEP which was then used in the instruction of the learner at the implementation stage. At the evaluation phase, the goals and objectives were evaluated to establish whether they were achieved. If all these phases were adhered to, then functional aspect of the learner could be achieved.

Each phase involved different personnel working in collaboration, hence could form the sub systems. A combination of all the phases formed a system which ends in summative evaluation before being re-cycled into the system after reevaluation.

1.9.2 Conceptual Framework

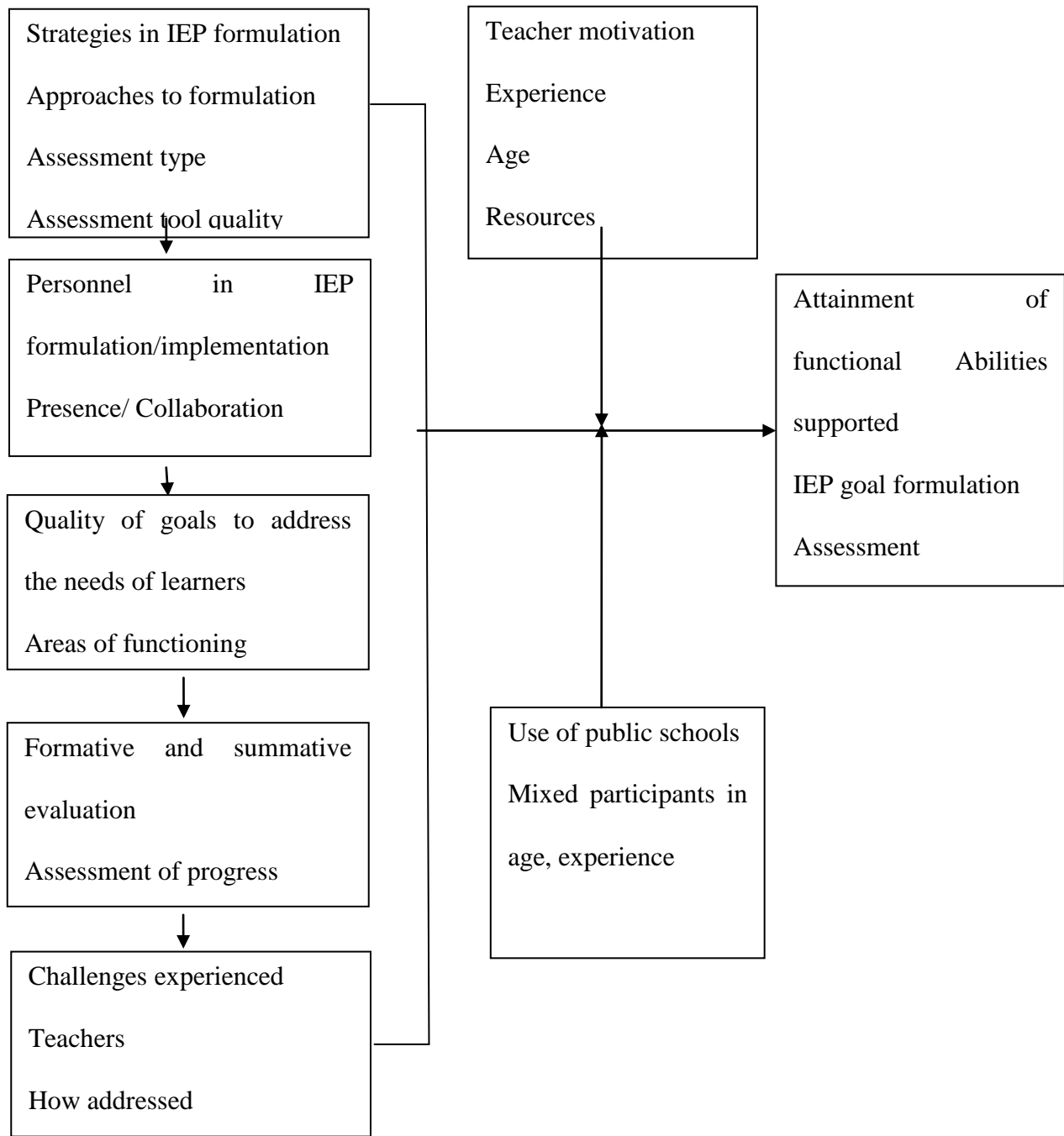
The implementation of the IEP that could result in attainment of functional skills in LWDB is influenced by several factors. These factors are; Strategies employed in identification of the needs of learners, the implementation of the indentified intervention in relation to how goals were formulated, the type of assessment made to identify the needs, the quality of the assessment tool used and what it captures, and the kind of policies that are in place to guide the whole process. Proper use of strategies at an early stage of identification of the needs of learners would impact on the goal development which in turn would contribute to learners achieving functional abilities.

Apart from strategies, the personnel involved in the process, must have relevant knowledge and experience to perform the required tasks. Since the needs of these learners who are DB are varied and complex, proper collaborations must be made. The roles of these personnel must be clear, to impact positively on service provisions.

The IEP statement should have goals that address the functional abilities of learners. It should capture the areas of functioning for LWDB and have the qualities of being measurable in order to direct implementation. The kind of evaluation done and the kind of documentation given as feedback, have an impact on attainment of functional abilities. The challenges that the personnel experience and how they are handled have an indirect impact on service provision. These factors act as the independent variables.

The above could be influenced by factors such as; how well teachers are motivated., the experience of the teachers in teaching such learners, the age of teachers, resources available in schools and the type of administrative support received. To neutralize these factors, public schools were chosen with almost similar factors as those listed above. Participants sampled for the study had varied age and experience.

The above factors, when observed, will result in attainment of functional abilities in learners with deaf blindness in that the needs of learners will be properly identified, proper assessment and goal formulation done, correct services provided and implementation well done. Figure 1.1 shows the conceptual framework.



In depended Variables

Intervening Variables

Depended Variables

Adapted from Dick and Carey (1996) on Instructional models of learning

Figure 1.1. Conceptual Framework

1.10. Definition of Terms and Concepts

Alternate assessment	Assessment of students who are unable to participate in regular assessment even with appropriate accommodation to address their special needs
Assessment	The process of gathering and discussing information from diverse sources in order to develop a deep understanding of what student know, understand and can do with their knowledge for purposes of improving learning
Compliance	Adhering to the laid down procedures of IEP formulation
Deaf-Blind	Having difficulties in seeing and hearing, and relying on tactile.
IEP	A written document that directs the provision of special education services in a wider variety of categories for persons with disabilities
Effectiveness	The quality of being able to produce a certain effect
Efficacy	The power to produce the desired effects
Functional Abilities	The ability to perform activities of daily living, including bathing, dressing, and other independent living skills, such as shopping and housework
Implementation of IEP	The act of providing the necessary intervention procedures as stipulated in the IEP
Inclusion	A philosophy in life that fights to eliminate all forms of exclusion and discrimination regardless of the nature of person
Integration	A move that aims to bring together persons with disabilities with those

without to avoid segregation

Interdisciplinary team	Members of different professions performing their assessment independently but coming together to draft or develop a program of instruction and give joint recommendations.
Mainstreaming	Bring persons with disabilities into the mainstream of life
Multidisciplinary team	Experts from varied disciplines coming together to
Normalization	Persons with disabilities to live a life that is near normal as possible
Paraeducators	Personnel, who assist the teacher in general daily classroom activities, help special needs students, and cares for their physical, emotional health and safety, affirming their abilities, and striving to promote dignity in all relationships.
Paraprofessionals	Persons who provide support to the teacher and especially to students with disabilities in the classroom who need modified instruction or assistance, as keeping with their Individualized Education Program(IEP).
Procedural	Requirements in terms of the structure of the IEP and the process it should take
Related Services	developmental, corrective, and other supportive services as that are required to assist a child with a disability to benefit from special education
Special Factors	Factors that the IEP team must consider in the development, review, and revision of each child's IEP

Special Needs	Significant limitation in terms of activity and participation in one or more areas of life due to permanent functional and structural issues, which result in continued difficulty in terms of communication, learning, mobility, autonomy, interpersonal relationship and social involvement
Substantive	The content of the IEP that reflects its quality
Trans-disciplinary approach	Team members are committed to work collaboratively across individual disciplines.

2.1. Introduction

This chapter covers the review of literature relevant to the IEP implementation for functional support. There has been integration of literature and research reports relevant to the constructs investigated. The areas that were reviewed were; the formulation and implementation of IEPs for the DB, personnel involved in IEP, special needs of learners with DB, evaluation and reevaluation of IEP and the challenges encountered in the formulation and implementation of the same. These areas were reviewed in line with the objectives. References to the citation were captured in the reference section of this write up. Since there was an ad hoc literature on implementation of IEP in Africa, the review centered on both local and developed countries.

2.2. Strategies used in Formulation and Implementation of Individualized Education Program

2.2.1. Approaches to IEP goal formulation

Goals and objectives are considered key to any IEP formulation and implementation. Tsuey-Ling and Mei (2009) conducted an action research study on the implementation of IEP in an inclusive setting in Taiwan using a multidisciplinary team in both the formulation of goals and implementation of IEP. The study revealed that the IEP was a curriculum core and central to attaining success in any educational program for the disabled. However, this could be realized only if the goals and objectives were well formulated. The IEP content gave direction to any educational program for individuals. Silveira-Maia, Lobes-dos-santos, Sanches-Ferreira, Tavares, Alves and Pinheiro (2012) in their study on the use of ICF framework on educational planning established that there was need for quality goals to be formulated that could guide

instruction and meet all needs of learners. The studies implied that apart from having an IEP, quality goals could enhance the purposes of an IEP.

Marva (2007) carried out a study on the IEP development as a function of pedagogical experience among special education teachers. The purpose of the study was to describe the instructional planning strategies used by teachers who had diverse experience. Using a qualitative approach which included the drafting of IEPs by teachers who had been furnished with relevant information, the study established that teachers formulated broad IEP goals that could not be measured. They were not adequate in terms of the target behavior, conditions under which the behavior could be performed and the criteria of evaluation. They lacked congruence in terms of reflecting the students' needs hence they were instructionally inadequate. This is a typical example of what happens when an individual person formulated goals and objectives for the disabled. In their study 'How individualized are the IEPs: an analysis of the content and quality of the IEPs goals', Ferreira, Santos, Miguel and Maia (2013) also established that goals drafted by teachers in general were poorly written especially in terms of measurability.

Costa (2014) conducted a study on teacher characteristics in supporting deaf blind learners. Using a descriptive survey method, he established that teachers' level of competency was not adequate for them to adapt instruction. Teachers were to be frequently trained in order to improve their competencies in adapting instruction. This finding was echoed by those of Banerjee and Luckner (2013) who carried out a study on assessment practices and training needs of early childhood paraprofessionals. The findings of the study revealed that, teacher' competencies could enhance the quality of goals formulated. The challenge posed in this scenario was that teachers, who were not adequately trained, would prepare goals that may not comprehensively cover the learners' needs. Wang'ang'a (2014) in her study; teaching strategies

used by teachers to enhance learning in learners with multiple disabilities in selected schools in Kenya revealed that IEPs were formulated by individual teachers with scarcity of both human and material resources. In light of the above findings, the state of IEP goal formulation especially in terms of capturing the required learners' needs and quality by teachers alone was questioned..

Goldstein and Behuniak (2012) reviewed literature on literacy assessment and students with significant cognitive disabilities. One of the objectives of the study was to find out how assessment information influenced instructional practices of special education. They established that designing and choosing proper assessment; though time consuming could result in proper goal formulation especially when the personnel involved had the required competencies. The above finding was echoed by Sigerseth (2011) and Barret (2010). In her review of literature on assessment and IEP development in functional areas of social, behavioral and communication of high school students with autism spectrum disorders, Sigerseth (2011) established that, personnel could not appropriately link the assessments to goals and avoid vagueness due to lack of needed skills. This, however, could only happen when the staff was competent in knowledge and practice.

In their study, Tsuey-ling and Mei (2009) came up with two strategies that could be used to enhance IEP goal formulation as a curriculum oriented model which heavily relied on the curriculum content, and team work. They recommended team work as the best approach in both formulation and implementation. They, however, noted that team work was challenging since it needed many professionals. The developed countries in which this study was done had adequate staff with relevant training. The same may not be the scenario in developing countries who are struggling to improve both adequacy and effectiveness of the work force. Norwich (2014) who carried out a study on how the capability approach address current issues in special education

needs, disability and inclusion, suggestion of a peer based strategy to addressing the above challenge could be welcomed in developing countries. However, it has to be proved that a peer based strategy could indeed be used as a substitute to team work. Marva (2007) supported team work and exposed the fact that teachers did not use the knowledge received in training, which was done on a termly basis but reverted to the naturalistic methods and those devised by the school. This aspect could be avoided by employing team approach.

2.2.2. Assessment Strategies in IEP Goals Formulation and implementation

“High educational assessment is the foundation of a high quality educational programming...” (Garner *et al*, 2012). They further established in their literature review on curriculum, assessment and reporting in special educational needs and disability that, assessment and IEP at all levels are inseparable. It is from assessment that the individual needs of persons with disability are established and goals and objectives drawn. Kurth and Mastergeorge (2010) carried out a study on assessment practices and training needs of early childhood teachers’ education highlighted the fact that assessment must address the complexities of learners’ needs. It is from the assessment that the intervention services and assistive technological devices that are required are established (Blaha and Moss 2009, Barret 2010, Sigerseth 2011 and Gregory 2015). All those needs are then considered and documented in the IEP.

Smith–Woofter (2010) carried out a study on the impact of alternate assessments and standards based IEPs on classroom instruction and student achievement. The study was carried out in two districts in North Carolina with the purpose of exploring how the implementation of alternate assessment and standard based IEPs were impacting on classroom instruction and student achievement. The researcher highlighted the type of assessment for students with multiple

disabilities as alternate assessment in which assessment targets the unique/special needs for appropriate accommodation that address those needs, and classroom assessment. In this case, the purpose of assessment was to capture the 'special needs' that made the learner require special education. He further noted that the teachers' training in formulation of IEP was done, however, it was not adequate to help them with issues of compliance and instructional needs. In this scenario, the 'special needs' of learners may not be clearly identified. This raises concern right from the start of the program. This clearly indicates that errors could begin at the start of the IEP process even before implementation. Herbster (2015) in his study special education eligibility and the category of deaf blindness: examining the perspective of case coordinators, added that, the varied characteristics of the deaf blind needed knowledgeable personnel in order to enhance assessment. The varied nature of the 'special needs' of learners with multiple disability may not be addressed due to assessment issues and this eventually impacts on the functional abilities of learners.

Reeves, Gleinert and Muhomba (2009) carried out a review of literature on alternate assessment. The purpose of their review was to examine empirical studies conducted since the inception of alternate assessments and evaluating the progress made. The review highlighted the fact that alternate assessment enhanced the assessment of PWDB. They, however, recommended two types of alternate assessment thus, alternate assessment with grade level achievement standards, whereby assessment should be linked to the level of the learner, and alternate assessment with modified achievement standards. They stressed the aspect of assessment being linked to the IEP writing so that the students and parents had a chance to participate in drafting of goals. This assessment was advanced and appropriate for capturing learners' needs for purposes of goal formulation.

However, the technicality of the above assessment required skill, training, appropriate instruments and guidance as observed by Rowland, Stilman and Mar (2010) who carried out a study on current assessment practices for young children who are deaf blind using survey method. These qualities may not be available in developing countries. Barret (2010) in her study New York states alternate assessment: is it really fulfilling its purpose? used survey approach to establish that alternate assessment was not fulfilling their purpose of instructional planning. However, she focused on the practice in one state unlike the purpose of the assessments. This meant that though the practice was questionable, the purpose of the assessments was worthwhile as indicated in her recommendation.

Guthrie, Pitman, Stoole, Strong, Poss, Bowman, Ashworth and Hides (2011) carried out a study on the reliability of standardized assessment for adults who are deaf blind. The study revealed the purpose of assessment tools as helping an assessor to identify individuals who were functionally deaf blind and gaining insight into their needs and abilities. The study captured the fact that there were many types of assessment and assessment tools for DB developed for a specific purpose. He cited two namely; Inter Residential Assessment Instrument that captured activities of daily living, social functioning, mental health pain, hearing and vision while the deaf blind supplement instrument captured communication, mood and behavior, level and type of informal support to be given by peers and family, psychosocial well-being as well as orientation and mobility. The tools were formulated specifically for the purpose of assessing specific areas of need. This could enhance assessment in all areas of a learner's functioning and guide in evaluation. His finding further indicated little reliability in areas assessed where the assessor had little knowledge in the area. This pointed out to the fact that, in assessment to identify learners'

needs regardless of the tool, errors may occur where the personnel involved were not knowledgeable.

Blackwell and Rossetti (2014) reviewed literature on the development of IEP. Reviewing peer-reviewed research studies that had examined IEP development since 1997, they established that a good tool should relate assessment, IEP objectives and instructional services. This should also be congruent with the related services to be provided. Thus, an assessment tool should have all the required parts to guide services and evaluations to be made. Their findings were however, refuted by a study done by Salle, Roach and McGrath (2013) on the relationship of IEP quality to curricular access and academic achievement for students with disabilities. The purpose of this study was to investigate the quality of Individualized Education Programs (IEPs) and its influence on academic achievement, inclusion in general education classrooms and curricular access for students with disabilities. They established that there was no significant relationship between the quality of the assessment tool and students' achievement. The study raises questions with regard to assessment and its relationship on goal attainment. There was also no relationship between educating learners in an inclusive setting and the students' achievements.

2.2.3. Policy influence on IEP Goal Formulation

Policies play a role in the formulation and implementation of the IEP. In the USA, policies ensure that relevant services are offered correctly. Lack of adherence to policies could result in court cases. McIntyre (2013) in his study, Tensions, issues and challenges in special education: stories of mismatch between policies and practice noted that policies reflected goals, principles, laws and outcomes that could guide the future. Using a qualitative approach to the study, he further observed that specific policies impacted on services provided to learners in terms of,

access to better instruction, frequent monitoring procedures, response to intervention and access parental perspectives and solutions schools can offer, stressed the importance of a policy by stating that, policies influenced practice by ensuring accountability since what was stipulated was acted upon.

In her study, *Special Needs Education (SNE) in Kenyan public primary schools: exploring government policy and teachers' understandings*, Mwangi (2013) used a phenomenological qualitative approach to investigate, among others, factors that impede students said to have SEN from accessing quality education. She established that a policy, especially at school level, was essential for proper service coordination and provision. In other words, the absence of a policy could result in barriers to accessing quality education which would affect attainment of functional ability. Kiarie (2014) in her paper, *legislation and litigation in the development of special education in Kenya and the United States* noted that Kenya needed to establish a strong policy base that could serve as a monitoring tool. The study exposed the fact that Kenya did not have a policy that could enhance both the development and implementation of quality IEP at all levels. This would imply that the kind of education offered to learners with special needs, the deaf blind included, was not of the intended quality and that issues could be raised in terms of adherence to regulations and documentation.

Aldreasson, Onsjö and Isaksson (2013) in their study *lessons learned from research on IEP in Sweden: obstacles, opportunities and challenges* stressed the need for a policy at school level that guided implementation of IEP. Observations from Scoil Mhuire primary school in Ballymore revealed that it had a well documented special needs education policy detailing the IEP formulation and implementation. This impacted on the activities that were undertaken in relation to IEP. Virilister Age Presentation College (VAPC 2012) policy on special needs

embraced a whole school approach to IEP formulation. This gives strong evidence that importance can be attached to the IEP formulation and implementation. However, where such structures are missing, which is the characteristic of developing countries, there is need to evaluate the implementation of IEPs. McIntyre (2013) noted that the absence of documentation on some well-known practices opened a gap for schools not to strictly adhere to what was required.

2.3. Personnel in IEP formulation and Implementation

Personnel play a vital role in the education of the PWDB. Personnel are required practically at all levels. The success of functional ability acquisition could be influenced by the nature, experience and other factors inherent in the personnel or in the education system.

2.3.1. Role of various personnel in IEP formulation and implementation

In a study done by Poponi (2009) entitled the relationship between students' outcomes and parental involvement in multidisciplinary IEP team meeting in Philadelphia, it was revealed that students whose parents participated in formulation of IEP attained higher grades. The impact was felt greatly in children with severe impairments. Using a retrospective examination of archival data for eleven years and interviews, he established that parental involvement brought about commitment to the implementation of the program. This resulted in continuity, an aspect that could not be compromised with the education of the deaf blind. Parents are expected to actively participate in the IEP meeting where goals for their children are drafted and in the actual implementation and evaluation. Poponi's study revealed to a great deal the importance of parents in the education of their children. The study placed a lot of emphasis on parents' role in implementation of the IEP since they were present when goals were set. The study, however, did

not expound on the importance of parents in the decision making apart from implementing what had been stipulated.

Harvey (2011) in his study 'they need to understand how to educate her' noted that there was a disconnect between what parents perceived as their involvement in their child's education and the realities. He established that parents were inactive in IEP meetings and tended to confuse child care with educational involvement. This finding may support the above views whereby parents contributed by implementing what had been stipulated by educators. Thus, they may be recipients of other people's decisions but not decision makers. The findings were echoed by Griffins (2014) who citing Reiman, Beck, Coppola and Engiles (2010) in his study, the importance of collaboration between parents and school: perceptions from the field, noted that in general parents had contributed positively to the education of their children in terms of discipline, instruction and even placement. They however had to be encouraged to contribute to goal setting. He further observed that, instead of parents contributing to formulation of goals for their children, they ended up fighting for their rights. Parents, in this case, were not active in goal setting. In Kenya, little emphasis has been placed on parental involvement. Very few studies have been conducted in the said area.

Parental participation in the IEP process has remained an area of debate. MacKichan and Harkins (2013) in their study: Inclusive education, perceptions of parents of students with special needs on individualized, program planning process, observed that parents were excluded from the planning process and their role was to fill a form. Their views in other words were disregarded. Gregory (2015) in the study, IEP development for children with developmental disabilities observed that the role of parents was to receive written documents from schools, for the purpose

of implementation. Suubi (2014) observed that all related service providers did not attend IEP meetings.

Apart from parents, psychologists also contribute to a great deal on the drafting and implementation of IEP. Guthrie *et al* (2011) however, found out that, the areas that were assessed by psychologists in relation to children with mental retardation had low reliability. The explanation given by the assessors were based on the limitation in knowledge base. They associated the findings with the aspect of specialization. They advocated for specialist personnel to be considered during the assessment, goal setting among others in specific disabilities. Specialized personnel give additional information that assists in the assessment of learners and in suggested intervention. Concern is raised in cases whereby a learner who has a multiple disability is assessed by one specialized personnel in one area that may not be related to the disabilities in questions.

In their report entitled, from norming to practice: a status report on the implementation of the rights of PWDs in Kenya (2014), the Kenya National Commission on Human Rights (KNCHR) found that the assessment officers were charged with a heavy mandate of identifying, assessing, placing, training of personnel and assisting in IEP formulation. This made the EARC officers central in provision of SNE in Kenya. Yell, Conroy, Katsiyannis and Tim (2013), in their article ‘individualized education programs and special education programming for students with disabilities in urban schools’ observed that gaps in the above scenario may be created. They stressed on the inclusion of different personnel at IEP drafting stage for meaningful IEPs. The article, however, did not consider shortage of staff and how it could be addressed. EARC officers have been trained in SNE. If equipped with relevant skill, EARC officers could adequately assess comprehensively LWDB.

Citing Mitchell *et al* (2011), Alquraini and Gut (2012) in their review of literature on critical components of successful inclusion of students with severe disabilities observed that, in most countries, EARC officer's participation in IEP formulation was central. They formed the foundation of the knowledge base. However, Qureshi (2015) in his study; an investigation into the evolving professional identities of SENCO in relation to their impact on teacher's skills, observed that there has been a paradigm shift. SENCO received reduced funding for their activities which affected their performance. They also needed training in order to cause an impact. SENCO are charged with the mandate of coordinating SNE and thus are equivalent to EARC.

Other personnel that could enhance the provision of functional support in learners who are deaf-blind are therapists. However, Giangreco, Broer and Sutter (2011) observed that, though educationists valued the services of therapists, the fact that they had relevant titles did not qualify them to offer relevant services. Most had no knowledge of what should be done with learners with disabilities and therefore needed training in order to understand disability. The same views were shared by Price (2014) who carried out a qualitative study on shared decision making in IEP meetings. The researcher observed that the therapists and other personnel in IEP meeting did not make meaningful decisions. The above author concentrated on an ideal situation whereby the therapists were available and needed training to fine tune their skills. If the presence of therapists alone raises concern on the provision of services, what would be the scenario in their absence? Jordan (2011) observed that there had to be a positive relationship and trust as well as valuing other personnel's ideas for any collaboration to be productive.

Therapists play a vital role in the functional abilities of PWDB. Therapists are expected to: identify goals, diagnosis and evaluate intervention, and participate in meetings (Kennedy and

Steward, 2011). Missiuna *et al* (2012) noted their role as providing information to teachers and parents, and designing educational materials and methods. The above authors noted that with proper collaboration, the outcome of the learners' functional abilities could be enhanced. (Kennedy and Steward, 2011) noted a disconnect in ideal and actual service delivery. Thus, the collaboration in service provision may not be what it is expected to be. Czapaniskiy (2016) in his paper: Kids and Rules: Challenging individualization in special education observed that, there was and still is procedural fraud where by the ideal services to be provided are on paper only. However, the same is not realized in practice.

To address the above, Giangreco, Broer and Sutter (2011) who carried out an evaluative study on 'Guidelines for Selecting Alternatives to overreliance on paraprofessionals: field-testing in inclusion-oriented schools' using a mixed method approach, observed that the services offered by these personnel were key and suggested the approach of equipping teachers with therapeutic skills to perform more than their educational roles. However, the observations by Thomason and Milmath (2015) that carried out a survey study on, provision of school-based physical therapy services suggests otherwise. They indicated that, even in training of teachers on therapeutic skills, their efforts were hindered by teachers' attitudes, shortage of staff and agreement on what was to be offered. Whichever way, provision of therapeutic services also raises concern. Hagelman (2013) suggested co-teaching as a solution. He, however, noted that this could require regular training and co-planning of time, an aspect that remains challenging. Evaluation of related service provision is therefore needed in order to establish its influence on attaining functional skills.

2.3.2. Collaboration in IEP formulation

An IEP for deaf blind covers a wide range of special needs that consideration should be given to personnel involved in its formulation. An IEP, as earlier stated, is what makes SNE to be special rendering the customer who is PWD the determinant. For its success, the following may be required; specialized material, equipment, services and teaching strategies (Walingo, 2010). Due to these requirements, special educators will necessarily have to collaborate with other professionals in order to meet the unique needs of its learners. Some of the personnel, they are required to collaborate with are the paraprofessionals as highlighted by Carter and Sisco (2011) in their survey study paraprofessional perspectives on promoting self determination among elementary and secondary students with severe disabilities.

In the USA, IDEA mandates that, assessment for the purpose of goal setting must be done by a multi-disciplinary team. In their study Giangreco, Broer and Sutter (2011) observed that no one discipline had what it took, in terms of resources and skills, to do a comprehensive educational assessment and construct appropriate intervention programs for DB as a result of their complex needs. In other words, goal setting for any individualized program must incorporate team work. Vuohelainen (2014) in his survey study entitled, class teachers experience and views on the use of IEP in Finish and Norwegian primary schools, noted a gap in the multidisciplinary team and exposed the fact that it had been successful on paper but not in practice. Kahtani (2015) in his study, the individual education plan process for students with intellectual disabilities in Saudi Arabia, observed poor interpersonal dynamics including trust, concerns about professional competencies, lack of planning time and absence of administrative support as part of the contributing factors that impeded multidisciplinary approach. The success of a multidisciplinary team remains an area that requires study to establish its effectiveness in practical terms.

A multi disciplinary team requires a lot of collaboration. In their survey study on roles, responsibilities, and concerns of paraeducators, Fisher and Pleasants (2012) found out that collaboration in paraprofessionals could result in role conflicts. This happens in cases where paraeducators offer services under the supervision of teachers. Thus, the role played by the occupational therapists may overlap with that played by the physiotherapists and cause conflicts that may not be beneficial to learners. Role conflict also occurred in instances whereby EARC officers in Kenya, assessed learners with disabilities and gave advice to teachers (Walingo, 2010). Some paraeducators also felt that teachers had no value for them (Williams, 2016). Williams (2016) who carried out a survey study on a positive working relation is necessary for skill development in learners observed that absence of respect for ones specialty, coupled by competition, could result in undermining one another thereby impacting negatively on collaborations.

Jones (2016) who carried out a qualitative study on parents' perceptions of school multidisciplinary team meetings and collaborations, distinguishes between multidisciplinary, interdisciplinary and trans disciplinary teams. A multidisciplinary team refers to experts from varied disciplines. These experts will perform their assessment tasks independently and undertake intervention procedures independently. In such circumstances, the chances of one professional feeling superior and undermining others are very high. In the history of evolution of special education, it resulted in disagreement between the educators and the medics (Gregory 2015, Larsen and Damen (2014). On the other hand, an interdisciplinary team refers to members of different professions who perform their assessment independently but come together to draft or develop a program of instruction and give joint recommendations. In this instance, there is information sharing and joint planning. This approach is deemed the best only if there is time

available for planning and meeting. In a trans disciplinary approach, team members are committed to work collaboratively across individual disciplines. Consultation therefore continues even after the IEP meeting. The best approach for Kenya however has not been studied.

2.4. The ‘Special Needs’ of Learners with Deaf Blindness

2.4.1 Identification of Special Needs of Learners

The ‘Special needs’ could be defined as, significant limitation in terms of activity and participation in one or more areas of life due to permanent functional and structural issues, which result in continued difficulty in terms of communication, learning, mobility, autonomy, interpersonal relationship and social involvement (Ferreira, Santos, Alves and Miguel, 2013). In this case, special needs of learners are viewed in terms of functioning. The international classification of functioning disability and health has been developed in order to record the characteristics of the developing child and the influence on its surrounding environment. In her study on applying ICF-CY to identify everyday life situations of children and youth with disabilities, Adolfsson (2011) noted that ICF-CY provided a framework that could enable one to identify and document individual needs, strength, barriers and facilitate the person in that environment. It viewed disability as a dynamic interaction between a person and his or her context and provided a systematic way of documenting individual functioning capacity and his or her limitations in carrying out activities. The ICF-CY could be used to monitor the impact of disability and aid provision of all round interventions.

Educators are not in consent over what areas of special needs of learners are to be incorporated in the IEP. In their review of literature on the development of IEP entitled ‘where have we been and where should we go’, Blackwell and Rossetti (2014) noted that several researchers had raised concern over the appropriateness of IEPs in addressing individual students’ needs. In this

case, it is clear that not all IEPs addressed the needs of the learners adequately. They attributed this to the knowledge and skill of the IEP team members which was supposed to correlate to the meeting of learners' needs. Their study placed emphasis on identification of learners needs. The team members, if not well constituted, could not identify the needs of the learners. The authors expressed concern over lack of congruence in the extent to which IEP content was individualized based on the students' needs. Thus, the presence of an IEP may not signify that the individual needs of learners had been addressed. Hyatt and Filler (2011) in their study 'LRE re-examined: misinterpretations and unintended consequences' and Humphrey, Wigelsworth, Barlow, and Squires (2013) in their study the role of school and individual differences in academic attainment of learners with SEN added that, to capture the needs of learners, they should be viewed in relation to environmental influences. Thus, these needs should be viewed in the context in which they occurred.

Ferreira et al (2013) carried out a research entitled, 'how individualized are IEPs: an analysis of content and quality of the IEP goals'. In their review of literature, they noted that there was a mismatch between students' assessment for purposes of identifying their unique needs, the services provided, interventions and support services which affected their quality of life in their environment. This was proof that functional ability could be pegged on the aspect of capturing learners' needs and providing relevant services. The authors further concurred with Norwich (2015) that IEPs should be aligned to students' educational needs. Goals should be well developed to reflect behavior and skills that would enable students meet their educational and functional needs (Castro,Pinto and Simeonsson, 2014). Thus, special attention should be placed on appropriate identification of learners' needs as a central aspect of goal formulation.

2.4.2 Quality of IEP Goals in Supporting Function Abilities

Quality of IEP goals could act as an indicator to whether function abilities in learners were addressed and could be achieved. IEP goals drafted which tended to be highly individualized in curriculum did not attend to the functional content. Castro *et al* (2014) who did a study on ‘Content analysis of Portuguese individualized education programs for young children with autism’, using the ICF-CY framework, established that in many IEPs, goals were poorly written. Salle, Roach and McGrath (2013) in their study on ‘the relationship of IEP quality to curriculum access and academic achievements for students’ with disabilities’ also established that academic focused IEP goals were more likely to provide a link to the curriculum and document progress evaluation strategies but less frequently included information on the present level of performance as well as relevance to students’ educational needs. The studies, however, did not reveal the relevance of academic focused IEP goals on supporting functional ability achievement in learners.

Blackwell and Rossetti (2011) suggested models that could enable IEP goals and content being drafted to address learners’ needs as; team environment and assessment mapping model, transition planning inventory, beyond access model and finally onsite professional development and technical assistance. If well implemented, these models could facilitate capturing of students’ needs. To avoid the case of mediocre content, Stand Based IEPs (SBI) was advocated for. Wanda (2011) explained SBI as already set standards for a grade level only that accommodation and modifications had been made to the content to capture the SN of learners. They evolved from the traditional IEPs where a team evaluated the present level of academic achievement and based instructional content on it. SBI IEPs could be deemed best for students who may easily access the curriculum.

There are three models that could be used to determine the curriculum content. The three models are; developmental model whereby the mental age is the determinant, functional model whereby age appropriate functional skills are stressed and finally the additive model where social inclusion and the individual students' self-determination are the determinants (Mitchel *et al*, 2011). The latter approach enables students to participate and mix with regular students as they also acquire functional skills. It is, however, challenging to implement especially where alternate assessment is lacking. The models also have to be evaluated in the context of developing countries to prove their effectiveness

2.5. Evaluation and Reevaluation of IEP

The IEP contains a description of how children's progress towards annual goals is reevaluated. The only way to gauge whether one is on track of attaining or not attaining the set goals is through periodic evaluations. IDEA (2004) requires accountability for IEP development. Frequent assessment and evaluations are necessary to meet this requirement.

Christle and Yell (2010) in their study, individualized education program: legal requirements highlighted three aspects of IEPs that could be evaluated. The first form of evaluation takes the element of compliance of the document. IDEA has specific mandatory procedures that have to be adhered to. Evaluation of these procedures would shed light on the commitment to meeting the purposes of the IEP. The second aspect is the diagnostic/ instructional link. This aspect ensures the quality of the document in accurately addressing the unique needs of PWDs. The last aspect is what educators, parents and other stakeholders feel about the document and its overall usefulness. These aspects, though captured in the developed countries, have been given very

little consideration in Kenya. Since they capture the whole content of the IEP, they should be addressed. The focus of reevaluation is the attainment of the annual goals and objectives.

Rotter (2014) conducted a study on IEPs use by general and special educators in New Jersey. The objectives of the study were how IEP goal and objectives attainment was measured and its use in instructional planning. Using survey method, the researcher found that, teachers used grading system to evaluate the progress of the child (Rotter, 2014). Grading as a method of evaluation was perceived to be subjective and could not give adequate information of progress as compared to multiple assessment models specifically authentic assessment, curriculum based assessments, use of rubric and direct measurement. Guskey, Swan and Lee (2010), citing various studies, revealed that grades in themselves had varied interpretation attached to them and thus may not provide the required information. They further add that teachers who gave the grades were ill prepared in assessment thereby compounding the validity of the grades.

Hirsh (2014) did a study on the Individual Development Plan: supportive tool or mission impossible? He used qualitative content analysis of interviews with Swedish elementary school teachers. His study found that teachers had dilemmas in the evaluation of students with disabilities. These dilemmas were; combining grades with formative assessment which resulted in concentration on the grade and ignoring the formative part, use of colors to show difficulties which would then be translated into a pie chart that discouraged weak students due to many red colors among others. He noted that, due to these dilemmas, teachers gave parents evaluations that they needed to know and not the actual picture of the child's progress and this compounded the validity of the evaluation. Vuohelainen (2014) also observed that students with disability were being evaluated using grades and no documentation was made. He, however, observed that

documentation of the same was not made. He concluded by dismissing such evaluation as ‘...words on paper without any real meaning to actual situation.’

Reeves *et al* (2009) identified assessment of progress of learners with deaf blindness as alternate assessment with modified achievement standards. In this case, the modified objectives set for the learner are evaluated. This follows the principle that evaluation of learners should be in the form of formative assessment and documented in a way that should be understood by all parties involved in the learner’s education. These views are echoed by Hirsh (2014). Such formative evaluations gave direction to instruction and yielded visible results in learners that could enhance function ability (Goldstein and Behuniak, 2012).

What needs to be evaluated for learners with deaf blindness is also important. Gates (2014) in her dissertation, a legislative and judicial analysis of individualized education program related services identified areas of deaf-blindness that needed not only to be assessed but also evaluated. These areas should include developmental, corrective and supportive functions. Many research studies concentrate on forms of evaluation. However, few studies look into finer details of what is to be evaluated causing challenges to educators who should, in their own way, develop measurable goals (Ferreira et al, 2013). The idea of a curriculum could solve and assist teachers in evaluation (Osundwa, 2013).

Formulated IEPs need to be reevaluated (Christle and Yell, 2010). These authors reviewed literature on Legal Requirements and Research Findings of IEP and established that re evaluation was part of the process of IEP drafting and implementation. It is clear from review of literature by various authors that studies focus on several components and procedures of IEP but not reevaluation of the IEP. Reevaluation of IEP serves as a means of ascertaining the continuation of provision of special services (Blackwell and Rossetti, 2014) as well as monitoring the success

of the program (Mueller, 2015). Aldersay and Turnbull (2011) who analyzed and compared the national policy of the United Republic of Tanzania on disability and that of the USA established that, for purposes of accountability, reevaluation of the IEP should be done annually.

2.6. Challenges Encountered in the Formulation and Implementation of IEP

Challenges in general may act as barriers to acquisition of functional ability by learners. They impact on the provision of services which is central to attainment of the intended goals. When the challenges are more, then the effects are greater. Various authors front for different challenges of IEP formulation and implementation. Mitchell *et al* (2011) noted that there was no standard way of formulating IEPs. The different systems used by schools differed on terms like who should write the IEP and who should oversee it. In such a scenario, personnel may not be so committal on the formulation of the IEPs and mainly shift the blame to one another.

Christle and Yell (2010) noted the reluctance by parents in participating in the education of their children as demoralizing to the educators. This was clearly evidenced in the statement below: ‘...my heart breaks when a child who was once motivated no longer cares because their parents do not value education.’ In fact, some parents are only interested in custodial care than the education of their children (Masha, 2013). Parents are considered to be advocates of the child and provide a link between school and home. If parental involvement was low, it affect in collaboration in IEP implementation.

There was also an outcry of too much paper work. Balancing between records and teaching posed a great challenge to educators. Andreasson, Onsjo and Isaksson (2013) established that the IEP could not be written in one month. If the IEP for one student could take that long, then what time would it take for four? This introduces the element that one aspect would suffer at the

expense of the other. Kahtani (2015) observed that the IEP were lengthy. One IEP took 10 to 20 pages, with some covering 56 pages. It thus became too difficult to even read and implement, not to mention the keeping of data for evaluation purposes. The practicability of the whole process, especially when you have more than one student, becomes questionable.

The collaborative aspect of IEP further posed a major challenge. Kennedy and Steward (2011) identified that the time for scheduling meetings for the process always conflicted. Heeden, Moses and peter (2015) further added that it would always be the special needs teacher who would have to fit in other professionals' schedule which, in many cases, did not favor them. They had to agree to odd hours if the meeting had to be held. Tsuey-Ling and Mei (2009) who incorporated all personnel in their action research further established that lack of time for IEP development posed a great challenge to his research. If during a research the collaborators could not find time to work together, what would be the actual scenario? The challenges in collaboration could ultimately affect the commencement of services for learners.

Learners with special needs are encouraged to mix with regular students for purposes of social learning. Infact, the current trend of inclusion is highly advocated for. Griffins (2014) noted that though PWDs were supposed to access regular education in order to develop some aspect of SNE, it proved difficult. Tsuey-Ling and Mei (2009) observed that even in the implementation process, success of inclusion of learners with disabilities was only realized in the cases of learners who had mild impairments unlike learners who are DB who experience severe challenges. The main challenge in the inclusion of this group of learners was the formulation of IEPs. For one to succeed in educating learners who are DB, special teaching approaches were to be used (Wang'ang'a, 2010). If the implementation of IEP for other learners with SNE posed challenges, it was expected that more challenges should be experienced in the case of learners

with multiple disabilities. In fact, most studies do not discuss inclusion of this area of specialization.

2.7. Summary

The literature review revealed that the approaches used in IEP formulation and implementation included, a multidisciplinary team, using staff that were qualified and experienced, using proper assessments to identify the needs of learners and linking them to assessments and goals, and finally teamwork. These strategies aimed at developing quality goals that captured the real needs of learners and adequately guided instruction. An assessment tool was a strategy that captured all required areas of assessment. A policy impacted on the services provided in that it helped coordinate them. Though strategies used in IEP formulation and implementation was an area that had been widely researched, most studies were general with few targeting learners who were deaf blind. Deaf blindness is a disability that was complex in all aspects educationally and involved minority children. The studies concentrated on instructional aspects of IEP and not the attainment of functional skills.

The review also revealed that various personnel were required in the formulation and implementation of IEPs. The varied expertise and experience of parents and paraprofessionals contributed to learners attaining high grades. Collaboration was required. This however could be attained in developed countries that emphasized a multi-disciplinary team and experienced minimal problems in staffing. There was need to find out how functional abilities were being achieved in areas of shortage of qualified personnel.

The definition of special needs of learners posed a challenge in their identification. The review however revealed that the identification of the needs of learners and the reevaluation of these

needs were pegged on identification by a multi-disciplinary team member's knowledge. The needs were captured only when the goals were well written. The goals determined whether the IEPs were standard based or not. The additive model was stated as the one which could attain functional abilities in learners. The review did not capture properly how the needs of the learners who were deaf blind could be identified. It is only in identification of learners needs that quality goals are drafted.

Evaluation of IEPs takes the form of compliance, diagnostic and usefulness. Formative evaluation was good for giving direction to instruction. Most studies concentrated on types of evaluation, components of the IEP and the procedures involved. However, few studies addressed reevaluation of the IEP and the finer details of what was evaluated, an aspect that this study addressed.

The studies on challenges were general. Those that had an inclination to deaf blindness tended to lean towards general areas of education. Few studies address the IEP for deaf blind in relation to their function ability. This study therefore attempted to bridge that gap.

3.0 CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY

3.1. Introduction

This chapter discusses the research design and methodologies that were used to analyze the IEP implementation in supporting the attainment of function abilities in learners who were deaf blind. The variables are discussed at length. The chapter focused on the population that was used, how they were sampled, and the sample size itself and how data were collected and analyzed. It also gives a clear picture of the instruments that were used and how validity and reliability was achieved.

3.2. Research Design and Locations

3.2.1 Research Design

The study employed a mixed method approach. Johnson, Onwuegbuzie and Turner (2007) defined mixed method approach as a type of research in which a researcher combines elements of quantitative and qualitative research approaches for broad purposes and depth of understanding and corroboration. Creswell and Plano (2012) supported the mixed method approach for the ability to compensate for the weakness of both qualitative and quantitative approaches. Johnson et al (2007) captured the aspect of methodological triangulation which actually means the use of multiple methods to study the same phenomenon while Tashakkori and Teddlie (2010) noted that it removed inherent bias in particular method.

The study entailed the retrospective examination of archival documents thus IEPs in document analysis design. This design was deemed appropriate since the aim of the study was to analyze the IEP statements for learners. The design was used to determine the strategies that were used in

goal formulation and implementation, establish the quality of IEPs in meeting the needs of LWDB which support the attainment of function ability of the child and the criteria for evaluation and reevaluation. The information sought majorly came from the IEP document and reports hence the qualitative approach.

However, whatever was documented does not imply that it was implemented. There was need to capture the quantitative data direct from the implementers of the IEP. A descriptive survey design was therefore used. Survey design is defined by Creswell (2013) as a systematic method of gathering information from entities for the purpose of constructing quantitative descriptors of the attributes of the larger population of which the entities are members. The study gathered information from teachers which aimed at giving information on IEP implementation.

Mixed method approach which involved collecting both qualitative and quantitative data and integrating distinct designs, was preferred due to its ability to uncover contradictions in the data, stimulate creative ways of collecting rich data and the confidence it gave the researcher in terms of results (Creswell and Plano, 2012). It offered comprehensive evidence for studying a particular phenomenon and is practical since all tools of data collection available are used thereby yielding both figures and words.

3.2.2. Variables

The study focused on analyzing the drafting and implementation of IEPs in the deaf blind school and units for functional support to learners who are deaf blind. The implementation of IEPs for learners who are DB largely depended on the following variables which were captured in the study; various strategies that were used to formulate goals and objectives. These strategies were approaches used, assessments done, the nature of the tool used and finally the policies that were

in place that guided the drifting and implementation. Other variables included, needs of learners, Personnel, ability of the goals to address the needs of learners, the challenges experienced and finally the evaluation and reevaluation of goals and objectives. These formed the independent variables. The dependent variable was the implementation of the IEP for LWDB. However, there were various extraneous variables which influenced the study which included the teachers' motivation and experience, resources and the type of administration. Control of these variables was done by having conditions that were similar in the sampled schools. In this case, public schools which were assumed to have the same working conditions and provision of equipment were used. Participants were sampled who had different experience in the teaching of learners with deaf blindness. This ensured randomization.

3.2.3. Location of the Study

This study was conducted at Kabarnet School for deaf-blind in South-Rift, Kilimani Special Unit for the deaf-blind and Maseno School for the Hearing impaired in Nyanza. Kabarnet School for the deaf blind is located in Baringo County of Rift Valley, in Kabarnet Municipality. It is the oldest and the only established school for students who are deaf blind in the whole region of Eastern Africa. It has all levels of provisions from pre-school which is for those with low functioning, basic for moderate to pre-vocational for the high functioning and therefore the most appropriate choice for the study. It provided its services to learners who were institutionalized. The student population was drawn from all over Kenya.

Maseno School for the hearing impaired (HI) had both facilities for residential and day. Though established to cater for learners with hearing challenges, it had a special class for learners who were deaf blind. The class had been recently created and therefore portrayed a very good contrast

of the practices. The institution was located in Maseno Division, Kisumu West Sub-county, Kisumu County, Lake Victoria region. It was established in the year 1975, by Anglican Church of Kenya, and Kenya Society for the Deaf.

Kilimani Primary School which practiced inclusion of the deaf blind gave a very good contrast for the study. It was the only institution in the whole nation practicing inclusion of visually impaired and deaf blind and also had a special unit for both disabilities. Kilimani Primary School is located in Nairobi County. The school had regular students attending pre-primary to standard eight, a well established unit for the blind separately from that of the deaf-blind. The deaf-blind unit was established in 1995 as a self-help project. It got sponsorship in 1997 when a class was established. The institution has relevant infrastructure suited for learners with both visual and auditory impairments. These include a swimming pool.

3.3. Population

The study took place in programs for DB. There were eight programs for the DB spread across the country. These programs were deemed appropriate since students in these programs were beneficiaries of the IEP. The target population was students who were DB. The unit of analysis was the IEPs for these students. The IEPs gave detailed information on services provided and thus pointed to the support given for function ability.

In the formulation and implementation of the IEPs in developed countries, several personnel were involved. They included medical staff, EARC (Educational Assessment and Resource Centre Officers), teachers teaching in the school, and teacher aides. Though the above provide vital information required to answer objectives on goal formulation and role played by various personnel in formulation and implementation of IEPs and the challenges in implementation of

the same, the study focused on teachers who were the main players in the formulation and implementation of IEPs in the Kenyan scenario.

There were eight (8) programs for the deaf blind in the whole nation of Kenya. Kabarnet School for the DB had a total population of forty-two (42) learners and forty-three (43) teachers. All were qualified in SNE. The total population in Maseno school was one hundred and fifty-eight (158). Out of these learners, eleven (11) were deaf blind. Kilimani had a population of eight (8) students who ranged from ages 4 to 24. It had nine (9) teachers. A summary of the overall population is presented in Table 3.1:

Table 3.1 Study Population

Institution	Teachers	Students	Teacher Aides	EARCS in school compound	Medical Personnel
Kabarnet Sch for Deaf blind	43	42	3 House mothers	1	1 Nurse 1 OT
Maseno Sch for Hearing impaired	6	11	3 House mothers	0	1 ST
Kilimani Primary Sch (Special Unit for Deaf blind)	9	8	1 Cook 1 House Mother	0	0
Total	58	61	6	1	3

Key

OT Occupational Therapist

ST Speech Therapist

EARCS Educational Assessment and Resource Center officers

3.4. Sampling Technique and Sample size

3.4.1. Sampling Techniques

Sampling was done in order to identify the programs that took place in the study. Sampling was guided by the nature of the population, the kind of information sought and the tool that was used. Kabarnet School for the DB and Kilimani Special Unit were sampled using purposive sampling. Purposive sampling was chosen in order to ensure proper representation of the population (Creswell, 2013). Kabarnet School for DB was the earliest and only school to be established for persons with deaf blindness. It had been serving the whole region of East Africa in the area of deaf blind as the only school from 1985. Kilimani was the only special unit for DB established by a primary school practicing inclusion from the perspective of the blind. The remaining units served learners who had hearing as their learning media. They were found in hearing impaired schools and were sampled using simple random sampling. Maseno School for the deaf in Kisumu County was identified while Kitui was sampled for the pilot study. This gave a balanced representative sample of three (3) institutions that gave a positive contrast.

Saturated sampling technique was used to establish the IEPs that were evaluated and the teachers that took part in the study by responding to questionnaires. Tashakkori and Teddlie (2010) recommended that, saturated sampling should be used in the cases where the target population was small. It allowed all the IEPs to be evaluated. The IEPs of the whole population in terms of students attending the school were preferred since the total population was small in number. However, in cases where the R-GORI was used, the absence of goals in some IEPs, led to the researcher using objectives in the schemes of work. The objectives/benchmarks were listed according to their area of intervention and then four objectives/ benchmarks were sampled using simple random sampling as per each area. In case of interviews, purposive sampling was done

whereby only teachers who had an IEP for their students and had contributed to its development were sampled. Table 3.2 shows the sampling frame.

Table 3.2: Sampling frame

Study Population	Sampling method
Programs for DB	Saturated sampling
Teachers of DB	Saturated/ Purposive
Students(IEPs)	Saturated/ Simple Random Sampling

3.4.2 Sample Size

The sample population that the researcher worked with was 118 in total. However, some teachers were involved twice in the study. This was because they participated in responding to both the questionnaire and the interview. Sample population of 118, which represented the total population less one, was adequate enough to produce reliable valid and accurate results.

Table 3.3 is a summary of the sample size

Table 3.3 Sample Size

Study Population	Total Population	Sample at Kabarnet	Sample at Maseno	Sample at Kilimani	Sample population
Teachers	58	42	6	9	57
Students	61	42	11	8	61
IEPs					
Total	119	84	17	17	118

3.5 Research Instruments

This study embraced varied methodologies and thus several instruments were used in the collection of data. A written description of each technique is therefore given.

3.5.1. Documented Data

Documented data was required to answer several objectives. In relation to objective one, data was required to capture the aspect of the quality of the assessment tool. Quality of the assessment tool is largely determined by the components of the tool which stipulates the due process that was observed. Since the researcher was only interested in the components of the IEP tool that were captured when drafting the statement, the researcher adopted part one of the PEPSE tool. With reference to the third objective, addressing the needs of learners that could enhance acquisition of functional abilities as portrayed in the goals formulated was investigated. To achieve the above, the researcher used the R-GORI (Ferreira, Santos, Alves, Miguela and Maia, 2013) in combination with the international classification of functioning, disability and health, version for children and youth (ICF-CY) that helped classify the areas of special needs targeted. A description of the tools is provided below.

3.5.1.1. Program Evaluation for Procedural and Substantive Efficacy - PEPSE

The major source of data collection was secondary data. IEPs are formulated before the inception and implementation of the program hence the study relied heavily on what had already been documented. To capture this information, the adapted program evaluation for procedural and substantive efficacy (PEPSE) IEP scoring guide by Donelson (1999) was used.

The PEPSE guide analyses two aspects of the IEP namely, procedural compliance which is meant to capture whether those involved in the formulation of IEP adhere to the standard

conditions, and the second part which evaluates the substantive content. Only the procedural component was used in the study. PEPSE evaluated the presence of the following components of the IEP: Present levels of performance, including student's strengths annual goals or objectives, special education and related services and supplemental aids and services to be provided, participate with nondisabled children in the regular classroom, assessment tests, date for the beginning of services, progress toward annual parents' involvement, personnel at IEP meeting and special factors identified. Those parts were requirement for compliance purposes, The scoring of the PEPSE tool was then done. In cases where the item was present, it scored a plus (+). The absence of the item scored a negative (-). The higher the score, indicated that compliance was observed. The percentage frequency of the items' presence was then computed and reported inform of graphs and pie charts. Compliance to the set steps in IEP formulation and implementation is important in that it pointed to the right practices that could attain the objectives of SNE. This indirectly pointed to steps towards supporting the attainment of functional support

The guide was thoroughly scrutinized alongside the objectives and the research questions, to establish whether the responses adequately answered to objectives one to four with slight adaptations (See Appendix 1). The substantive component of PEPSE was not captured since the quality of the goals and objectives were to be analyzed in details using the R- GORI as described below.

3.5.1.2. Revised IFSP/IEP Goals and Objectives Rating Instrument (R- GORI)

R-GORI was used to measure the general quality of the intervention goals and objectives. It was proposed by Notary- Syverson in 1995. Its purpose was to support the development and evaluation of goals (Ferreira, Santos, Alves, Miguela and Maia, 2013). It was supposed to establish whether goals were functional, measurable, have quality in terms of instruction and the generality of the goals. This was quite important because, if the goals were relevant and of quality, then it is assumed that they addressed every area of special needs of children which ultimately contributed to ability to function.

Each dimension has a set of indicators which were scored. If the goal met the indicator specified (as in Appendix II) it scored one. The absence scored zero. The mean of the scores was computed to give the overall quality of the goal or objective. When the mean is high then quality is better. Quality goals as discussed in the literature review complement the provision of services. The R-GORI was specifically chosen to answer research question one thus the strategies used in the formulation of IEP goals and objectives, and question two on the areas of special needs that were incorporated in the IEP during formulation that support the function ability of the child.

3.5.1.3. International Classification of Functioning, Disability and Health (ICF-CY)

The area of special needs that supports functional ability could not be exhaustively determined by R-GORI alone. The (ICF-CY) was used. ICF-CY is a WHO classification that defines component of health and health related components of well-being (Fayed, Cieza and Edmond 2011). It is designed to record the characteristics of the developing child and the influence of the influence of its surrounding environment (WHO, 2007). The detailed analysis of the IEP statement content identified the domain it addresses, which in turn informed whether it supported

the development of functional abilities as stipulated by the following statement by WHO. ‘The ICF-CY can assist the educators, researchers, to document the characteristics of children and youth that are of importance in promoting their growth, health and development’

It contains three domains namely functioning which encompass all body functions, activities and participation, disability which encompass impairments, activity limitations and participation restrictions and finally environmental factors that define barriers or facilitators to functioning. ICF linking rules developed by Cieza were used to link the goal’s content to the ICF codes (Ferreira *et al* 2013, Fayed, Cieza and Edmond 2011). The codes used in this study were, b representing body function, d representing activities/participation and e representing environmental factors. The above domains were considered important in the study since when addressed could support attainment of functional abilities.

A goal was linked to the most appropriate corresponding ICF category, identified with its alphanumeric code. If the goal’s content was not represented in the ICF, it was ‘Nc’ (not covered by the ICF) as shown in Appendix III. The presence of each domain was computed using percentage frequencies and reported inform of charts.

3.5.2. Non-Documented Data

3.5.2.1. Questionnaire

For primary sources of data, the study used questionnaire (Appendix IV). There was one set of questionnaires for teachers. The Questionnaire was considered since this was an elite group and could not find it hard to read and interpret the items. It was also selected for this group of respondents based on the aspect of time and distance.

The items were selected based on the objectives. The selected items were tailored to capture the information that had not been captured by the secondary data collection tools. The questionnaire contained thirteen items, with ten closed ended items and three open ended items. The main objective captured by the questionnaire was on challenges encountered in the implementation and on evaluation of the IEP. It is presumed that the challenges faced by each respondent varied hence making it necessary to open up for varied responses.

Percentage frequencies were used in analysis of data especially closed ended items. The open-ended questions were coded in line with their themes. The themes were determined based on the current practices in the USA and Britain (Mitchel et al, 2011).

3.5.2.2. Interview

An interview schedule (Appendix IV) was used to get information from teachers. Interviews were deemed appropriate to get in depth information and also to capture the non-verbal cues that would give sensitive evaluative information needed (Orodho, 2008). Teachers were deemed to be typical cases since they were the implementers of the IEP. Interviewing this group provided valuable confirmatory information on the implementation.

The tool contained questions that addressed four objectives, thus one, two, four and five. The areas captured included assessment, qualification of assessment personnel, the role played by different personnel, evaluation and reevaluation of IEP and how challenges were addressed, which required open responses. The interview was semi-structured and the items were asked in an orderly way to maintain consistency.

3.6. Pilot Study

A pilot study was done in Kitui Special School for the Hearing Impaired. The institution was sampled because it had the characteristic required for the study (Roksan, Robab and Taghipour, 2014). The pilot study was used to establish problems and barriers related to the recruitment of participants and also to assess the acceptability of observation and interviews. 10% of each group of the population, as guided by Roksan, Robab and Taghipour (2014), took part in the pilot study. The pilot study took place alongside pre-testing of the instrument. The detailed summary of the pilot population is presented in Table 3.4;

Table 3.4 Pilot Study Population

Population Unit	Sample size
Teachers	6
IEPs	6
Total	12

Pre-testing of the instrument helped eliminate ambiguities, misunderstanding and inadequate items. During piloting, it was clearly established that the EARC officer and the medical personnel were not involved in the IEP development and implementation. This aspect featured in all institutions. This development rendered the tool for the said officers to be irrelevant thus focusing the study mainly teachers.

The information provided by part B of the PEPSE tool was duplicated by the R-GORI tool which was preferred due to the depth of information provided resulting in the part B of the PEPSE tool being eliminated. Since the rating of the goals was done by one person (the researcher) the

interater reliability (how reliable are the research assistants in scoring the IEPs) was considered irrelevant. However, for purposes of clarity in rating and a better mastery of the scoring, the researcher incorporated other four researchers in special needs department from Kenyatta and Maseno Universities in the scoring of the pilot results.

3.6.1. Validity of the Research Instruments

Validity refers to the quality of data gathering instrument or procedure that enables an instrument to measure what it is supposed to measure (Kothari, 2008). In this study, content validity was used to validate the instrument. Yaghmale (2009) defines content validity as the degree that the instrument covers the content that it is supposed to measure. In the development of the questionnaire, identification of the domain of construct was done which was guided by the literature on the five objectives of the study. The research instrument was then subjected to professional judgment by experts from Special Needs Education department in Kenyatta University and Maseno who were conversant with the topic of study. The experts judged the instrument independently and made recommendations. Later, corrections were made based on recommendations before the instrument used in the field. Triangulation was used in place of the interview. Creswell (2013) defines triangulation as a validity procedure where researchers search for convergence among multiple and different sources of information to form themes or categories in the study.

3.6.2. Reliability of Research Instruments

Reliability is the degree of consistency that a research instrument demonstrates. Reliability of the instruments was established through test-retest method through a pilot study. A test of the questionnaire was administered to ten percent of the study population. Later, the test was re-

administered to the respondents after two weeks. It was then marked and coefficient of correlation calculated using Pearson correlation. The results from the test retest for the questionnaire yielded a coefficient of correlation value of 0.75 which was considered a high enough value for its reliability.

3.7. Data Collection Procedures

Consent to conduct the study was sought from relevant authorities at national thus the Ministry of Education, County and School levels. Research permission was sought from the School of Graduate Studies (SGS) and obtained after successful presentation of the proposal at Kenyatta University. Permit was also obtained from the Ministry of Education before collection of data. Courtesy call was made to the County directors of Education where Kabarnet School for Deaf-Blind learners, Kilimani Special Unit for the Deaf-blind and Maseno School for the Hearing Impaired were located. The second courtesy call was paid to the County Education Officers (CEOs) for purposes of creating rapport that could alleviate suspicion. Later, the head teachers were contacted and permission sought. The researcher addressed them for good public relations. The researcher encouraged voluntary participation and confidentiality of the information was assured. The researcher informed participants of the purpose of research and the persons who would access the information. Maximum confidentiality was stressed by the anonymity of the respondents on the questionnaire.

The data collection was done by the researcher in person. This was due to the technicalities involved in the kind of data that was required and the nature of the tools used. The researcher took one week in each institution collecting all the required data before moving to the next institution. This was done after relevant permission was granted both from the university and the

government at local and national levels. The relevant permits boosted confidentiality of the respondents.

3.7.1. Interview

The IEPs collected were used to determine the sample for teachers who developed the IEPs for interview. It was, however, discovered that most of the teachers were using the IEPs which they did not develop and were of earlier years. The teachers who had at one time taken part in drafting IEPs were interviewed. The interviews were recorded after obtaining permission from the respondents. Photographs of relevant facilities e.g. play facilities, rehabilitation equipment were also taken. The researcher also discovered that though the IEPs were drafted and implemented by teachers, the researcher observed from the non-teaching staff that their activities in providing services, could indirectly contribute to achievement of functional support.

3.7.2. Questionnaire

The questionnaires were administered to individual teachers, under supervision of the researcher. After obtaining permission the researcher accompanied by a member of staff mostly the deputy head teacher, administered questionnaires to teachers in their specific classes and collected them immediately before a major break. This system minimized interaction and influence of the teachers and ensured maximum response.

3.8. Data Analysis

Data analysis depended on each objective and what it sought to establish. Data collected from questionnaires and the PEPSE were coded and simple descriptive statistics computed using Excel package. The information was then presented in form of charts and tables. The interview

responses were analyzed thematically and also coded and reported in prose. The responses from the tape recorders were coded in themes. Frequencies were then determined depending on the responses per theme which in turn yielded quantitative data. In some instances, the coded information was reported in prose.

Deductive content analysis was used in the analysis of ICF-CY and R-GORI. In ICF-CY, data/goals were aligned to specific ICF-CY components of body functions and structures, activities and participation, and environmental factors. The goals were then linked to the most appropriate corresponding category identified with its alphanumeric code. Where the goals content was not covered in ICF – CY, it was indicated NC meaning not covered. The presence and absence of the nine R-GORI quality indicators were rated per goal scoring between one (1) when present and zero (0) when missing. Scores were then added and the score that was obtained was translated into percentages by analyzing the percentage of goals per IEP rated positively on it.

3.9. Ethical Consideration

The IEP statements for students are private documents. For them to be used, the researcher sought consent from concerned parents through the heads of institutions. Instead of parents being used as representatives of their children a legally authorized proxy (Wohleber, 2009) who, in this case were teachers, were used. Informed consent was also sought from them.

Confidentiality was also maintained. The researcher worked on the IEP statements alone in a secured office which was assigned to her for the period she was in the institutions. The IEPs were then given back to the head of institutions, who from the beginning, had custody of them.

4.0 CHAPTER FOUR: FINDINGS, INTERPRETATION AND DISCUSSIONS

4.1. Introduction

This chapter presents the findings, interpretation and discussion of the data collected from the field. The data was in relation to analyzing the implementation of individualized education programs for persons with deaf blindness in order to establish their functional support. The findings have been presented in themes guided by the research objectives as follows; strategies used in formulation of IEP goals, roles played by different personnel in the IEP formulation and implementation, the quality of the goals in identifying the needs of learners that support function ability, the criteria used in evaluation and reevaluation of learners, and finally the challenges faced in formulation and implementation of IEP for learners who are deaf-blind.

4.2. Demographic Data of Respondents

The background profile of the respondents was sought under the following sub headings; response on Gender , area of training of teachers, specialization and age bracket of the teachers. Though captured as demographic data, the findings were discussed separately because they have a direct contribution to the study. The findings were as follows.

4.2.1. The Response on Gender

The researcher wanted to find out the gender of the respondents. The findings are presented in Table 4.1

Table 4.1. The Gender of Respondents

	School A		School B		School C		Total	
	N	%	N	%	N	%	N	%
Male	23	58	2	33	2	22	27	50
Female	18	42	4	67	5	78	27	50
Total	41	100	6	100	7	100	54	100

Table 4.1 reveal that the gender for both male and female teachers in all institutions combined was equal 27(50%). However, the number of males in one institution was high, thus 23(58%). The percentage of females in the two remaining institutions was above 65.

4.2.2. Teachers Age Bracket

The researcher sought to establish the age of the respondents. The findings are as indicated in Table 4.2

Table 4.2. Teachers Age Bracket (N=54)

Age Bracket in Years	N	% Freq
0-20 Yrs	0	0%
21 – 30	8	15%
31 - 40	17	31%
41 Above	29	54%
Total	54	100%

From Table 4.2, 29 (54%) of teachers in the programs for LWDB are 41years old and above. A small percentage of 8 (15%) ranged between 21 to 30 years in age. There were no teachers below 20 years of age. The age bracket of 41 and above was a mature age which indicated vast

experience in teaching. The experience was beneficial if they had taught students with special needs especially those who were deaf blind. However, it could also have a negative connotation in that, teachers had outgrown the ages where they explore methods of teaching that could yield results (Alufohai, 2015). This implied that the negative methods acquired by teachers may be carried over especially in cases where by in- service programs were not emphasized.

4.2.3. Teachers’ Area of Training

The bio data on area of training was considered important. This was because the information obtained was also used to address objective one. Training plays the role of imparting skills necessary for performance of a task. It could also be an indicator of how well the personnel were equipped in assessment and implementation of IEP. The findings are presented in Table 4.3.

Table 4.3. Response on Area of Training (N=54)

Training in	SNE		DB		IEP writing	
	N	%	N	%	N	%
% Trained	52	96.2%	37	68.5%	2	3.7%
% Not Trained	02	3.8%	17	31.5%	52	96.3%
Total	54	100%	54	100%	54	100%

From Table 4.3 almost all teachers 52 (96.2%) who responded to this item were trained in special needs education. Training was assumed to make one knowledgeable in terms of dealing with students with special needs. Most of the teachers 37 (68.5%) had specific training regarding deaf blindness as a specialty. The remaining 17(31.5%) had trained in other areas of special needs education, which included inclusive education. It is presumed that, these trained staff in deaf

blindness should be comfortable in teaching children with deaf-blindness in all aspects. However, in terms of writing of an IEP, only 2(3.7%) had been trained.

A follow up on what teachers had specialized in, with reference to deaf blind training, was done. This aimed at exposing the length of training undertaken by the teachers and the exact duration that the training lasted. The two teachers who were trained in IEP writing were interviewed. The information would assist in establishing the ability of the teachers in assessing and writing the IEPs. The findings are as in Table 4.4.

Table 4.4. Response on Specialized Training (N=2)

Area of specific training	Writing of IEP for DB	Assessment of deaf-blind
Trained	1	0
Not trained	1	0
Total	02	0

The interviews revealed in Table 4.4 that, out of the two teachers, who had indicated in Table 4.3 that, they had training in writing of IEP, only one had trained in it. The findings further revealed that, though one teacher was trained in writing IEPs for learners who are deaf blind, she did not have specific training in assessment. This implied that LWDB were never assessed professionally. This raises concern on how the needs of learners were identified especially when those involved lacked the skills.

When asked how long her training had taken, she stated that it had taken six month. This duration, could not have equipped her with adequate skills in assessment of the Deaf blind for the purposes of establishing students' needs. This revealed that there was a problem regarding writing of IEPs for this group of learners.

The findings support those by Costa (2014) who established that, though teachers had competencies in teaching LWDB, in terms of training, they needed to have specialized skills, be knowledgeable in all aspects of deaf blindness and/or solicit information from specialists to adapt instruction. Deaf blindness is a compound disability. Most learners who are deaf blind tend to have additional impairments which include mental retardation and autism. This implied that teachers needed to be equipped adequately to assess and write IEPs for them. They also needed specific skills to adapt instruction that could yield the desired outcome. Among the areas mentioned by Costa (2014) that teachers needed to understand and be conversant with, included assessment and interpretation of results. This played a vital role in IEP drafting and implementation, which was conspicuously absent as depicted by the findings.

The findings when compared to Marva (2007) who had observed that teacher competencies impacted on the quality of goals formulated implied that the nature of goals that were written by these teachers were inadequate. Competent teachers would right goals that had quality. However, competencies alone were also questioned especially when there were no in-services courses/seminars. Technology and knowledge is revolving. This required that teachers needed to refresh themselves to improve their skills. This fact was captured by Costa (2014) who observed that competencies or training needed to be complemented with regular training in specific areas to improve perceived ability to adapt instruction. This meant that, these two teachers who had training in IEP drafting still needed to refresh by training in order to remain relevant. With such a small percentage trained in IEP writing, it was clear that, there weren't enough skills to complement IEP drafting. Wang'ang'a (2010) compounded it with the findings that in Kenya, IEPs were being written with scarcity of both human and material resources.

The finding also supports those by Blackwell and Rossetti (2014) who observed that the extent to which the IEP is individualized depended on the skills and knowledge of the teachers. This brought out the aspect of capturing the specific needs of each individual learner. This implied that, lack of training contributed to insufficient identification of learners needs. To aid teachers, they suggested that training models be employed so that the area of content in IEP shall be addresses. Thus, they point out the fact that the nature of training should be considered. Though training was done, not all training would provide the desired outcome. This implied that even with one trained teacher, it wasn't mandatory that the needs of learners were being captured. This was further supported by Barret (2010) who noted that training was importance in that, it enabled the teachers to integrate assessments made into content and instruction. With these revealing facts on the importance of training, coupled by the kind of training depicted in the findings, supporting functional abilities in LWDB was highly compromised.

4.3 Strategies Used in the Formulation of IEP Goals for Learners with Deaf Blindness

The first objective of this study was to establish whether the strategies used in the development and implementation of IEP for learners who are deaf blind supported their attainment of functional abilities. There are several actions designed during IEP goal formulation that may lead to achievement of functional support for children who are deaf blind. If employed, they would point to the attainment of the educational objectives which included independence of learners in SNE, a factor largely influenced by learner's function ability. The strategies that could be employed in IEP goal formulation which were investigated were; the approach to IEP goal formulation, assessment, the quality of IEP statement and finally the policies that guided the

IEP formulation and implementation both at national and school levels. The following were the findings.

4.3.1. Approaches to IEP Goal Formulation

There are different ways of writing IEP goals. The main determinant of the method to be used is what exactly the drafters of IEP and the laid policies intent to achieve. The three approaches that could be used are curriculum based, developmental and the Multi-disciplinary (Holistic). The study wanted to establish the approach used in the development of IEPs, which would give direction as to whether functional abilities could be developed. The findings are as follows.

4.3.1.1. The Drafting of IEPs

To establish whether teachers wrote the IEPs alone, a questionnaire was given to teachers to fill.

The findings are as in Figure 4.1

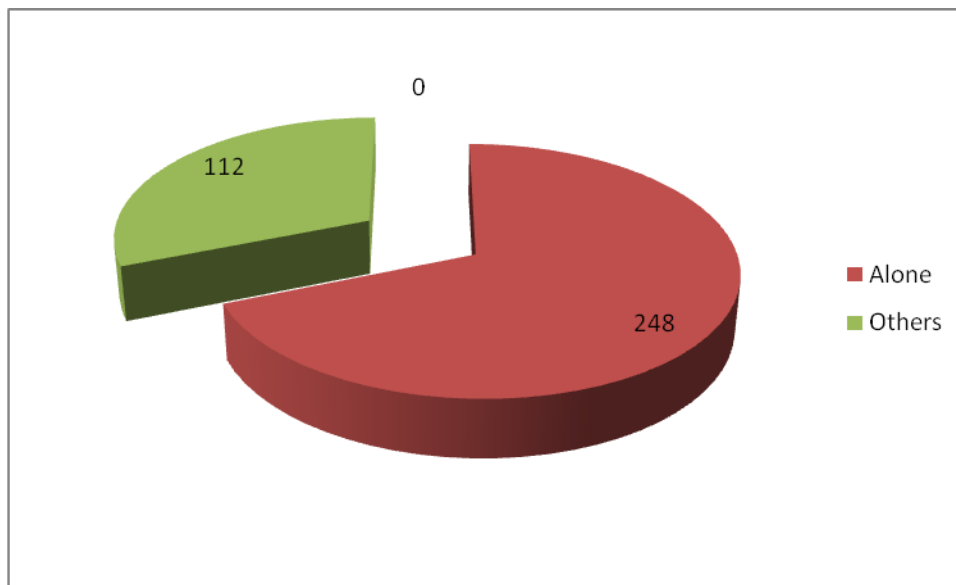


Figure 4.1. How IEPs were written (N=54)

Figure 4.1 revealed that most 37(248) of the teachers wrote the IEPs themselves. Thus, they collected information, assessed and drafted the IEP individually. This clearly indicated that a

multi-disciplinary team was not used. This finding also indicated that, the drafting of the IEPs largely depended on an individual person's input. This implied that, the education of a student with deaf blindness was entrusted to an individual person. This was a complex scenario which could easily have led to serious consequences, especially in cases whereby teachers were not competent in key determining areas of assessment and IEP drafting (Table4.4).

The above findings are not in agreement with several authors and exposed a lapse in the formulation of IEPs, which may affect the performance of the learners. Marva (2007) observed that, when teachers are left alone to draft IEPs for students, there were chances of not capturing aspects of learners that, they were not conversant with. In this case, the author supported a multi-disciplinary approach to IEP formulation which was not the case as in the findings. The teachers in this study, were expected to be conversant with all the skills and knowledge that the multidisciplinary team would have contributed to the IEP drafting process. This approach used would also be questioned especially considering the findings by Ferreira, Santos, Miguel and Maia (2013) who observed that one person assessment and drafting of the IEP could lead to avoidance of areas in which he or she felt inadequate. Most teachers were using IEPs that had been written several years back, with some of them dated 2006. This could point to the fact that these teachers may have avoided drafting of IEP due to incompetence and hence resorted to recycling of the same.

Costa (2014), findings further raises concern regarding the study finding. He observed that learners with deaf blindness had varied needs that could only be identified when assessed by a multidisciplinary team. He further noted that, there was no individual, who had been proven to have the capability of assessing and identifying the needs of learners were deaf blind which were varied and complex. This clearly implied that the needs of LWDB were not being captured from

the initial stage. The findings, when viewed in light of Blackwell and Rossetti (2014) further revealed that, attaining functional abilities would be questionable. They authors observed that knowledge and skills of the members of the team determined the quality of the IEP in terms of meeting the needs of learners. If the quality of a team is put to question based on the capability of individual members, then the drafting of IEPs by individual teachers would be detrimental to attaining functional ability.

Vuohelainen (2014) also challenges the findings. He established that teachers formulated goals that were broad. Broad goals were not easy to evaluate. They also observed that the goals were inadequate in content and hence could not capture the needs of the learners. The goals lacked congruence in terms of addressing students' needs. This gives a picture of the nature of goals that could result from the IEPs developed by teachers in this study. A sample IEP is given (Appendix VI). This could be an explanation of the IEPs observed during the field work that were written on a single page. With pressure of documentation and competing priorities in terms of time for teachers, drafting of IEPs would be compromised. This would be compounded by cases of incompetent and poorly trained work force that was left to write IEPs.

The findings however were consisted with Smith (2013) who established in his study that teachers wrote the IEPs alone. The difference in his study was that though they wrote the IEPs alone, they consulted regularly with the relevant personnel. Alquiraini and Gut (2012) had earlier noted that teachers were supposed to come up with fifteen IEPs as well as implement them. In such cases, the pressure of work load alone would limit consultations. However, the ratio of teachers to learners in this study did not exceed 1:3 in extreme cases. This should have given a chance for consultation. This was not realized, leaving room for IEPs that could be compromised in terms of goals formulated. The quality of goals formulated in the study done by Alquiraini and

Gut (2012) also needs to be evaluated. The high number of IEPs formulated, still compromised the quality of IEPs produced, which eventually may have impacted on the outcome of the implementation of the same

4.3.1.2. The Purpose for Drafting the IEP

The researcher wanted to find out the basis for IEP drafting. The reason for drafting the IEPs could inform whether a developmental approach was used. If the teachers drafted the IEPs to meet the needs of learners, it pointed to the fact that the developmental milestones were being considered. Figure 4.2 shows the findings.

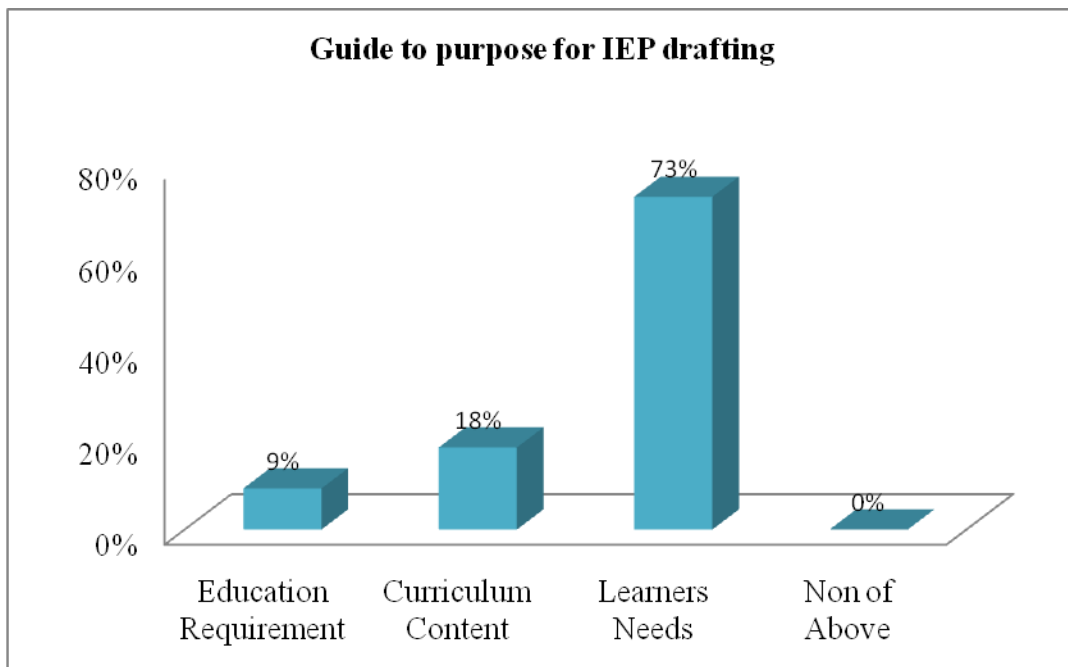


Figure 4.2 Purpose for IEP Drafting (N=54)

From Figure 4.2, most of the teachers 36(73%) drafted IEPs for the purpose of meeting the needs of the learners. Ten (18%) of the respondents wanted to inculcate the curriculum contents into the learners' education program. Only a few 8(9%) drafted the IEP as an educational requirement. This finding implied that, most teachers knew the purpose for drafting the IEP. An

IEP is specifically drafted in order to meet specific learners needs. This approach suggested that the drafted IEPs took on the developmental approach. However, 18% of the respondents stated that they incorporated the curriculum content into the IEP. This indicated that the curriculum based approach was also considered.

An observation of the actual drafted IEPs revealed that a lot of emphasis was placed on establishing the strength and weaknesses of the learners. The assesment done utilised teacher made test tool that identified the level of performance of the learners. This approach could be considered to yield developmental IEPs which were advocated for in the case of learners who are deaf blind. Establishing the present level of performance was meant to give a base line of the current level the learner were operating at that time. However, considering the fact that most IEPs were not current, it could be questioned. Thus, which level of perormance was being addressed by them. In such cases, obtaining functional abilities which was pegged on the continued perormance of learners would not be clear. Also, the same developmental approach was not employed with regard to goal formulation.

The findings concurred with Blackwell and Rossetti (2014) who noted that, IEPs should be aligned with students' needs. He further observed that, the goals of an IEP should reflect the behaviour and skills that were required to attain the intened purpose of that IEP. If in the drafting of IEPs, the correct needs were identified, it actually followed that the intervention chosen would be specific to the needs, making the implementation and evaluation as stipulated by the ADDIE model of learning easy to attain. Thus, the chances of trial and error to establish whether the objectives were achieved would be minimised. This would complete the circle in the developmental approach.

4.3.1.3. Personnel Involved in IEP Formulation as a Strategy

The presence of a multidisciplinary team is a good start in achieving functional abilities. The researcher wanted to ascertain, whether different personnel were present when the IEP were being drafted. The researcher therefore analyzed the documented information in the drafted IEP statement, to establish the presence of different personnel. The findings are as in Figure 4.3.

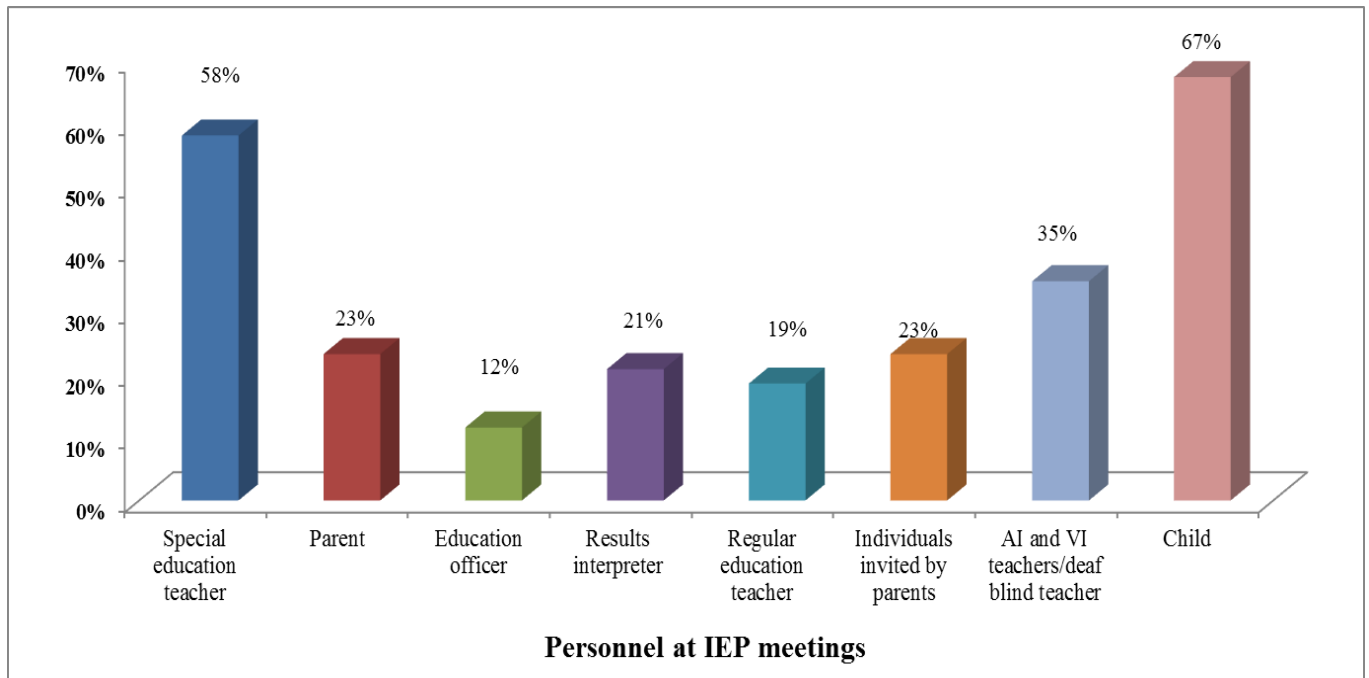


Figure 4.3. Personnel present at IEP meeting (N=54)

Figure 4.3 above revealed that, in many institutions, the people who were regularly present in the IEP meetings were, the child 36(67%) and the special education teachers 31(58%). It should be noted that, IEPs had scanty documented information on personnel present at the IEP meeting. Very few meetings indicated that, specialist personnel were present. Specialist personnel include interpreters 11(21%), auditory impairment specialists and visual impaired specialists 19(35%). It could be assumed that, auditory and visual specialists were not present at the meetings, but instead, the special education teachers, trained along those specialties, assumed their role. The

presence of the education officers 6(12%) and regular education teachers 10(19%) was the least realized. The above findings contradicted those from the questionnaire (Figure 4.1) which revealed that, there were no IEP meetings held. This may imply that the above findings were not the true picture of the practice.

The findings may have several interpretations. The low percentage 19(35%) of the presence of specialists, who provide services to learners who are deaf-blind implied that, the students were not receiving specialized services that characterized functional support. A good approach to goal formulation, for learners who are deaf-blind, and experience complex challenges, should have provisions for specialist or specialized personnel.

The interpreters, who include psychologists would analyze and give a simple picture of the results, while, the visual or auditory specialists would give more information from the impairment aspect. Their role should include evaluation of special areas. This meant that a multi-disciplinary approach was not used. The low presence of educational officers and regular education teachers revealed that, they were not incorporated in the drafting of the IEPs.

Figure 4.1 indicated that IEPs were written by individual teachers. The low percentage of personnel involved confirmed the fact. Several authors found that the presence of other personnel, rather than the special education teacher was important. As earlier discussed, no single discipline had adequate skills and knowledge in writing an IEP. The input of other personnel would be quite enriching during the drafting stage. Their varied expertise would help in identifying interventions. The presence of different personnel suggested that, goal formulation took a multidisciplinary approach. However, the small number of the IEPs that documented their presence negated that view.

Guthrie, Pitman, Stooles, Strong, Poss, Bowman, Asworth and Hides (2011) in their study emphasized that, various specialists contributed varied ideas during assessment which formed the knowledge base that assisted in drafting the IEP. Going by the Guthrie *et al*(2011) findings, the assessment in the above scenario would be deemed to be unreliable and lacking in knowledge thereby raising eyebrows on the initial stage of drafting of IEPs. The absence of various specialists was indicative of inadequacy in ideas. In such instances achieving of functional support may not be attained. The above views were also shared by Carter and Sisco (2011). Their views however, were not shared by Vuohelainen (2014) who felt that the presence of a multi-disciplinary team did not add value to the learners' achievement. The researcher reasoned out that, though various specialists were important in drafting the IEP, it only ended at paper writing and not implementation. In this case, the implementation of the IEP was questioned. However, if the initial stage of drafting the IEP was faulty, chances of correction at implementation and evaluation stages would never be positive.

The low percentage of the presence of parents raised concern in the whole implementation of the program. The involvement of parents in the IEP has been proven to contribute positively to learner's achievement. The study by Price (2014), Griffins (2015) and Gregory (2015) revealed that lack of parental involvement in the IEP writing for affected the overall achievement of learners. This implied that learners did not achieve to their fullest potential. The situation was compounded by the fact that some of the IEPs in question were never regularly drafted. This may have been due to lack of parental involvement.

As discussed in the review of literature, those parents, who took part in the IEP meetings for their children, were inactive or passive. However, their presence yielded seriousness in the drafters of the IEPs (Jordan 2011, MacKichan and Harkins, 2013). Presence of parents in small

numbers indicated that the education of the learners was not being taken seriously. Parents may have little knowledge in special needs education but their interaction with their children may provide vital information for instructional purposes. Reiman, Beck, Coppola and Englies (2010) noted that parents contributed to issues related to the child's placement, discipline, instruction and should therefore be involved in drafting of IEP goals and objectives.

Poponi (2009) found that, the presence of parents for learners who had multiple disabilities at IEP writing contributed positively to their performance. It would not be procedural for them to be absent. Jones (2016) noted that such procedural errors of ignoring parental contributions could result in court cases in the USA. This was an indication that, when IEPs were taken seriously, any mistakes made at whatever level, faced stringent measures. Mistakes have an impact on a learner in a detrimental manner. Such stringent measures were conspicuously missing from the Kenyan policy on special needs education. This created an opportunity for any personnel to do anything and walk away with it. Parents also acted as advocates. Their presence in small numbers meant that learners missed out on several services that they were entitled to.

In Kenya, the whole assessment process was left to EARC officers. The EARC office represented the education office. The EARC officers had a teaching foundation and may not have adequately identified the needs of learners. The learner was then placed to different institutions by the same officer. Other measures were left to individual efforts of the institution. This left the learner in the hands of charity and not what he or she had a right to, thereby negating the international policies that advocated the rights to free and appropriate education with which Kenya identifies. The EARC officers were specifically appointed to oversee special education. They were however not involved in the drafting of IEPs which raised concern to the existence of that office.

The findings have some commonality with Alquiraini and Gut (2012). He observed that in Saudi Arabia, the IEPs were drafted in the absence of all related service providers. The whole responsibility was left to teachers. The same observations were shared by Aldersey and Turnbull (2011) about special education in Tanzania, Suubi (2014) whose study was based in Rwanda and Masha (2013) whose study was based in Kenya. A close observation of these countries suggested that, the presence of a multi-disciplinary team was only achieved in developed countries. This implied that developing countries had to come up with strategies that were tailored to suit their economy.

4.3.1.4. Characteristics that Influenced Teachers while Drafting the IEP

The researcher wanted to establish the characteristics that helped teachers to draft the IEPs. The findings are as in Figure 4.4.

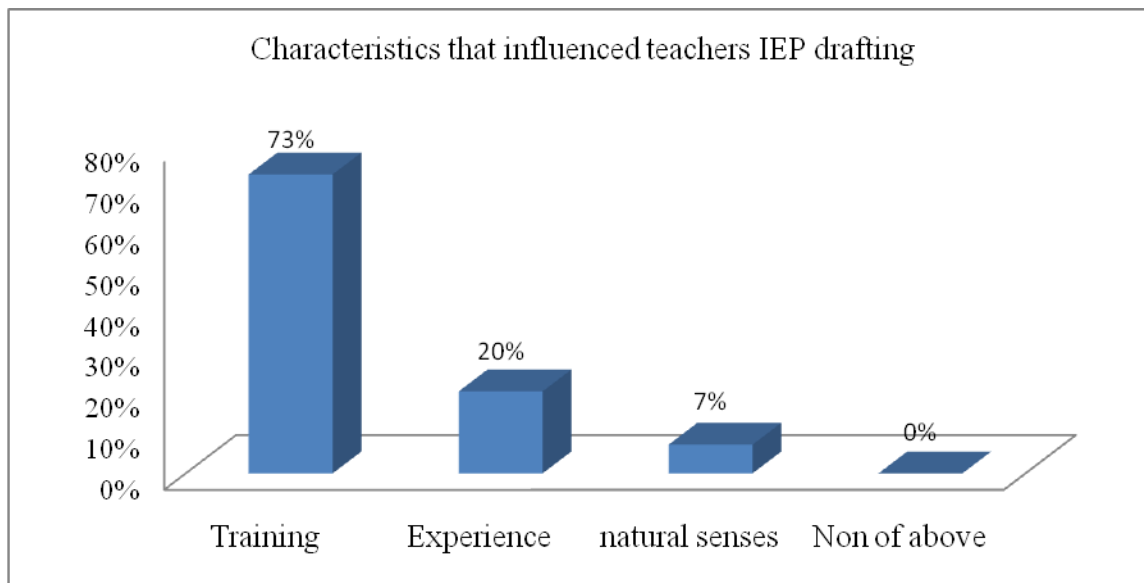


Figure 4.4. Characteristics that influenced teachers while drafting the IEPs (N=54)

From Figure 4.4 it was revealed that most of the teachers 39(73%) relied on their training while drafting the IEP. A few of the teachers 11(20%) relied on their experience. Only 4(7%) relied on

their natural senses. Findings in Table 4.4 revealed that, teachers who had been trained in special needs education, in the area of deaf blindness did not have training in IEP writing. It thus follows that, the over reliance on training would not have resulted in adequately written IEPs that could contribute to functional abilities. This implied that, special consideration had to be given to training of teachers.

The above findings were consistent with Costa (2014) who conducted a study in one of the sampled institution in this study, and noted that training was essential in instruction of learners who were deaf blind. He established that, though most of the teachers had some level of training in deaf blind, they still lacked skills to instruct appropriately and to draft IEPs. He further added that many teachers also relied on experience. This exposed a gap in drafting of effective IEPs. As earlier discussed the kind of training the teachers received which was in general special education of LWDB was not adequate to equip them with the needed skills to attain functional abilities in learners. Norwich (2014) also observed that teacher education alone left teachers unprepared for both teaching and writing IEPs. He observed that most teachers' skills were acquired on job. He quoted one the teachers stating that '...those courses can't prepare you for this stuff. Not even close...' viewed a long this finding, the approach of depending on the skills acquired via training was inadequate in assisting LWDB develop functional abilities.

Carter and Sisco (2011) observed that the knowledge of the members who comprised the IEP team, especially where the IEP had to be aligned with the state curriculum were the main factors that influenced how that IEP was written. This implied that the Knowledge of the teachers who were the main drafters of the IEP influenced its drafting. Unlike the above scenario whereby the curriculum played a major role in guiding the IEP team, the curriculum for the learners who are DB was produced in 2013 and had not even been evaluated (Masha, 2013). This may lower the

teacher's self-efficacy and performance, a factor that Doren, Flannery, Lomardi and Kato (2012) and Montgomery (2013) observed as contributing to IEP writing negatively.

The findings however, differed with Marva (2007) who observed that, most trained teachers did not use the training knowledge they had received to implement the IEP. They resorted to their experience and natural senses instead. 27% of the teachers who relied on experience and natural senses could not be assumed to be a negligible figure. This approach could easily result in transfer of mistakes that teachers had gotten used to, to the next generation and block new ideas which would be beneficial to the education of learners who are deaf blind (Carter and Sisco 2011, MacKichan and Harkins 2013). This could be the possible explanation to the observed common format for writing IEPs by several teachers' in all the three institutions which was not clear (appendix VI). Costa (2014) noted that this scenario would be detrimental to service delivery and would indirectly impede progress in learners' acquisition of required skills.

4.3.2. Assessment as a Strategy of IEP Formulation and Implementation

In this strategy, the researcher aimed at finding out the kind of IEPs that had been formulated and their inclination towards supporting acquisition of functional ability. There are three types of IEPs which could be classified based on the assessment done. These are; the traditional IEP, standard based IEP and finally IEPs from alternate assessment. The findings are herewith reported and discussed:

4.3.2.1. Whether Teachers Conducted Additional Assessment after Placement of Learners

The researcher found that, after the assessment done at the EARC office, teachers unanimously 18(100%) agreed that they always conducted their own assessment. This implies that the teachers and the EARC officers did not work together. In this case, the EARC officers only played the

role of placement. They did not have any influence or contribution after that. Sampled statements that reinforce the above are reported below;

Responded 5 ‘... that is why we have all students here in class for one term. This enables us just to observe them. We must establish whether there was a mistake in assessment and placement of learners’

Responded 15 ‘... the EARC officers are not trained in deaf blindness. They do not understand anything and therefore you cannot depend on their diagnosis/assessment. Even if I depend on their diagnosis, they do not provide any documents apart from showing that the student be admitted in the unit.’

Responded 3 said ‘...whose assessment and by which EARC officer? Huyu mwenye tulisoma na yeye same year KISE. Atajuache deaf blind na yeye ni MR?. Hata sign language hajui, ata communicate na mtoto kweli? Meaning; how can I really on his assessment? We were in college together with him. His area of specialization is mentally retarded. He cannot even communicate with simple sign language. How can he identify the needs of the child?’

The above findings revealed that, the personnel tasked to assess learners and identify their needs for proper placement, do not have the right skills and knowledge for the job. This is compounded by the fact that, the teachers in special programs, who are junior, are aware of their qualifications and performance. This implies that the education of learners with deaf blindness is challenged at every level, beginning with the identification stage. It also portrayed a picture of lack of collaboration among the personnel involved in the education of LWDB.

The findings are not in agreement with Qureshi (2015) who observed that SENCO who played a similar role to EARC officers played the role of enhancing the skills of special education teachers. The researcher however noted that the SENCO officers needed to improve their

potential so that they could perform their roles. This implies that the training offered to SENCO was aimed at equipping them to empower teachers and to actively act as resource teachers. Thus, the training offered to SENCO was more job specific. This was contrary to the findings by this study which revealed that EARC officers were trained to teach learners with special education. Experience from my teaching special needs learners showed that EARC officers were in-serviced in assessment skills. However, the training took place more than ten years back, with no refresher courses offered. They attributed this to the changes in that profession. Qureshi (2015) attributed this to the budgetary constraints and that the support offered to SENCO for reaching out to teachers and other practices had reduced.

The above findings however, concurred with Fisher and Pleasant (2012) who noted that services for the deaf blind, if not well coordinated, could result in role conflict. Their observation revealed that Para-educators were demeaned. The EARC officers as well as paraeducators offered views that were never regarded as important. Their views were disregarded by special educators, and that they were not generally recognized. This was reflected in the teachers' strong words such as, 'which EARC officer

4.3.2.2. Type of Assessment Tool

The study sought to establish whether teachers used a standard tool to assess learners' needs. The findings from the interview established that 18(100%) of the teachers used their own teacher made tool. 18(100%) of the teachers further stated that there was neither a standard tool nor format for assessment of LWDB.

The absence of a standard tool for assessment indicated that standard based IEPs were not formulated. Teacher made assessment tests were preferred for learners who had varied needs. The teachers', however, would have preferred a guiding tool in their assessment (Masha 2013,

Osundwa 2013). The researcher's observation of the documented tools indicated that a standard tool to some extent had been adopted. There was a common approach to writing IEPs as observed in most IEPs (Appendix, IV). The format could not give sufficient information since it was very brief and summarized important details. There was a need to develop guidelines in assessment for purposes of IEP drafting for the deaf blind.

There are several authors who advocate for a standard tool. Price (2014) observed that when a standard tool is used during the drafting of IEPs, it guided the meeting and the interaction of the IEP team members. He however suggested that the tools be revised to capture parental contribution which he felt was not adequate. Blackwell and Rossetti (2014) observed that, the IEP tool could assist in developing IEP content that met the legal requirement. A standard well researched IEP tool could give direction to the assessment, content and evaluation. However, Rowland, Stilman and Mar (2010) had observed that there was no universally accepted IEP tool for LWDB. He further observed that it was not easy to access a tool that linked assessments and classroom observations. This to date has not been addresses. Thus, if a standard tool has to be used, it has to be evaluated to establish its effectiveness. The tool should also link assessment results and the suggested interventions.

There were varied IEP tools for learners who are deaf blind, with each tool having been designed to assess a specific area of need (Rowland, Stilman, Mar 2010, Guthrie *et al*2014). The teacher is therefore expected to choose a tool which could evaluate what they intend to capture. However, the tools in this case were standardized, meaning they were not flexible for use. The advantage of a standardized tool was that, it touched on areas that when left alone to one specific individual, they would be ignored.

Larsen and Damen (2014) highlighted the characteristics of the deaf blind and stated that, they could not benefit from a normal (Standardized) assessment. They suggested that the assessment should incorporate knowledgeable personnel, specialized in communication methods and instructional approaches for the deaf blind. Thus, teachers who were well trained in assessment especially for the deaf blind would be preferred in assessing learners. This aspect was lacking in almost all teachers, who, mostly had general training in deaf blindness and could not positively influence the drafting and implementation of IEP.

Mitchel *et al* (2010) noted that there were two types of assessment for learners with special needs. These were assessment with accommodation and alternate assessment. Assessment with accommodation involved making alteration to the assessment process but not the essential content. This kind of assessment suited learners whose impairment were mild and could not follow the curriculum. It also resulted in the traditional form of IEPs. Reeves *et al* (2009) observed that the assessment that befitted learners with deaf blindness was alternate assessment. He stated that ‘...alternate assessment is reserved for a small percentage of student population for whom traditional paper and pencil assessments, even with appropriate accommodations, would be inappropriate measures of students’ progress within the general education.’

In the traditional IEPs, focus was directed towards academic improvement. To counter that, and ensure learners’ needs were met, Guthrie *et al* (2011) and Herbster (2015) suggested the use of an already developed tool that could guide and direct the teachers who may be lacking in knowledge on exactly what to evaluate. The teachers may be blamed for not consulting other personnel, yet they may not have the knowledge of, ‘whom to consult’ and on ‘what’ to inquire about. A tool, that may be adapted to fit the Kenyan scenario, and which was flexible to some

extent, may enhance teachers' active assessment of learners. This will in turn impact on the implementation and produce positive results.

The researcher suggested a tool that would capture the views of various personnel. The tool (Appendix VII) would require the great input of parents, in that, they would approach different specialists, who could give their independent views and comments about the education of the learner. The teachers would eventually access these views and come up with goals. The tool is considered relevant since it may not be possible to have these varied personnel together. It could also guide the teachers on whom to consult. However, this approach does not leave teachers with the opportunity to enquire beyond the submitted views since do not interact with the specialized personnel.

4.3.3. Quality of IEP Statement

In this strategy, the researcher wanted to find out compliance to what is required for the development of an IEP, the content of the IEP and the team that formed it. The findings are presented below.

4.3.3.1. Components Captured by the IEP Statement

The researcher wanted to find out whether the formulated IEPs had the basic required parts. An effective IEP statement should have at least the following components: historical background of child, present level of performance with evidence of assessment tools, goals, objectives, services to be provided, the commencement date, service providers, evaluation procedures, participation in regular classroom, parent informed of due dates for each step, transition plan and the progress report. The researcher used program evaluation for procedural and substantive efficacy by Donnelson (1999) to establish the components. The findings are as in Figure 4.5.

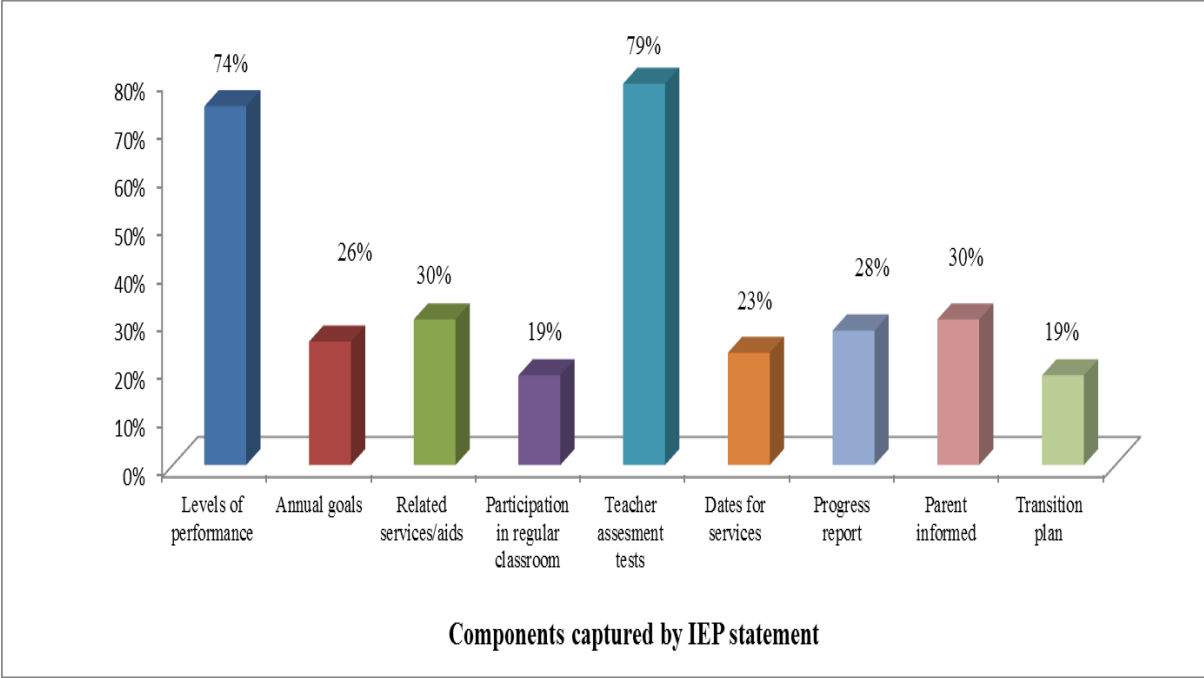


Figure 4. 5. Components Captured by the IEP Statement (N=54)

The IEPs did not have all components that they were required to have. Thus, some components found in some IEPs did not feature in others. Not even one component was found in all IEPs. From Figure 4.5, most IEPs contained the present level of performance of learners 40(74%) and teacher made assessment tests 43(79%). Other areas captured by the IEP team were related services or aids that were to be provided to learners, whether parents were informed of learners’ performance 16(30%), progress records of learners 15(28%), annual goals 14(26%), the dates for commencement of the services 12(23%), participation in regular classroom 10(19%), and transition plan 10(19%).

The above findings implied that, the IEP statement did not meet the required standards, since only two required items were found in more than half of the IEPs. The presence of teacher made assessment tests indicated that assessment was done. However, five percent discrepancy between the assessments made and the establishment of the level of performance implied that, the level of

performance was not established in some specific IEPs. This may have different connotation. Either the assessment was not adequate to establish the level of performance, or the assessment done was not relevant. It also may be due to the use of outdated IEPs. It also implied that, teachers may not have known how to establish the level of performance. Other essential components required for functional support such as annual goals, provision of related services, the dates for the commencement and termination of this services and how students were progressing, were given little preeminence in the tool since all scored below 30%.

Tsuey-Ling and Mei (2009) observed that a well formulated IEP was central to achieving the educational goals for learners. The proper drafting of an IEP could be better realized and monitored by the components captured in the statement. In the above scenario, the resulting IEPs would not have been adequate in yielding standard IEPs. Rowland, Stilman and Gut (2010) observed that different IEPs captured different components depending on what the team wanted to measure. Gregory (2015) observed that the components of an IEP depended on the conceptualization of learners needs. The above components of the IEP were suggested by Donelson (1999) as the basics for an IEP for learners who are deaf blind. A gap still exists that need to be filled regarding the component of an IEP for the deaf blind.

4.3.3.2. Special Factors of Learners that were Identified

The researcher wanted to establish whether the formulated IEPs captured the learners' special needs or factors. It is from these factors that intervention plans are drawn. The findings are as in Figure 4.6;

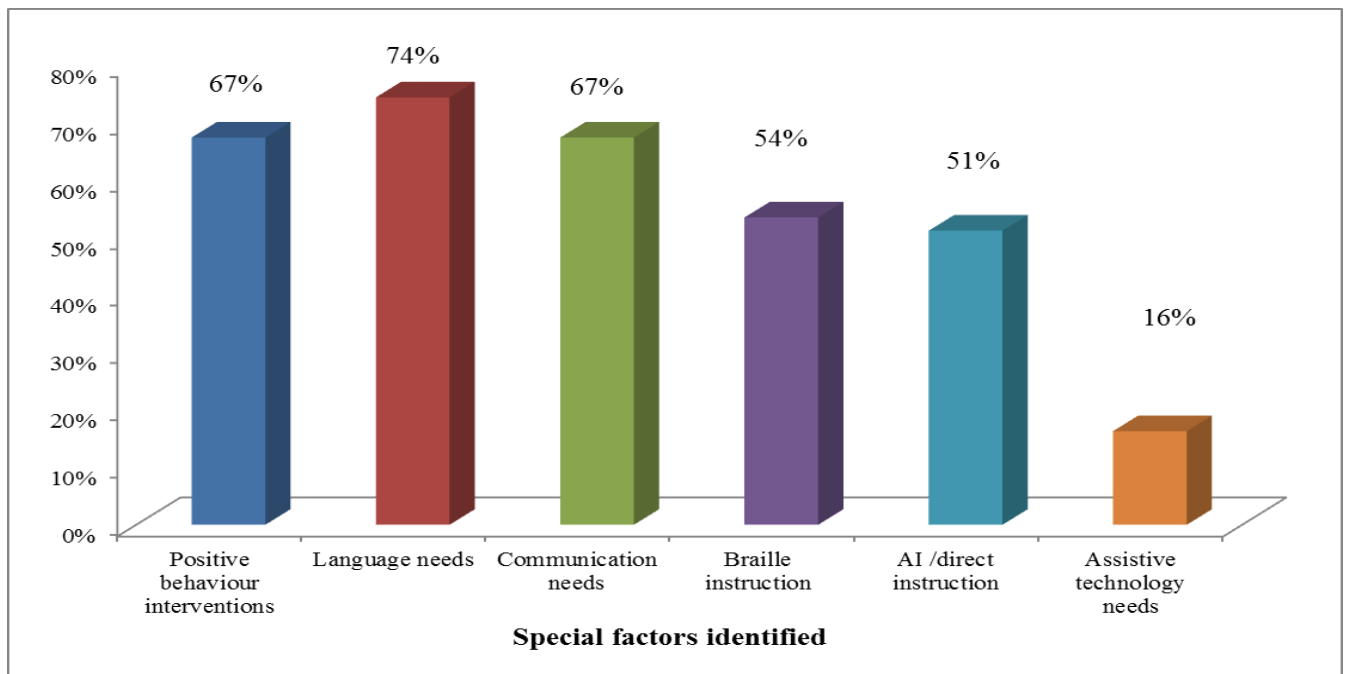


Figure 4.6. Learners ‘Special Factors Identified (N=54)

From Figure 4.6 majority of the IEPs identified the following needs:40(74%) language needs, 36(67%) positive behavior and communication needs, 29(54%) Braille instruction, 28(51%) direct instruction and 8(16%) assistive technology. The findings indicated that IEPs captured special needs of learners. The small percentage of IEPs that captured assistive technology may imply that most teachers did not have knowledge in that area.

The above findings concurred with Poponi (2009) observations. He observed that the areas that were not given preeminence in training were always given little attention in their implementation. This may explain the reasons for the very low scores in documentation of assistive technological devices in all IEPs. Herbster (2015) highlighted the qualities of an IEP statement for deaf blind as that which captured the following; access to information, social needs, communication, behavior needs, orientation and mobility, related and supplementary services as well as the transition plan. The tool does not have some of these mentioned parts like

orientation and mobility, which is important. Access to information is fundamental for this group of learners and thus, should have been considered separately from communication.

Salle, Roach and McGrath (2013) noted that the components of the tool largely depended on the goals to be formulated. Thus, academic goals were more likely to include sufficient information about links to the curriculum standards and progress monitoring strategies, but less frequently included sufficient information about students' present levels of performance and the relevance of IEP goals to the students' educational needs. The statements in this study, focused on academic issues. In fact, if it were thoroughly followed, the special factors identified with little emphasis on assistive technology would not have supported the child's development of function abilities.

4.3.3.4. Services Recommended

A quality tool should specify the services that have been recommended which must be related to the factors identified. The recommended services are as in Figure 4.7.

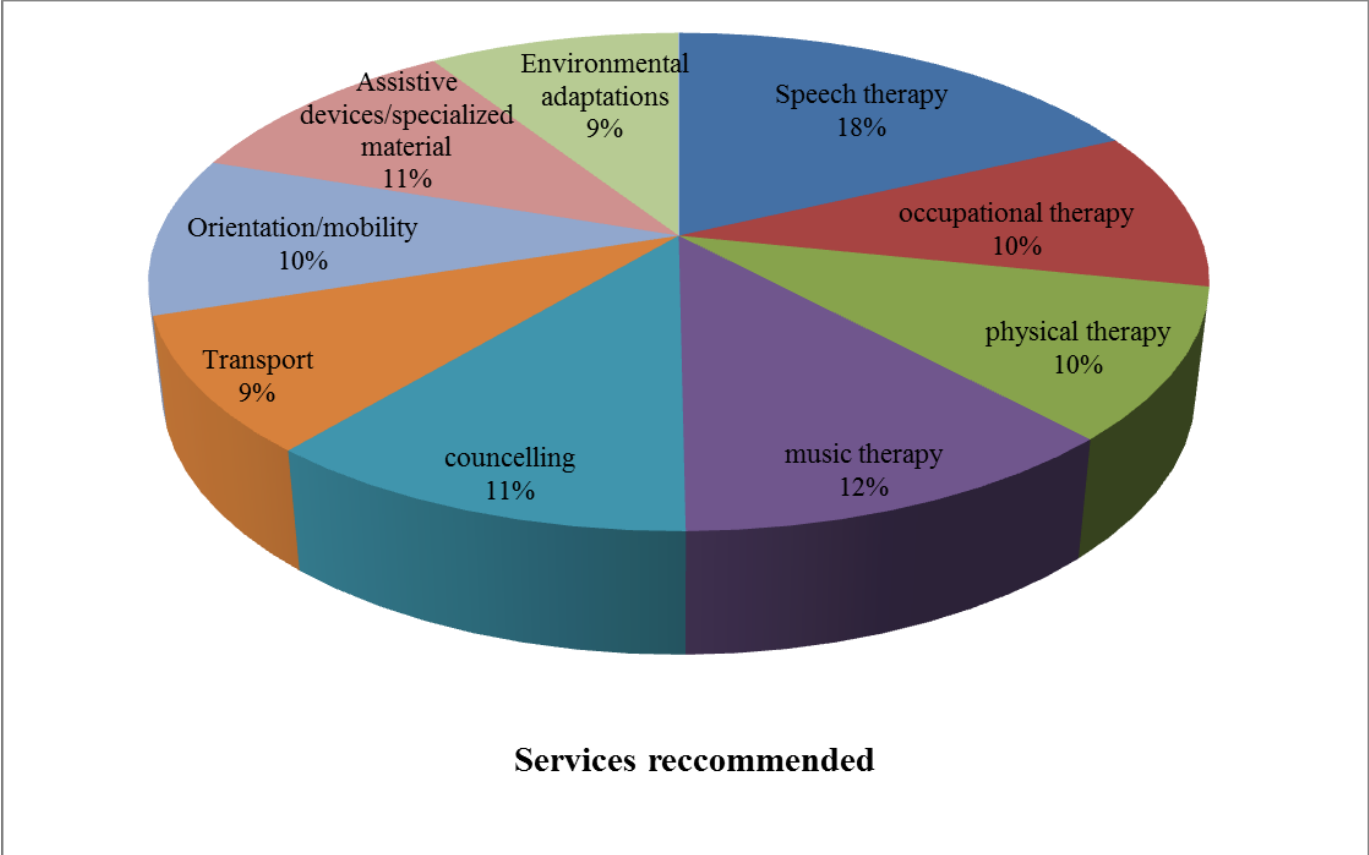


Figure 4.7 Services Recommended (N=54)

Most IEPs did not have recommendation for related services. From Figure 4.7 the highest documentations that revealed the presence of related services were in 10 (18%) IEPs. The services that were documented were; Music therapy 7(12%), assistive technology, counseling 6(11%) each, occupational therapy, orientation and mobility 5(10%) each, transport and environmental adaptation 4 (9%).

These percentages for the recommended services in general were very low, and may have implied that, LWDB required very little assistive devices. Based on the identified special needs of learners (Figure 4.6), the findings may have implied that, the teachers were not conversant with the services to recommend or they could have recommended services which were not available. The absence of services may have forced them to opt for what could be offered

(Norwich, 2014). In whichever way, learners were not having access to relevant services that could facilitate independence, negating the purpose for SNE. The most highly recommended services were speech therapy and environmental adaptation. However, they did not commensurate with the identified special factors. This implied that though good work was done in identification of needs, interventions were not taken seriously.

The findings are consistent with Carter and Sisco (2011) who established that though the needs of learners were identified positively, the teachers wrote the IEPs based on what was available in the school. Thus, the IEP goals and related services depended on what could be offered and not what was the best remedy for the learners. Gregory (2015) also observed the same. He noted that goals and services to be provided were framed around what was possible within the settings of the special class and the available resources. This indicated that there was a disconnect between services offered and the assessments. Blackwell and Rossetti (2014) observed the lack of congruence between assessment practices, IEP objectives and instructional planning. Thus, for each of the identified need, there was supposed to be an objective for it and services that could facilitate the attainment of the same. He suggested the need for the tool to capture assessment and related services.

With reference to the Guthrie *et al*, (2014) who observed that a tool for the learners who are deaf blind should be specifically tailored to address the functional aspects of a learner and clearly spell out the services provided, and Salle, Roach and McGrath (2013) observation of goals, the above recommended services indicated that the IEPs were academic oriented and thus may not have favored learners who are deaf blind. Based on the characteristics of learners with deaf blindness, the tools were inadequate in addressing the complex and diversified needs of these learners.

4.3.3.5. Goals and Objectives Identified

One aspect that an IEP tool should not miss is the presence of goals and objectives. The study was to identify whether the statements had goals and objectives. The percentages for both goals and objectives in Figure 4.8 therefore represented the number of IEPs that documented them regardless of the quality. The findings are as presented in the Figure 4.8.

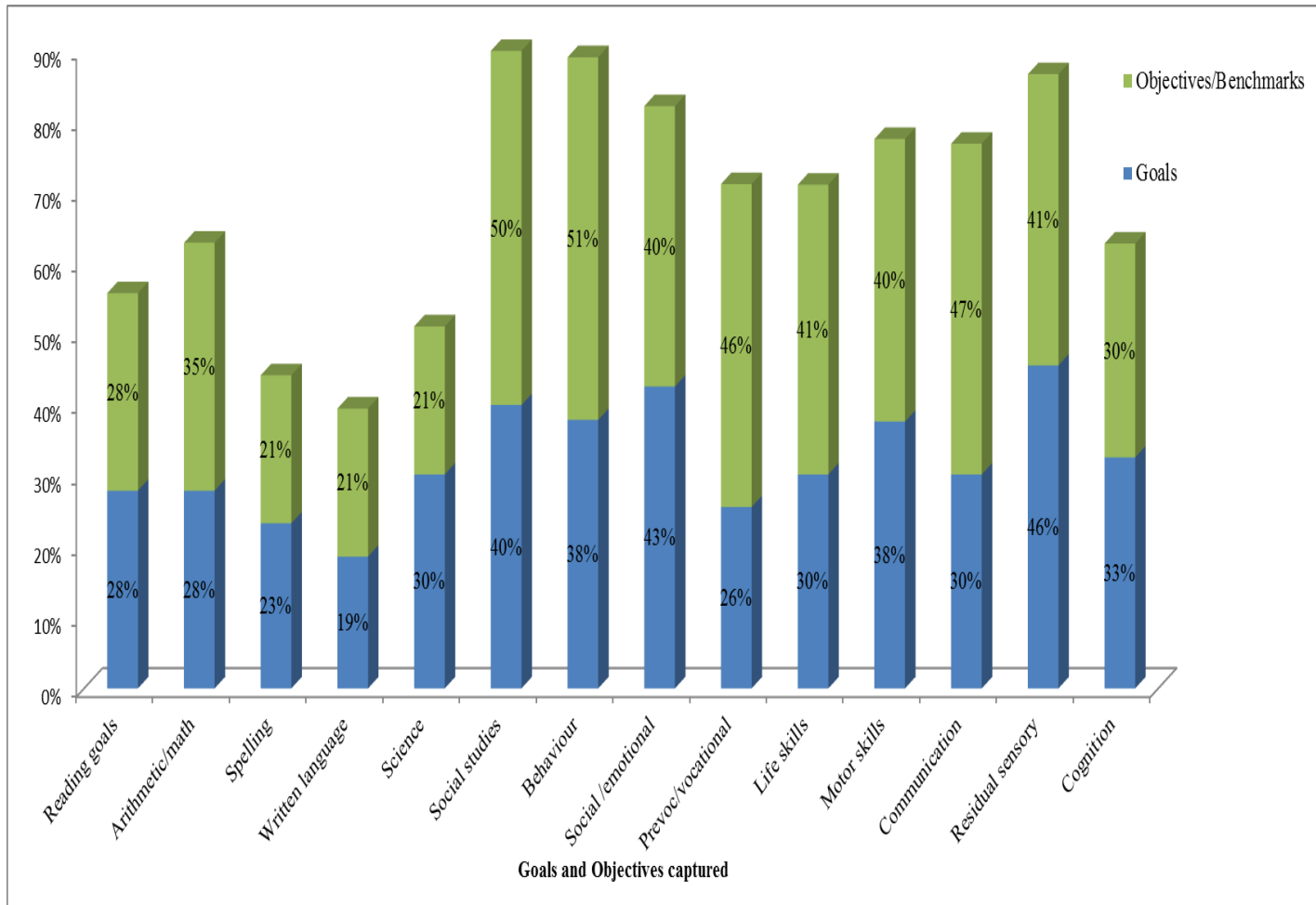


Figure 4.8 Goals and Objectives Identified (N=54)

Figure 4.8 revealed that, none of the goals formulated were captured in half of the IEPs. Only objectives on social studies 21(50%) and behavior needs 22 (51%) were present in half of the

IEPs. The goals and objectives formulated, though capturing relevant key areas that could support function abilities, were scanty. This meant that quite few IEPs had them. In fact, there were no IEPs with goals on orientation and mobility and general access to the environment. The goals and objectives were supposed to align with the identified needs of learners (Figure 4.6). In this light, the goals and objectives which were commensurate with the intervention (Figure 4.7) did not balance. There were also variations in the findings. In some cases, goals on specific areas were present though objectives were not formulated. It is expected that for any formulated goal, the percentage of formulated objectives should be equal or more than. However, in cases like written language, science and cognition, the opposite was realized.

Norwich (2014), observed that the number of IEP goals did not necessarily equate with the success of the students. Per Norwich, one quality goal was essential for quality instruction and considered relevant. Silveira-Maia *et al* (2012) also observed that the number of goals did not impact on instruction. In this study, at least IEPs had goals. It could be assumed that the few goals and objectives could guide attainment of functional abilities. In this study, several IEPs did not have goals as shall be discussed later. Considering the centrality of the contribution of goals/objectives have on directing instruction, it could be assumed that the development of functional abilities was far from being reached.

Osundwa (2013) noted that, many specialized teachers were struggling with the writing of IEPs. This may explain the discrepancy in the absence of goals/objectives in some IEPs. In fact, the researcher, identified goals that were not clear (Appendix VI). In such circumstances, then, the quality of the services offered compromised the attainment of functional ability. Sanches-Ferreire *et al* (2015) also noted the broadness of goals that could not be measured. This indicated that the qualities of the IEPs statement were compromised.

4.3.3.6. Interaction with the Non-disabled.

A good IEP statement should encourage a learner to interact with their non-disabled peers. This item wanted to capture the extent to which learners who are deaf blind were given an opportunity to interact with the non-disabled. Figure 4.8 shows the finding.

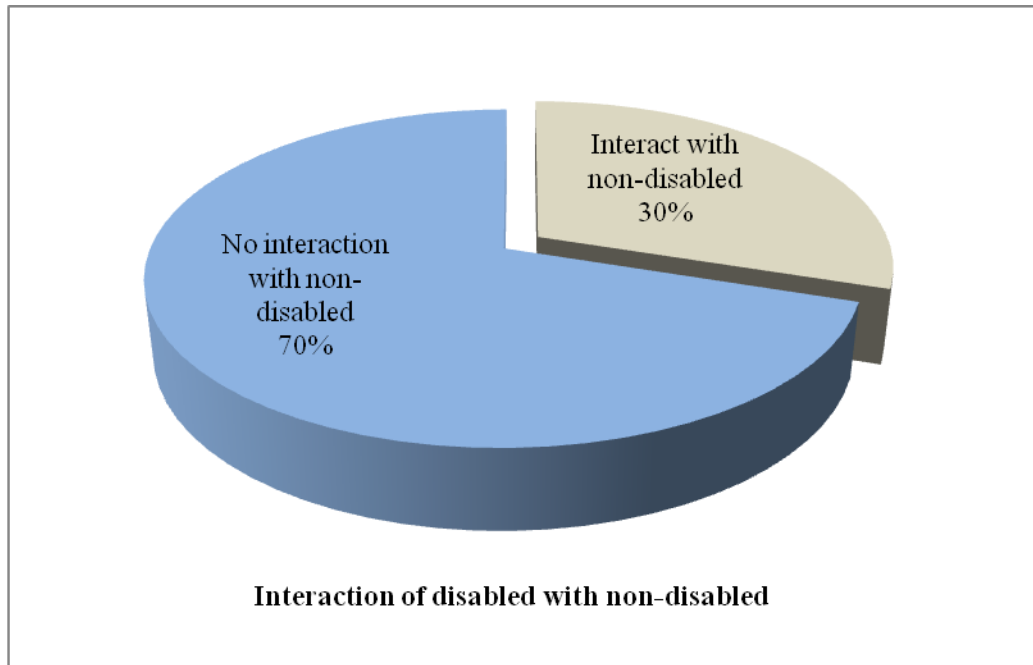


Figure 4.9 Interaction with the Non-disabled (N= 54)

From Figure 4.9, 16(30%) of the IEPs indicated that learners could interact with the non-disabled. This finding may have been influenced by the integrated program in one of the sampled institution which emphasized interaction with the non-disabled. A quality tool should capture the interaction of LWDB with the non-disabled. Interaction with non-disabled enhances the social aspect of learners who are deaf blind.

Learners need to learn with the non-disabled. However, when it is proved that these learners could not interact with non-disabled, documentation must be availed (Jones, 2016). Salle, Roach and McGrath (2013) revealed, through review of literature that learners with disabilities who had an opportunity to participate with the non-disabled showed great improvement. Though the deaf-blind disability is more complex than others due to communication, interaction with the non-disabled proved positive on both learners. He, however, noted that the improvement came along when accommodations were made.

Rotter (2014) contradicts the stated view indicating that learners with deaf blindness experienced problems in visual and auditory areas and may not attain age appropriate milestones which made them less likely to spend time with the non-disabled. In this case, interaction with the non-disabled would not have been given pre-eminence. This argument may explain the reasons leading to learners with deaf blindness being alone and isolated during break times, as observed by the researcher in her visits to the integrated institution. Break times are moments that enhance interaction but this was not being achieved in most cases. However, the fact that 76% of IEPs did not specify the interaction pointed out to the inadequacy of the tool to capture areas that could develop functional abilities.

4.3.4. Policies

The researcher wanted to find out whether there were special policies both at school and national level that guided the formulation of the IEP. The findings are presented in Figure 4.10

4.3.4.1. Presence of school policy

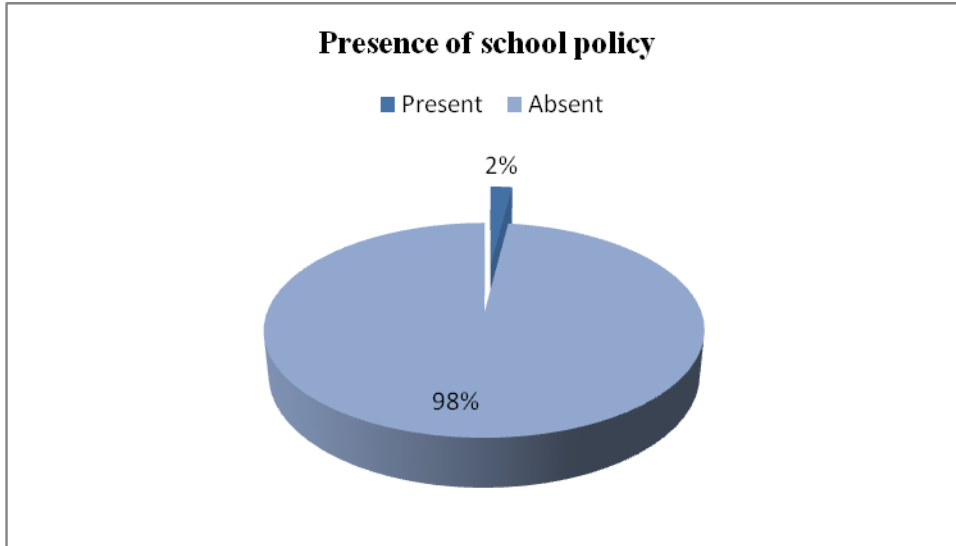


Figure 4.10 Presence of School Policy(N=54)

From Figure 4.10, majority 52(98%) stated that there was no school policy on assessment, formulation, implementation and IEP in general. Only 1(2%) stated that there was a school policy. This clearly indicate that, there were no policies whatsoever on IEP. It may also imply that, in case they were present, they had not been effectively communicated to the members. Since the other questions that were mainly pegged on the presence of the policy were not answered by anybody, then it was assumed that there were no policies both at national, regional and school level that would have guided the formulation and implementation of the IEP.

Figure 4.10 agrees with Mwangi (2013) who observed that there was need to develop school policies in SEN programs that would enforce provision of services in Kenya. She further added that the current SNE policy in Kenya against practices in schools and international conventions, needed to be refocused on issues and standards other than enrolment. The observation depicted the real situation on SNE. There were no specific policies that addressed key issues that could enhance accountability in service provision in Kenya. Policies emphasize accountability and

improve outcomes as well as aligning services to the intents of education (McIntyre, 2013). Matz (2014) further stated that ‘...experience has shown us, in education, what gets measured gets taught’. This statement reflects a scenario whereby without accountability, services would not be provided as expected. In fact, what Kenya needs is a system of accountability in the whole process of SNE and not only at summative evaluation which stresses on cognitive development and targets other groups of disabilities excluding deaf blindness. The affective domain which favors the development of functional abilities needs prioritized.

Kiarie (2014) noted that, unlike USA which was handling issues to do with the quality of services and how to improve special needs education, Kenya was still battling issues of access to the learning and physical environmental which could be captured best and emphasized by a policy. In fact, the first policy framework for SNE was developed in 2009 but it lacked several details. Kenya is expected to establish a strong policy base which will serve as a monitoring tool before it starts considering provisions of SNE in conformity with the international policy.

4.4. Role Played by Different Personnel in IEP Formulation and Implementation

In this objective, the researcher wanted to establish the presence of collaboration by various personnel in formulating and implementing the IEP. Deaf blindness is complex. To provide relevant services, the input of various personnel was required. The findings are presented as follows:

4.4.1 Role Played by Teachers

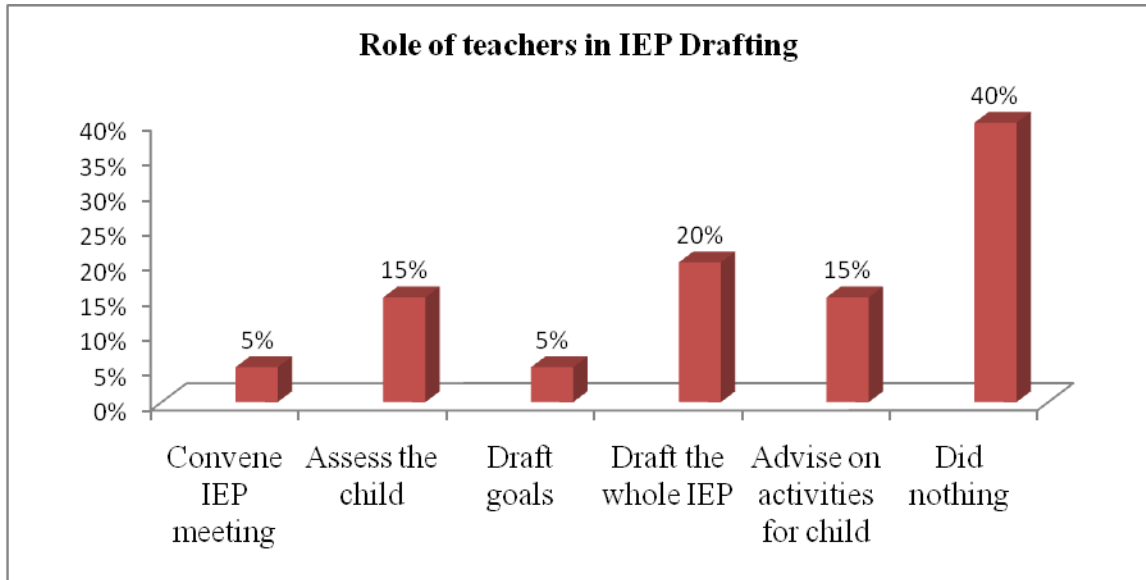


Figure 4.11, The Role Played by Teachers in IEP Drafting(N= 54)

Figure 4.11 indicate that 21(40%) of the teachers did not play any role in drafting the IEP. Eleven 11(20%) indicated that they drafted the whole IEP alone while a very small percentage 3(5%) convened an IEP meeting and drafted IEP goals. The high percentage of teachers who stated that they did nothing raised concern. Who wrote IEPs for them? This might be an explanation of lack of current IEPs. It also may have implied that an IEP meeting was conveyed whereby they were not involved, or goals were not formulated from the assessed children, or statements were written and they were given the drafted IEPs to implement. Either way, the state of dormancy in a high percentage of teachers indicated theoretically that a gap at the drafting stage was created. The percentage of teachers that were involved in assessment of the learners and were not involved in the drafting of goals also indicated that the drafting of IEPs were

questionable. This implied that either they submitted the assessed reports to the committee or they assessed for their own purposes of drafting the IEP. The roles depicted above however, showed that, most of the activities about IEP were done by teachers.

The researcher further probed into the specific roles played by teachers as they gathered as a group to draft the IEP. Only sixteen teachers had participated in the drafting of IEPs. Thus, the five teachers who convened an IEP meeting and those who indicated that they assessed learners were interviewed. The findings are as indicated in Table 4.5.

Table 4.5 Specific Roles of Teachers’ in IEP Drafting (N=16)

Role	Frequency	Percentage
Shared Ideas with colleagues	12	75%
Sat in the committee that drafted the IEP	9	56%
Did assessment for learners	16	100%

From Table 4.5 revealed that teachers 12 (75%) assisted one another in drafting the IEPs especially when one was unable to continue. Nine (56%) sat in IEP meetings that were formed by the head of institution to draft IEPs for the whole school and gave their contribution mainly on the interventions that had to be taken. All teachers stated that they assessed students to come up with IEPs individually or as a group. The amplification of these results was that, teachers viewed any group meeting that discussed an IEP as a meeting. Thus, there may have been no official communication of an IEP meeting. This explained the response that they assisted colleagues who were unable to draft an IEP and that they assessed learners for individual or group purposes. As the researcher collected the data, elements of IEP group meetings were

observed in one institution only. The findings clearly imply that whether in a group or as individuals, the responsibility of drafting IEPs rested on teachers.

Some of the teachers, who responded that they did nothing in the drafting of the IEP, viewed the IEP as a document for administrative purposes. In fact, some stated that they did not play any role in both drafting and implementation of the statement. They also did not receive guidance from any personnel. This is reflected in the sampled statements of respondent 3 and 17 below.

Responded 3

‘...I use my teaching practice IEP. I duplicate it. I have seen there is no need of teaching using an IEP...*hiyo ni kujitetea* (meaning, that is self-defense)’

Responded 17

‘...Who has the time to draft IEPs for another? You as an individual either have it for yourself and save your job or wait for somebody else to do it for you and have trouble with the administration.’

The use of a teaching practice IEP was a serious revelation that needed not only to be considered but taken for legal action. In this case, the following concerns were raised. Was the learner the same during and after teaching practice? Even if he/she was the same, were the needs of the learner still the same for the years the IEP was used? Responded 17 revealed that there were no IEP meetings. Such inconsistencies could be an indication that there lacked emphasis on IEPs. Most of the IEPs used had been drafted during previous years. An interaction with the teachers revealed that the IEPs had never been assessed nor evaluated since the inception of special education programs. This issue raised concern over the importance attached to the IEPs.

The findings in Figure 4.11 and Table 2.5 however, supported those of several authors. Smith (2013) observed that IEPs were written by individual teachers. They only consulted where they

felt necessary. As earlier discusses in 4.2.3 and 4.3.1, it was detrimental to learners when IEP were written by teachers even with the view that they could consult. Responded 17 clearly revealed that they had no time for that. This implied that the teachers would never find it necessary to consult which adversely affected both the drafting and implementation of the IEP hence impeding the development of functional abilities.

Price (2014) observed that, though meetings were called by educators who were mostly administrators, the writing of the IEP was done by teachers. All decisions were made by them. Gregory (2015) noted that teachers only sent IEPs to parents to sign at home and implement them. In this case, the whole process of assessment and goal setting was done by teachers. This was clearly reflected in Figure 4.11. Though five percent of the responded convened a meeting, fifteen percent had assessed the learners and advised on activities that were used as intervention. This was a small percentage, however, if the same trend could have continued in teachers who responded that they did nothing, the above picture by the two authors would have been reflected. The roles played by teachers in writing of IEP could be viewed in relation to the importance attached to it.

The findings also support those by Andreasson (2013) who observed that IEPs were being written for purposes of administration since they were required as academic documents. The same views were shared by Kahtani (2015). This was consistent with responded 17 who clearly did not want to have any conflict with the administration. He had an IEP solely to satisfy the administration. This implied that the IEP was not developed for purposes of assisting the learner achieve their potential. If this attitude was present in teachers, it did not matter whether they had qualification, skills or knowledge. The quality of the IEPs they produced were compromised. It also implied that the IEP was not used for teaching as captured by Rotter (2014) who observed

that teachers did not stress on the use of IEPs. Many had kept them. If teachers realized the importance of IEPs, they would not handle them as a protective tool required by authorities.

Salle *et al* (2013) observed that, though teachers did not read the IEP statements they had been given to implement, they taught without them and yet there was no impact on the actual instruction. Teachers of learners who were Deaf-blind in Kenyan institutions may have emulated the above view. The contradiction was that the same teachers', who took the central role in the implementation of IEP, did not even have schemes of work. The concern here is, what guided their instruction? This result exposed a lapse in the services offered to the children with deaf blindness which needs to be urgently addressed.

In their review of literature, Blackwell and Rossetti (2014) noted that teachers were struggling with the basic of writing an IEP in terms of procedural and substantive components. The findings had earlier revealed that most teachers did not have any training in writing of IEPs. This may explain why a high percentage 40% stated that they did nothing in the drafting of IEPs. If teachers do nothing in the drafting stage of an IEP, then it becomes hard for them to implement and evaluate the same. The role therefore they play in the drafting would not positively address the functional needs of learners.

4.4.2. Role Played by Teachers in the Implementation of the IEPs.

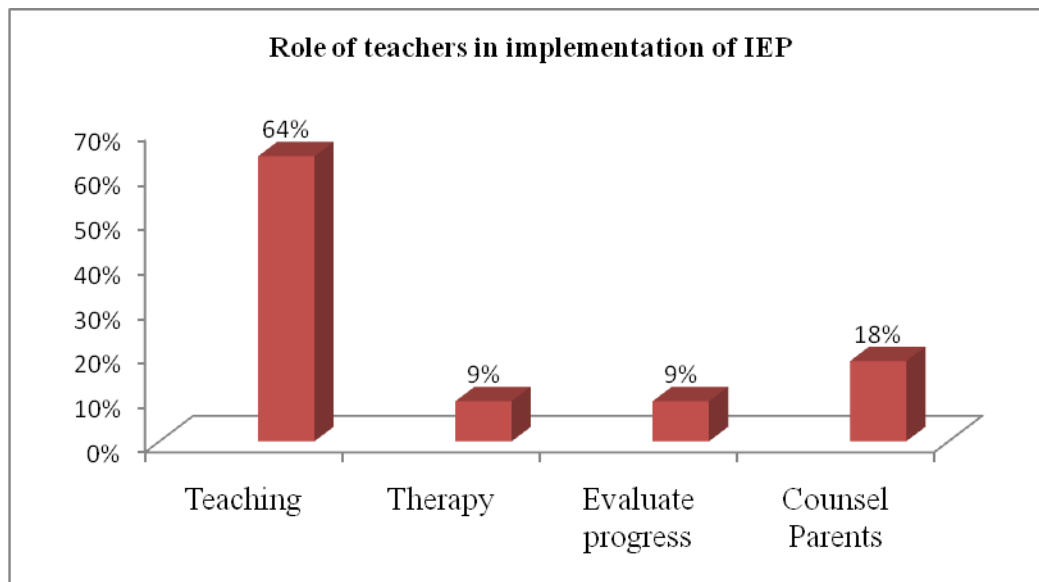


Figure 4.12. The role of teachers in implementing IEP (N=54)

In the implementation of the IEP, from 12, 34(64%) of the teachers taught. Ten (18%) offered counselling to parents, while only 5(9%) offered therapeutic services and evaluated the program.

Therapy could contribute positively to attaining functional abilities. However, the percentage was too low. Actually, very few activities that could enhance functional abilities of learners were being done. It is clear that learners who are deaf blind may not benefit much in academics. If they had to benefit from any program, then related services had to be an aspect that could not be ignored. Vital services like orientation and mobility were not being done. The finding could also imply that the services mentioned in Figure 4.7 and the learners' factors identified in figure 4.6 were being addressed through teaching.

The finding clearly indicated that teachers were struggling with roles that were not clearly defined. This finding concurred with Masha (2013) who noted that teachers were struggling with trial and error teaching learners who were deaf blind. His solution to that problem was the

provision of a curriculum. A curriculum alone does not offer a solution to learners with varied needs that were addressed by different personnel. This may be the reason for omission of vital services for the deafblind. As earlier discussed, Giangreco, Broer and Sutter (2011) further noted the role conflict between educators and therapists. No single personnel may take on the responsibility that they presume should be done by another.

Salle, Roach and McGrath (2013) observed that implementation challenges were pegged on poorly constructed goals. If teachers did not have well formulated goals that had the specific behaviours, action to be taken and evaluation procedures defined, then they would have very little activities done except teaching using a standard IEP that addresses learning disabilities. This would never support function abilities in learners who are deaf blind. Since the purpose for the IEP was to meet learners' needs, they needed to identify specific needs, merge them with the appropriate personnel that would provide relevant services and define their role in that case. Ferreira *et al* (2013) noted that lack of proper identification of learners' needs impacted not only on the setting of quality goals but also on their implementation.

4.4.3. Presence of Paraprofessional Personnel during Teachers Implementation of IEP

The study sought to establish the presence of paraprofessionals apart from teachers who were involved. It centered on finding out whether they were available during implementation, who exactly were available and finally the exact role they played in assisting teachers. The findings are presented as follows;

4.4.3.1. Availability of Paraprofessional Personnel

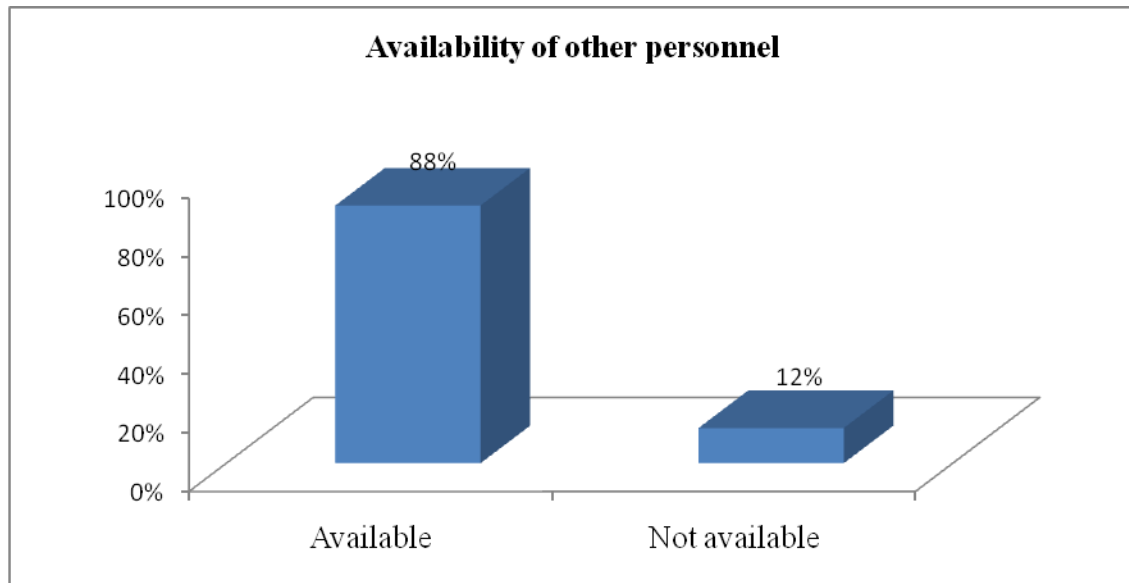


Figure 4.13. Availability of Paraprofessional personnel (N=54)

From Figure 4.13 the study established that 48(88%) of the teachers had contact with other personnel during the implementation of the IEP. This implied that, teachers did not implement the IEP alone. However, 12% of the teachers', who did not meet other personnel, was not a negligible figure. The fact that some respondents were working alone in implementing the IEP signifies the kind of services these learners were receiving, which may not have been exhaustive. This may explain the reason for retention of mature students in the units. It could be assumed that anything they were attaining was because of maturation and not education which could be achieved even at home.

The findings agree with Vuohelainen (2014) who emphasized the importance of collaboration especially in a multidisciplinary or Trans disciplinary intervention. It did not matter whether personnel available worked or assisted teachers at the same time. Jones (2016) noted that, what

improved performance were the observations by other personnel which were shared and guided the way forward for a learner.

Heeden, Moses and Peter (2015) supported the above views. They established a continuum of collaboration which included information provision, involvement directly, engaging and leading both IEP writing and implementation efforts. These may be done at any time and not necessarily coming together as a team to sit and deliberate on the implementation. Norwich (2014) further added that teacher relationships with the parents and community agencies had a great impact on overall outcome for learners. The presence of these other personnel would thus encourage functional support development. The suggested IEP (Appendix VII) takes on this approach.

4.4.3.2. The Nature of Personnel that aided the Implementation of IEP

In this item, the researcher wanted to answer the question, who are these personnel that aided? The nature of personnel involved would point to the importance of assistance the LWDB received and whether it was relevant to attaining functional abilities. The results are as below

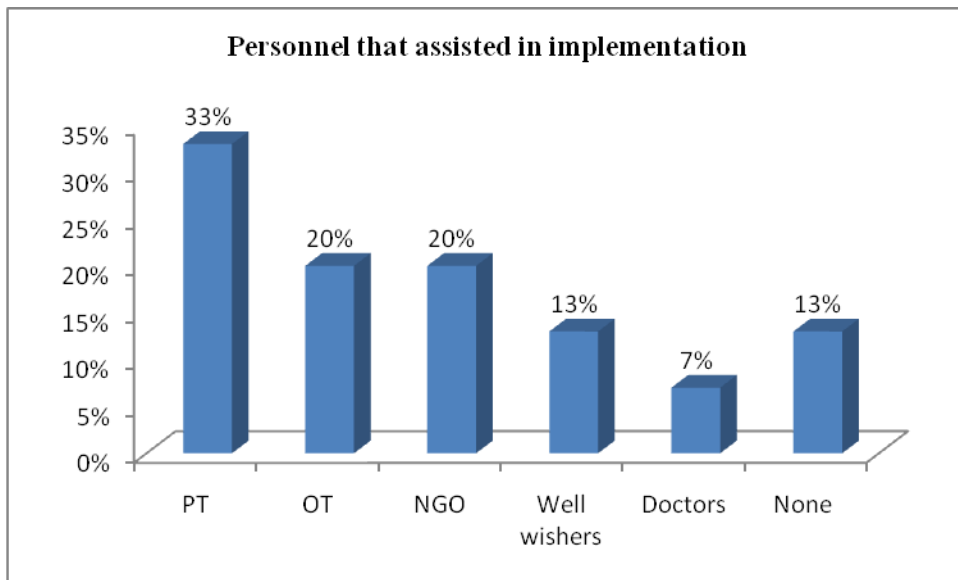


Figure 4.14. The Personnel that aided in the Implementation of IEP (N=54)

From Figure 4.14 the study revealed that 17(33%)of the personnel that offered the most assistance were physiotherapists (PT). 11(20%) were occupational therapists (OT)while 7(13%)were personnel working with varied NGOs. Other personnel who assisted in the implementation of the IEP were doctors and well wishers. the doctors in this case were stationed in hospitals and treated the learners just as they could any other sick patient. In fact, mostof the personnel mentioned, could not offer meaningful assistance. It was only the physiotherapists (PT) and occupational therapists (OT) that could assist or offer related services. An interaction with the management of the institutions revealed that, the assistance received from non governmental organisation (NGO) who were ranked second in provision of services, offered material support in terms of food and, to some extent, money for projects. Moreover 13% of respondents noted that they did not receive any assistance from those personnel they came across. This is a high percentage that could easily indicate the nature of services provided,in that,they may have targetted the administration and not the actual implementors.

This results are in agreement with Herbster (2015) who noted that, not all related service providers provided relevant services. Specifically, they noted that most services do not match the definition of related services, do not coincide with exemplary practices for educating students with disabilities in general special education and finally they do not adequately support students in their education. Going by their review of empirical literature on the roles of related services, it still needed to be evaluated whether the PT and OT provided the services required for the learners with deaf blindness. The author findings were quite revealing. The fact that OT and PT were present did not imply that they offered relevant services. This then raises concern especially when the percentages on the presence of this personnel was low. While working in these

institutions, the researcher observed that this therapist were employed by the school and had issues with non payment which impacted on the motivation for performing their duty.

Rowland, Stillman and Mar (2010) further complicated the situation. They observed that the complexity of the needs of this group of learners required more of the services of orientation and mobility (OM) specialist and language and communication (SP) specialists than PT and OT. This specialists are rare in the nation. This also clearly casted doubt on the relevance of the services that were being offered. LWDB would have achieved more with specialist attainment of the OM and SP who were not mentioned.

Infact, the needs of the learners as identified in Figure 4.6 and the recommended services as shown in Figure 4.7 indicated that the presence of speech therapists would have been beneficial to the learners functioning. At the drafting of the IEP as indicated in the results reported in Figure 4.3, there was no mention of the presence of PT and OT. There absence at drafting stage where goals are set and services indicated does not support the achievement of function ability in learners especially when appeared at the implementation stage alone. If the speech therapist participated in the drafting of the IEP, it would be implied that he could be present at implementation stage. The opposite was realised instead. This further raised concern over the validity of the IEP document.

Boavida, Tania, McWilliam, Cecilia,Pimentel and Serpa(2010) observed that, for one to construct meaningful IEPs, they must start at the drafting stage by including members with expertise in a students suspected area of need. They further highlight four main questions which must be sequentially addressed for the whole process of IEP implementation to be complete thus; what are the students unique needs that must be considered in developing an instructional program, what measurable goals will enable the student to achieve meaningful education, what

services will be provided to address these identified needs and finally, how will you evaluate the achievement. This was not only in line with the theoretical approach to this study but would have been a guide to the choice of personnel that could have offered services.

Giangreco, Broer and Suter (2011) further observed that, various roles of related services overlapped. They reason out that, a personnel in this case would have perform dual services depending on the expertise and the nature of training. This could be well suited to developing countries which experience shortage of personnel and may never realise the ideal situation as is the case in developed countries. Since teachers were the main drafters of the statements for learners as well as implementors, their training was supposed to equip them to perform the role of paraprofessionals to address the specific needs of learners. In such situation, then, the teachers were supposed to be retrained to assume almost all roles which was not the case. This clearly depicted a scenario that the needs of learners that required related services were not being addressed.

The above findings did not include the contribution made by parents. Reiman, Beck, Coppola and Engiles (2010) noted that parents contributed to issues related to the child's placement, discipline, instruction and should be involved in drafting of IEP goals and objectives. (Rotter, 2014) noted that the involvement of parents led to improved outcome of the child. In this study however, parents take a silent role in the education of their children apart from primary care.

4.4.4. Role Played by Personnel Implementing IEP

The study further established the specific support that the identified personnel contributed in the implementation of the IEPs. Teachers were asked to state the kind of assistance they received from each personnel. The results are presented as follows;

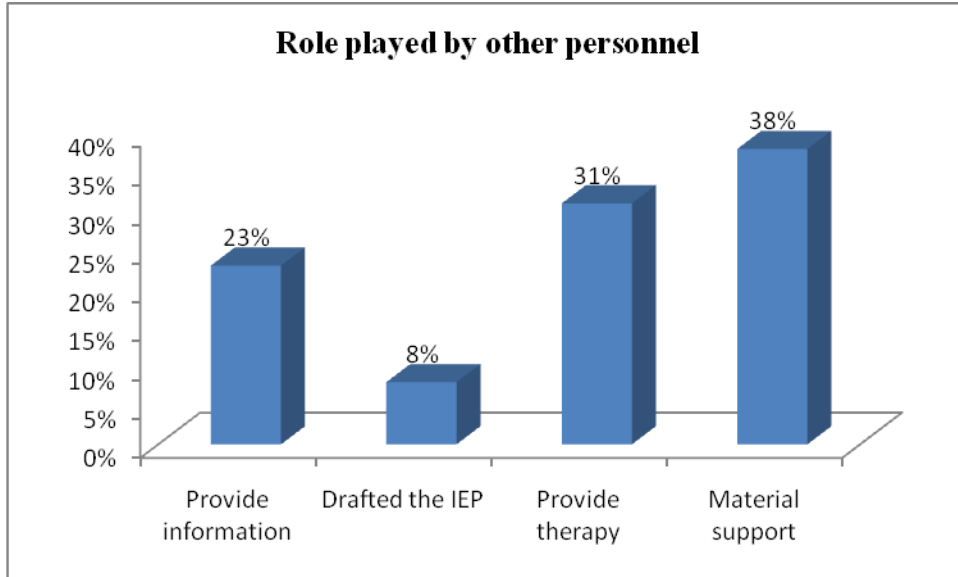


Figure 4.15 Role Played by other Personnel in IEP Writing and Implementation (N=54)

From Figure 4.15 it is clear that, the greatest 19(38%) assistance received from other personnel was in form of material support. Material support can play a major role when it comes to functional support depending on the nature of the materials. Materials in terms of assistive devices were very necessary. However field observation indicated that the support was in terms of food and buildings. Sixteen (31%) of the support received was in terms of therapy. In this case, the physio and occupational therapists offered their services direct to the learners. Twelve (23%) provided teachers with the relevant information that they needed while 4(8%) assisted in the drafting of the IEP.

The findings were not in agreement with Kennedy and Steward (2011) who noted that paraprofessionals, specifically therapists had important roles they played which had positive effects for overall intervention of students with multiple disabilities. They established that the

therapists collaborated with teachers in order to: identify goals for learners, design and evaluate intervention, participate in IEP meeting and review progress of learners. They observed a disconnect between ideal and actual service delivery. Though Figure 4.15 indicated that some of these services were being offered, there was no collaboration with the teachers. The above authors observed that collaboration enhanced students progress and professional development for both teachers and therapists. The percentage of teacher who were receiving guidance by therapists was also very low. Pairing in mind that the teacher learner ratio was one on one, it implied that a very small percentage were receiving services that could contribute to their independent functioning.

Missiuna *et al* (2012) in their model highlight the role of therapists as: providing knowledge to both parents and teachers. They highlighted the main role of therapists as designing educational materials and methods that could enable teachers attain learning goals of learners. This aspect is very key. Teachers would rely on this professionals so that their work was made easy. However, the support received thus material in nature could not have contributed to attaining functional abilities.

The researcher also interviewed teachers with regard to the assistance they received from the medical personnel thus the PT, OT and doctors/Nurse. The findings are as in Table 4.6.

Table 4.6 Type of Assistance Received from Medical Personnel (N=18)

S/NO	Type of Assistance	Frequency	Percentage frequency
1	Therapy	6	33.30%
2	Treating students	3	16.70%
3	No Assistance	9	50%
4	Total	18	100%

Table 4.6 indicated that the kind of help received by teachers from paraprofessionals was inform of therapeutic services 6(33.3%) and direct treatment of learners 3(16.7%). A total of 9(50%) teachers received no form of help. From their statements, it was clear that the nurse, who had been employed on full time basis in one instutution, treated the students as a physician. She did not have any role in implementing the IEP. The occupational therapist in the same institution evaluated the learners individually. When the timetable indicated therapy, the learners were released to the therapist.. He handled learners alone without any assistance. One institution had a speech therapist who could visit and train the students on a peripatetic arrangement. In other situations, the teachers had to perform therapy by themselves.

Figure 4.15 is in agreement with Carter and Sisco (2011) who established in their study that the education of students with special needs especially multiple disabilities required the presence of paraprofessionals. Their role included; one on one direct support, personal care, literacy instruction, social skills instruction, community based instruction and clerical and non instructional support. This was clearly observed in that the few paraprofessionals present offered their services. Kennedy and Steward (2013) however, observed that collaboration with defined and clear roles had to be spelt out for any achievements to be made. Thus the presence of various personnel performing certain activities related to the child could not attain the set goals. In this study, the therapist performed their duties independently. Functional support would have been best achieved if they had liased with the teachers and discused on several courses of action.

Fisher and Pleasant (2012) noted that in most cases the roles of paraprofessionals always overlapped and caused role conflict. This conflict led to each professional undermining their counterpart. Giangreco *et at* (2011) suggested a model that could be used to avoid over reliance

on para professionals who when caught in role conflict, compromises service delivery. There suggestion that, specific personnel, especially teachers of learners with SNE be trained in specific roles for deafblind, could eliminate the conflict and reduce the cost implication for SNE. Thus, teachers to be trained to provide the needed services. This could bridge the gap in cases of Kenya whereby personnel shortage was acute. The training of SNE personnel therefore needed to be restructured to capture extra roles.

4.5. Quality of IEP goals in supporting the development of function abilities in learners who are deaf blind

The purpose of this objective was to establish the needs of learners that could not be addressed by regular education that were catered for in the IEPs. This was done by analyzing the quality of the goals in capturing these needs. These special needs when addressed enhance the functional components of these learners. To capture this objective the researcher investigated the quality of the IEP goals, the aspects of functioning included in the IEP goals and finally whether the IEP goals addressed life skills. The data captured for these purposes included a thorough evaluation of goals, objectives and benchmarks in the IEPs. Below are the findings.

4.5.1.Aspects of Functioning Included in IEP goals

To capture the areas of special needs addressed by IEPs, the international classification of functioning disability and health version for youth and children was used. The findings are as indicated in the Figure 4.16.

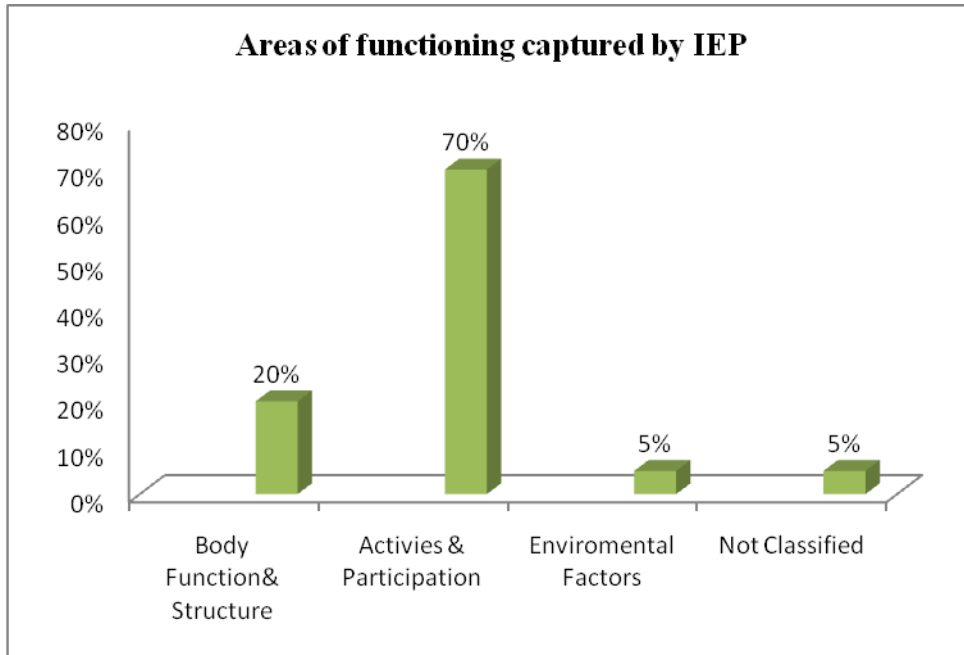


Figure 4.16. Areas of Functioning Captured by IEP (N=54)

From Figure 4.16, thirty eight (70%) of the IEP goals/objectives/benchmarks were centered on the activities and participation of learners. Activities in this case refer to goals that required a learner to execute some form of tasks or action while participation referred to the involvement in a life situation. In fact, most of the goals/objectives/benchmarks concentrated on tasks. A small percentage 11 (20%) concentrated on body function and structure which deals with basic human senses/ functioning including psychological functioning and the anatomical structures.

Figure 4.16 indicated that the goals formulated targeted only one area of learner's life at the expense of others. Though skills were quite necessary for one to function in the environment, they did not exist in isolation. Therefore, learners who were deaf-blindness needed to be exposed to the knowledge about their body structure and functioning.

Several authors tended to differ with the practice of over emphasizing activities and practice in isolation. Adolfsson (2011) stated that, the environmental aspect was necessary for the

functioning of the child and needed to be considered. This was because, it added information about how the context in which the skill was being performed, affected the general learners functioning for proper interventions to be made. Silveira-Maia (2012) had observed that, the environmental factor was not considered in most IEPs. This meant that the goals that were formulated considered not the context in which the skills were to be executed. In this case, the interventions focused on students' skills and capacities without considering the environment in which the student was embedded. This kind of intervention restricted performance and participation resulting in learners not achieving function ability. A key area of content for learners who are deaf blind was orientation and mobility (Larsen and Damen, 2014). Without addressing, areas such as environmental factors, the functionality of learners would have been impeded, thereby limiting independence.

Silveira-Maia *et al* (2012) observed that goals with more environmental factors impacted positively to learners' abilities to function. They specifically noted that goals that incorporated peers and parental support had great influence on learner's achievement. Humphrey *et al* (2013) further observed that, some environmental influences on learners functioning were ecological systems. This included: micro system which involved parents and siblings, ecosystem involving peers and school, ecosystems involving the community connection and the macro system which refers to cultural influences. They stated that they interacted to influence children's outcome. In this case, the goals had to be tailored to embrace the ecological influences for them to achieve the functional support needed. As discussed earlier the interaction of these learners were limited since they were not offered an opportunity to interact with the non-disabled.

To address the areas of need for learners with deaf blindness in totality, teachers had to employ the use of ICF components (Ferreira *et al*, 2013). The ICF component would assist in wholesome

evaluation of learners' needs and guide the drafters of goals in addressing each need specifically. This would require training of teachers to familiarize with the areas of need as per the classification. This would also assist them to know exactly what kind of skills are needed so that they would avoid ambiguity in the setting of learners' goals.

4.5.2. Quality of Written IEP Goals

The quality of the written IEPs points to the quality of the direction they give, for the purposes of its implementation. Gregory (2015) observed that, documents illustrated the extent of hegemonic discourses that controlled the IEP process. They are pivotal to shaping teachers' actions and perceptions. Observation of documented IEPs would therefore reveal the importance attached to addressing the special needs of learners. This item was to establish whether the goals addressed the needs of the learners.

The quality of the written goals was therefore analyzed (refer to 3.5.1.2). There were four areas that were evaluated that indicated the quality of the IEP goals. These areas were: whether the stated goals could be measured, whether they enhanced function ability, the generality of the goals, and finally whether they captured the instructional context. The goals or objectives or benchmarks that were evaluated were 115, derived from the 54 IEPs that were availed regardless of when they were written, so long as they were being used. The findings are as presented in Table 4.7.

Table 4.7 Percentage of Goals Rated Positively on R-GORI Quality Indicator (N=115)

Dimension	Indicator	Freq	Percentage
Measurability	1. Target behavior has beginning and end and can be seen/heard	11	9.6%
	2. Inclusion of performance criteria	9	8.05%
	3. The performance can be counted and measured	1	3.48%
Functionality	4. The child needs the target behavior to participate in all/most daily activities	68	58.82%
	5. The child needs the target behavior to complete all/most daily activities	54	47.06%
Generality	6. The skill represents a general concept or class of responses	41	35.29%
	7. The skill is generalized across a variety of setting materials and/or people	34	29.41%
Instructional context	8. The skill be taught across daily activities	47	41.18%
	9. The target behavior be taught/addressed by various team members	27	23.53%

From Table 4.7, the findings on measurability indicated that, almost all goals/objectives/benchmarks could not be measured. Thus, the behaviors could neither be observed nor measured. This is pointed out by indicator 3 which showed that only 1(3.4%) of the goals or objectives or benchmarks could be counted and measured. Measurability in this case meant that a criterion was not used that could determine the success of the intervention. The goals could not help identify whether the learner was achieving the intended improvement. Goals

or objectives or benchmarks analyzed scored too low in all components of measurability. This implied that the formulated goals were ambiguous since they could not be evaluated to establish their success rate. When goals are ambiguous, it automatically follows that the implementation of the same is affected. This in turn affects the outcome, which, in this case was attaining functional abilities.

Generality scored highly. Generality meant that the goal/skill represented a general concept or a class of behaviors that were not specific to an item or setting. Generality implied that the goals were too general hence an indication of vague goals with general outcomes. Generality and instructional context scored within the same range. Instructional context referred to whether the goals could be frequently targeted across daily activities. Scoring low on instructional context meant that the goal (skill) could not provide multiple and varied learning opportunities to teach the behavior during common or everyday situations.

The findings in Table 4.6 agreed with Bateman (2011) and Ferreira *et al* (2014) observations. Bateman (2011) specifically noted that teachers found it hard to determine the behaviors to measure or include in the IEP which resulted in their writing broad goals that were vague. These behaviors represented the areas of learners that required intervention. General, vague goals implied that the identification of the needs of learners that needed to be addressed were not effectively done. Thus, they were not addressed. Rotter (2014) noted that, the goals needed to be more specific in the kind of behaviors to be measured. However, in her case, the IEP developers were quite different from the implementers. Ferreira *et al* (2014) noted that, generally, IEP goals were quite poorly developed. The above authors raised concern on formulated goals. Thus, poorly formulated goals may impede other IEP processes that could contribute to achievement of

functional support. Blackwell and Rossetti (2014) question the appropriateness of the goals to ensure instructional support and services that could enhance functioning are provided.

The findings also revealed that most IEPs concentrated on functionality. Functionality was a term related to skills that increased independence and the ability to adapt to one's environment. The goals had to capture the behaviors that learners needed to participate in daily activities. The score, however, was still low with the highest being 58.82%. It was also questionable as to whether the child still needed these behaviors to function in the current daily activities, since most of the IEPs dated 2013 and below with majority being for 2009, 2010 and 2011. This could be an indication that most teachers were inadequate in writing the IEPs as indicated by Norwich (2015) who expressed concern stating that '...without knowing where one is going, it was hard to get there...'.

Silveira-Maia (2012) observed the need to train teachers in IEP writing and using it as a functional tool in planning and implementing educational practices to improve among others its function and form which have a direct impact on the function ability of children. These views were shared by several authors (Castro *et al*, 2012, Ferreira *et al*, 2013). Castro *et al* (2012) emphasized training as an aspect of great importance. From Table 4.7, training was of great importance bearing in mind that the IEPs in this study were, to a great extent written by teachers alone without any assistance.

The quality of the IEP goals were commensurate with the special needs addressed. The purpose of the IEP was to facilitate modification to suit individual needs and to support a child attain educational goals (Bruggink, Goei and Koot, 2013). If the goals were not of required quality, then this was an indication that the needs of learners were not being adequately met. Bearing in mind the views by Gregory(2015) who emphasized the fact that, documents were aspects of

educational environment or context in which teachers work. Referring to Bloomberg and Volpe (2012), Gregory (2015) noted that they could help uncover macro-level institutional discourse which in turn informed and influenced teachers thinking and practice, it could be assumed that functional abilities in learners with deaf-blindness was not being achieved.

4.5.3. The Special Needs of Learners Identified.

The study sought to find out the exact needs of learners that were identified by teachers. The researcher interviewed teachers to verify the information documented in the IEP. The results are as shown in Table 4.8

Table 4.8. Interview Result on Special Needs of Learners Identified (N=18)

Special need	Frequency	Percentage
Communication	13	70%
Therapy	7	39%
Daily living activities	2	11%

Table 4.8 reveal that 13(70%) of the interviewed teachers cited communication as the needs of learners that they had identified. 7(39%) cited therapy while 2(11%) mentioned daily living activities. Some teachers had identified more than one need. This was captured in the table above. This finding however does not agree with findings from Figure 4.6. The documented needs revealed that, more than communication needs were identified. This implies that though the needs of learners had been documented in the IEP, a discrepancy occurred between the documented needs and what teachers new as needs of learners. This could be an indication to the fact that, not all areas of learners who are deaf blind that required evaluation was done.

The above contradiction may also have implied that, teachers were not conversant with the definition of special needs of learners. Confusion on ‘what special education needs are’ is an area that to date, has remained unsolved. Norwich (2014) describes the special education needs of learners as, those needs that require a positive focus on individually needed provisions and opportunities which promise the end of deficit categories and a learner centered focus on personal difficulties. Gregory (2015) noted that various authors had not agreed on what special needs were. The researcher established from his study that, teachers perceived special needs of learners as individual difficulties, deficits and problems in learning which were pronounced. With such misunderstandings, teachers may not have given an exhaustive list of the needs of learners that they had identified.

Gregory (2015) further classified special needs of learners as: needs shared by all learners, needs specific to every individual and finally, needs specific to certain disability groups. Rowland *et al* (2010) identified the following needs associated with deaf blindness; communication, cognition, visual, hearing, motor abilities and mobility. He further added that for the needs of a learner to be evaluated, a learning media assessment and assistive technology evaluation must be made. Though the needs of learners were identified, the evidences of the assessment documentation did not indicate the presence of the assessments that could have generated those needs. The identified needs also were not exhaustive for a group which had complex needs. An interview with teachers also indicated that they concentrated on communication, thus, in terms of which mode of communication was best for the student.

Castro *et al* (2014) observed that, the behavior patterns of learners who are deaf blind and the level of performance translated into different interventional needs. These interventional needs formed the basis of learners needs. The above views were also observed by Garner *et al* (2012)

and Gregory (2015). Benerjee and Luckner (2013) noted that, learners' needs were based on the following variance in the learners' characteristics: types and levels of hearing loss, age of onset thus adventitious deaf blind will require sign language or an intervener, physical and health issues, cognitive functioning, expressive or receptive forms of language and educational histories. Castro *et al* (2014) however noted that this form of looking at the needs of the learner concentrated on the individual person. He noted that disability was a product of a learner and environmental interaction and hence his or her needs ought to be viewed in terms of a learners functioning. Gregory (2015) further noted that, such view of needs lowered achievement, expectations and reinforced exclusive interventions. However, interventions cannot be provided without an evaluation of individual needs.

4.6 Criterion used in evaluation and reevaluation of IEPs for learners who are deaf blind

This objective was meant to capture the whole practice of evaluation of an IEP. Evaluation was the only way in which the success of program implementation was determined. The study sought to find out how IEP goals were being evaluated for setting other goals. However, before this evaluation, which was summative in nature was done; the progress of the learners must be evaluated. In this case, evaluation centered on finding out how learners progressed during the implementation of the IEP and how documentation was done. Proper evaluation acted as a measure to the achievement of the goals. The findings in this objective are as presented.

4.6.1 Assessment of Learners' Progress

The study targeted to establish how the assessment of learners who were deaf blind was done. Figure 4.17 shows the findings.

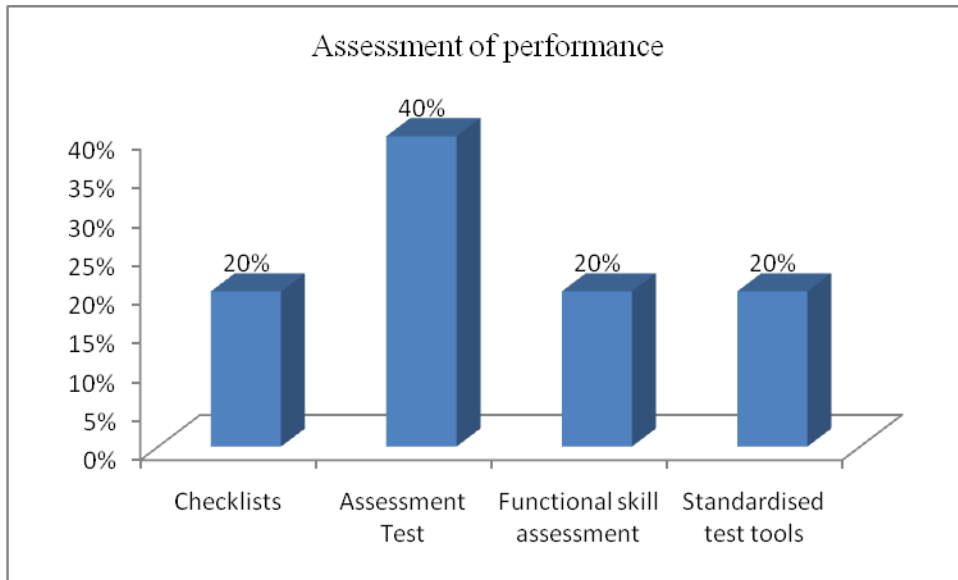


Figure 4.17. How Teachers’ Assessed Learners Performance (N=54)

Figure 4.17 indicated that the main method 21(40%) used to assess the achievement of learners’ who were deaf-blind by teachers was through assessment tests. This assessment tests were teacher made. Other means of assessment which were used in equal proportion 10(20%) were checklists, functional skill assessment and standardized tests. From actual observation of the test tools, assessment tests were used to establish the present level of performance. Documentation of the assessment made to evaluate the learners’ progress was not done. This implied that either learners’ progress was being evaluated without documentation or it wasn’t.

Figure 4.17 gives the impression that, the assessment done to evaluate learners who were deaf-blind dominantly was alternate assessment. In this case, the findings concurred with Reeves, Kleinert and Muhomba (2009) who established that, in evaluating learners who were deaf blind alternate assessment was the best approach to be used. Alternate assessment included approaches such as portfolio or body of evidences, checklist or performance checklist. Alternate assessment was used in cases where students may not benefit from regular assessment even when adequate

and relevant accommodations were made. Alternate assessment largely depended on the baseline data, which had to be in harmony with the set goals for its success. This implied that the checklists, evaluated the milestones made in attaining the goals set, being supported by evidences of performance. However, the absence of the assessment tools, coupled by unclear goals reflected that progress of learners was not evaluated.

Assessment of LWDB was challenging. Hirsh (2014) identified dilemmas in assessment of learners with disabilities. He established that though grades were used and formative assessment done taking the checklist and standardized tools approach, it did not provide teachers with the required flexibility that could capture the learners' progress. He attributed the '...market oriented educational paradigm characterized by competition, cost effectiveness and performance measuring' as a balance between trust in teachers' professionalism and external steering controls...' However, considering the facts on the ground in this study which revealed that, there was no documentation of the child's progress, such external controls were necessary.

Guskey, Swan and Lee (2010) discovered that parents preferred numerical scores to grades. They observed that for grades to be awarded, curriculum needed to be modified. They further observed that grades did not inform much regarding the learners' performance and teachers needed to be trained in grading. Assigning grades could be done without evaluation of the learner. With the whole process being faulty especially at the beginning, in this case setting of goals that could direct the implementation, it would be tempting for teachers who needed to protect their jobs to opt for grading. This may explain the absence of the test tools in the IEPs. Their suggestion of a standard report which was more informative would address such circumstances. The components of that report card would also require consensus and guideline on how to report.

The use of checklists was also contested. Goldstein and Behuniak (2012) raised concern over the validity of checklists in terms of accuracy of measuring functional skills. They noted that the checklists, though setting high expectation than teacher assessments tests, concentrated on the evaluation of academic constructs and not functional skills whose success was pegged on individual teachers' knowledge and effort. This implied that even in the use of checklists, it was not automatic that teachers were evaluating the attainment of functional skills. The use of checklists in light of the earlier findings on the knowledge and experience of teachers in the selected programs and the availability of the IEPs statements written, students may never attain functional support. However, teachers were left in dilemma especially since there was no agreement on the use of checklists or any form of guidance given on assessment. Herbster (2015) reinforces the above by stating that, there was need for a tool to guide assessment of learners' progress, which was acceptable to the stakeholders.

Though majority of the teachers stated that they used assessment tests to evaluate the progress of learners, it was evident that the assessment tools used were to evaluate the present level of performance of learners. They did not capture the assessment of relevant areas and or objectives that could enhance functional support. Gates (2014) observed that there were mandatory services that required to be evaluated both at the drafting and implementation of the IEP that could enhance functional ability. This included; developmental, corrective and supportive in nature which could assist a child access special education. These services were offered by paraprofessionals, who did not draft learners' goals. The teaching background alone without the medical aspect of the teachers, would not have equipped them to assess the progress of learners without paraprofessional support. Thus, the drafters and implementers of IEPs in Kenya, and

whom it is expected to evaluate the progress of learners, did not have what it took to play their role nor portrayed any evidence of consultation with the experts.

4.6.2. Reevaluation of IEPs

After the evaluation of learner's progress, the IEPs were to be reevaluated in totality for establishing new goals. This evaluation was supposed to be done by a multi-disciplinary team since new goals for the learner were to be formulated based on the achievement of the learner after interventions were done. All aspects of functioning were captured in this evaluation. The study sought to establish whether other personnel were involved in the reevaluation of IEPs. The findings are as in Figure 4.18.

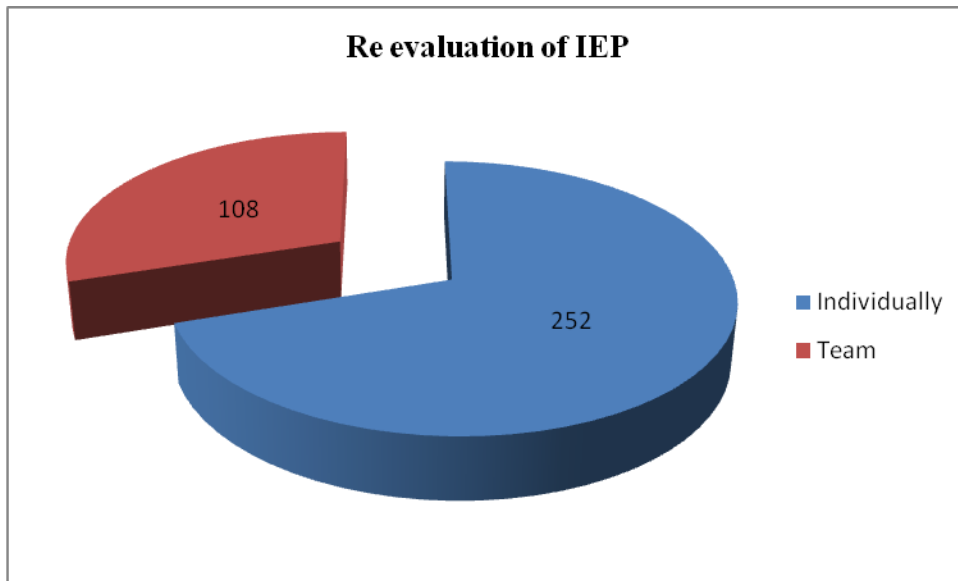


Figure 4.18. How IEPs were Reevaluated (N=54)

Figure 4.18, indicated that, most 38(252) teachers reevaluated the IEPs individually. Only a few16(108) teachers reevaluated the IEP with a team. Though the findings revealed that a team

was involved, this did not imply that it was a multi-disciplinary team. Teachers knew what had to be done, thus, the involvement of a multi-disciplinary team, but did not involve them. This was so because the drafting of the IEPs did not involve a multidisciplinary team. It is not easy for an IEP that was drafted by individual teachers to be reevaluated by a multi-disciplinary team. A team also, may have implied that a group of teachers were involved. The findings do not reflect the international scenario of reevaluation of an IEP whereby, it was given preeminence and a team of paraprofessionals were involved. The reevaluation done may not have been exhaustive and addressed the areas required, as per the set goals for the learner or it was never done.

The findings were not consistent with several authors. Vuohelainen (2014) observed that reevaluation was necessary for every PWDs at all levels. He further observed that it should take place at least every year, followed by a major reevaluation after two years. Gregory (2015) not only emphasised reevaluation, but stressed on the source of information of the reevaluations as, previous IEPs, report cards, classroom observations and checklists among others. Thus, it was expected that reevaluation of the IEPs for students have, a stipulated time. It was also to be guided by the documented needs of learners, and whatever effort that had been done. However, this was not the case. Identification of the needs of learners, setting of goals and recommendation of the intervention to be done, had been poorly done from the beginning. It wasn't going to be easy to reevaluate what teachers did not know.

Christle and Yell (2010) stressed that, reevaluation was a requirement by law. The fact that goals were formulated and were supposed to be relevant, appropriate and measurable, silently revealed that reevaluation of the same was mandatory. Teachers were supposed to reevaluate in order to ascertain whether learners needed the same services as observed by Blackwell and Rossetti (2014) or as a monitor of students progress (Christle and Yell, 2010). In such cases,

reevaluation would be more effective if a multi disciplinary team of paraprofessional was involved. The findings coupled by earlier discussions on IEP process raised concern whether truly what had been done was reevaluation.

Concerns regarding reevaluation of IEPs had been raised even in cases where goals had been set by an IEP team. Kurth and Mastergeorge (2010) observed that IEP goals were not being reevaluated. The situation in this case were ideal, thus, goals had been set and implementation was based on them. If in ideal situations reevaluation was questioned, how could the scenerio be in cases where vague goals had been established. The authors however, attributed the failure of reevaluationof the IEPs on the number of goals that had been formulated. They observed that due to a high number of goals formulated for an individual learner, they could not be reevaluated within a year.Price (2014) also, observed that in general reevaluation of IEP goals was not being done.To enforce reevaluation of the IEPs, considerations have to be made in terms of policy which could guide the whole IEP process.

The success of reevaluation in the USA could be attributed to the fact that it was a mandatory requirement that had been documented in policy (Mueller,2015). The lack of clear documentation of what was required in IEP development in Kenya impacted negatively at every level of IEP development and implementation. The effects triggledown to the receipient with a great impact. Monitoring of the program becomes more abstract than pratical.This may have influenced the findings. Teachers knew they needed to reevaluate the IEP, but it was more of a theoreticalidea that needed to be translated into practice. What could have compelled the over engaged paraprofessionals to leave their station of duty and assist teachers reevaluate IEPs unless a policy was present.

4.6.3. Duration Taken for Reevaluation of IEP to Occur

The researcher wanted to investigate the duration taken by the IEP drafter to reevaluate the IEPs.

The findings were as indicated in Figure 4.19

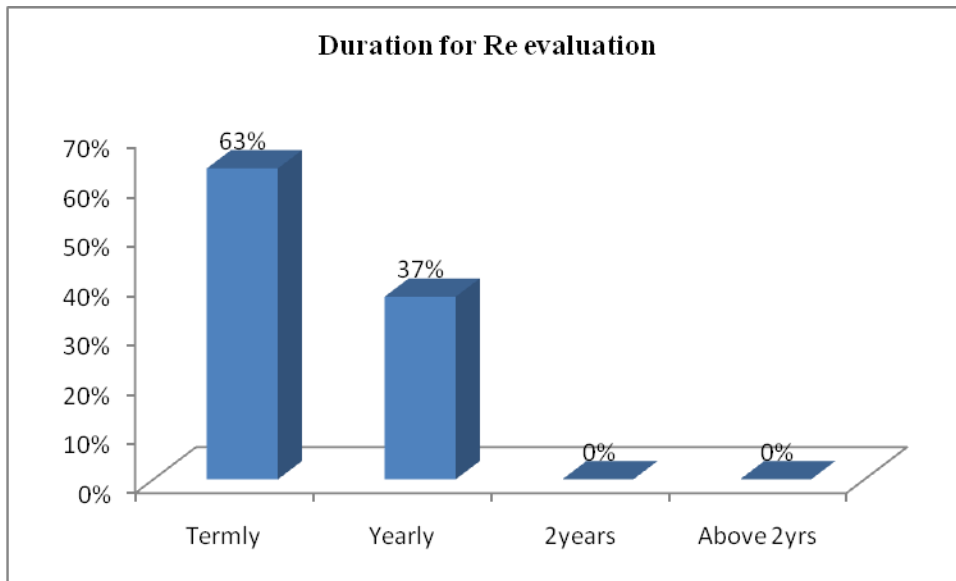


Figure 4.19. Duration taken before Reevaluation is Done (N=54)

Figure 4.19 clearly indicated that most 33(63%) learners who were deaf-blind were reevaluated on a termly basis. Twenty one (37%) learners were reevaluated on a yearly basis. The termly reevaluation indicated that, the interventions that had been recommended at the drafting of the IEP, had to be achieved within a term. The desired outcomes were to be achieved in the same period. It also implied that goals had to be reset on a termly basis. The above findings strengthened the notion that reevaluation of the IEPs was never done. Reevaluation of IEPs could never be done in a span of three months that form a term. Only short term objectives could be achieved within that time span. It could also not be easy to gather a team of professionals to evaluate and reevaluate IEPs within that time span.

The findings were not in agreement with several authors. A model policy by Fairfar County public schools documented that, reevaluation should be done at least once in three years (Aldersay and Turnbull, 2011). The policy which had clear timelines for identification, initial assessment and IEP drafting by the team, had highlighted the importance of giving the evaluation team time to thoroughly evaluate all the aspects of the student in order to come up with a comprehensive evaluation. This meant that the termly evaluations do not give ample time for comprehensive reevaluations to be done.

The above results also exposed the type of evaluation being done. The formative evaluation that happened termly in regular education may have been done unlike summative evaluation. However, whether it was formative or summative evaluation, there were several concerns that needed to be addressed. Christle and Yell (2010) noted that the assessment for reevaluation for the deaf blind should be immediate bearing in mind the nature of disability the learners had. This meant that reevaluation had to be done immediately the skill had been performed. If reevaluation took this format, then it would have taken a continuous approach. It may not, however, have been the best approach in redrafting of IEPs since wholesome evaluation that determined the level of performance of a child at that particular time, would not have been established easily. This meant that reevaluation that could determine whether a learner was developing functional abilities was not being done.

The duration taken for reevaluation coupled by evidence from documentation and the dates of drafted IEPs in this study as earlier reported, strongly pointed to the fact that IEPs were not reevaluated. This inconsistency especially in dates when IEPs were drafted, clearly indicated that reevaluation could not have been done for the redrafting of IEPs. It may be assumed that reevaluation inconsistencies could be attributed to lack of a clear policy, which (Aldersay and

Turnbull, 2011) noted that, its absence, could lead to lack of accountability and thus compromise service delivery.

4.6.4. Aspects of the Learner that were Reevaluated

The study sought to establish the precise aspects of a learner that were evaluated during the reevaluation of IEPs. There are certain aspects of deaf blindness which were considered key in attaining functional abilities. If these areas were reevaluated, it could be assumed that the learners functional skills would be addressed. The findings were as depicted in the Figure 4.20.

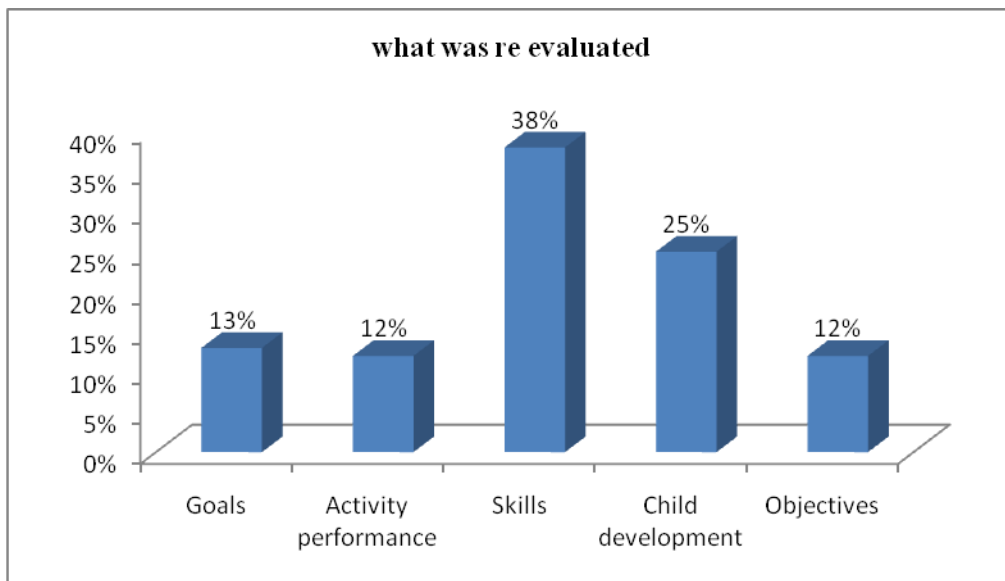


Figure 4.20. What Teachers Reevaluated (N=54)

From Figure 4.20, the aspect of a learner that was reevaluated with the highest frequency was the performance of skills 21(38%).The assessment of skill performance was done immediately the learner performed it. This meant that, assessment took the approach of being continuous contrary to the findings in Figure 4.19. Fourteen (25%) of the teachers evaluated the progress of the learners in terms of development. It was not an easy task to evaluate the progress of the child in

terms of development without medical assistance. The citing of development without medical assistance strongly points to the fact that IEPs were not reevaluated. It could also imply that teachers confused monitoring the progress of learners to reevaluation. Seven (13%) evaluated goals, while objectives and activity performance were evaluated by only 6(12%) teachers. The responses were given as they appeared in the IEPs that were analyzed.

If reevaluation of the IEPs in this case was done, it was not based on the identified needs of the learners and the set interventions to address these needs. These portrayed a picture of IEPs evaluation and reevaluation as a trial and error issue. There was supposed to be congruence from the beginning of the IEP process that entailed assessments, identification of learners' needs, special services recommended and the areas of reevaluation. IEP writing and implementation was a process, thus one action depended on another. Failure on one part of the system negatively affected the whole process.

The findings were not consistent with those of several authors. Zeza & Stavrou (2016) noted that, assessment of learners who were deaf-blind for IEP drafting was done across multiple and natural environments and targeted functional vision and hearing to determine the preferred learning senses (Learning media assessment). Rowland *et al* (2010) shared the same view by stating that assessment of learners who were deaf-blind took a holistic approach by touching on communication, vision, hearing, mobility, motor abilities, learning media and assistive technology. He further added that this could only be achieved by a team. If these areas were evaluated to form an instructional basis for the learners, it automatically followed that they needed to be reevaluated to assess the impact of the intervention or implementation of the plan.

Czapanskiy (2016) in his findings would have referred to such a type of reevaluation that was done in this study as '...a procedural fraud that could be met with legal repercussion...' Thus,

relying on teachers to predetermine learners IEPs, services and placement and evaluation was a grave mistake that was supposed to be legally acted upon. A learner was a passive recipient of a decision made by one unknowledgeable teacher. Citing the legal requirements in the USA, they stated that, for placement to be made, an assessment of the learner and goal setting must be done first. If the procedure was adhered to, then reevaluation would automatically take place.

Rowland, Stilman and Mar (2010) acknowledged that evaluation of learners who were deaf-blind was complex and it could not be assumed that bringing facts about hearing and vision could address the complex needs of these learners. They further added that the key area of any evaluation of LWDB should place emphasis on communication. An observation of the reevaluation aspects in this study does not touch on communication or senses. This directly raised concern over how it could help achieve functional skills in learners. Reevaluation reports based on a thorough assessment would always have an explanation of potential impact of specific sensory problems and how to deal with them to attain functionality in learners.

4.7. The Challenges Encountered in the Implementation of IEP

The last task of this study was to establish the challenges faced in the formulation and implementation of the IEPs. Challenges impact on the overall attainment of the intended results..

The findings are presented as follows.

4.7.1. Challenges Faced by Teachers in the Formulation and Implementation of IEP

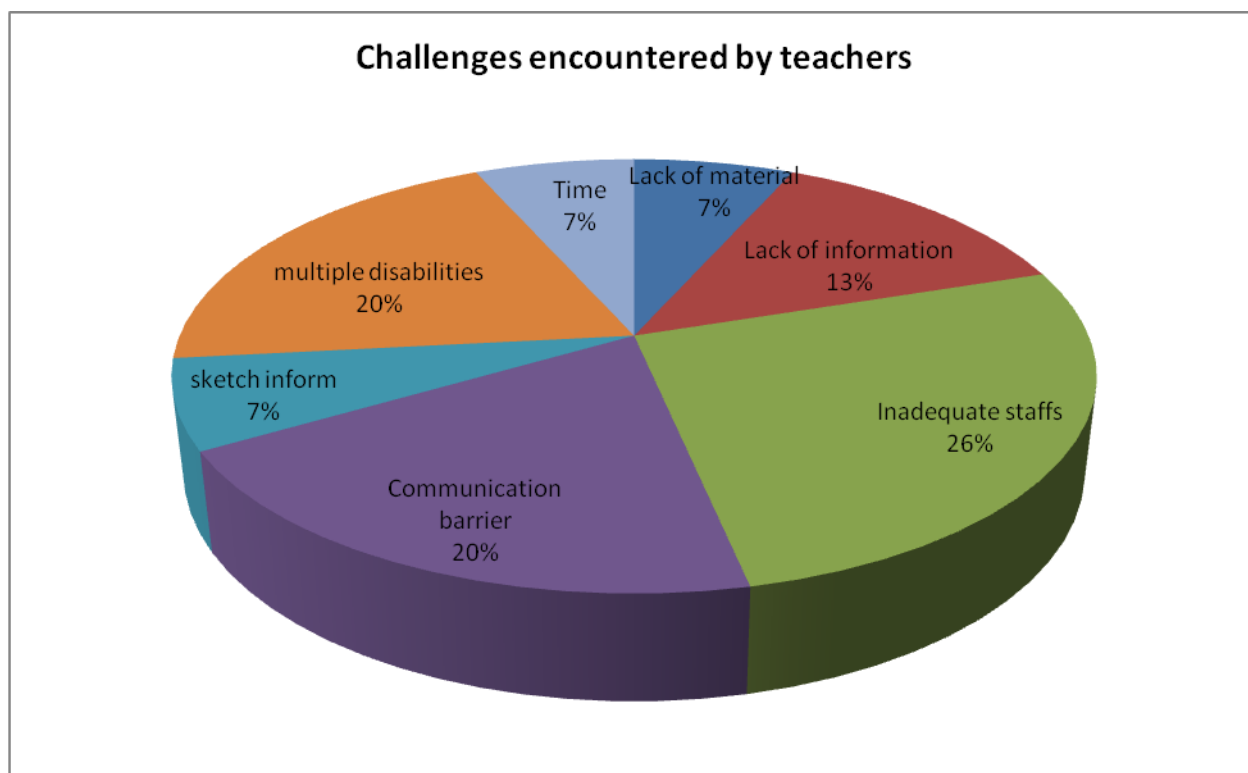


Figure 4.21 Challenges Encountered by Teachers (N=54)

From Figure 4.21, the challenges encountered by teachers in the formulation and implementation of the IEPs included; adequate staff 14(26%), 11(20%) communication barriers as well as students having multiple disabilities, 7(13%) lack of sufficient information about deaf blindness that could enhance writing of IEP, 3(7%) lack of materials, sketchy information as well as lack of time. Many challenges were experienced. However, the percentages recorded as challenges experienced by specific teachers were very low, thus below 30%. This meant that the challenges were widespread. No specific challenge was experienced by many respondents. Inadequate information in this case referred to the teachers' knowledge base of the deaf-blind while sketchy

information referred to the information given of the child that could facilitate the drafting of proper goals for the child.

The above findings agreed with several authors. Herbster (2015) and Costa (2014) established that staffs for deaf-blind were quite few. They noted that deaf blindness required personnel who would understand the impact of concomitant sensory losses on development of communication, cognition, motor skills and social emotional wellbeing. In this case, they were referring to qualified staff. Shortage of staff directly affected service delivery, which, could directly impact on achievement of the intended results. This study however refers to both unskilled and skilled staff. In fact, Kenya has not reached the level of raising concern over qualified staff especially with the current staffing levels. Osundwa (2014) confirmed this shortage when he cites the need for parents to bridge the gap in personnel for LWDB by taking on roles played by teachers. The government, however, has put in a lot of effort to meet this need by providing several training institutions for teachers. The same is not realized in relation to paraprofessionals. Most institutions had one medical officer performing all therapeutic activities. One institution had one therapist (physiotherapist) who had to take on the role of other therapists. The challenges of these officers were so great that one of them said '*Na tukona challenges nyingi sana, utatopoa kweli*' meaning we have so many challenges will you really handle them all.

Zeza and Stavrou (2016) also noted that, there was shortage of personnel specifically personnel trained in orientation and mobility. The specialized personnel are key in assessment and interpretation of results which could lead to proper establishment of IEP goals and general implementation advice. The staff for deaf blind is supposed to be one on one (Costa, 2014). A staff that has more than enough to handle, will not have time to attend to all students, which compromises quality and general performance. The state of implementation of the IEPs was

further compounded by the fact that these staffs did not give their views in IEP formulation. Most of them evaluate the child themselves and embark on service provision without any consultation. Any mistake of mis-diagnosis in this case could be costly on the child.

Unlike in Kenya, most developed countries reported challenges that were systemic in nature. Mitchell *et al* (2011) highlighted the following challenges; shortage of time thus time to read and implement the IEP recommendation as well as handling the paperwork, lack of clarity as to the purpose of IEP since IEPs were developed by a qualified team and handed over to teachers to implement. He noted that the goals of those IEPs were unrealistic. There was also a challenge of logistical barriers to parental participation an issue that was also highlighted by Blackwell and Rossetti (2014). Blackwell and Rossetti (2014) added that even when parents attended, they did not express their opinion. Systemic challenges have to do with the system and not within individual characteristics.

The findings of this study created a different scenario. Majority of the identified challenges namely: communication barriers, presence of multiple disabilities, lack of information on deaf blind children and sketchy information from assessments, portrayed a clear picture of incompetent staff. This meant that the challenges were contextual (within the implementers). Costa (2014) revealed that though teachers had training in special needs, they lacked competencies in handling specific areas of the LWDB. The mentioned areas as reviewed in literature were relevant to the acquisition of daily living and independent living skills and may adversely affect the general functioning of the child. Lack of appropriate competencies in teachers of learners who were deaf blind was a contextual factor that was so detrimental to the acquisition of functional abilities.

The contextual factors were supposed to be addressed urgently and immediately. This was so because of the role played by teachers of deaf blind which was so diversified. Rowland *et al.*(2010) identified their roles as ranging from being a coach, a professional and paraprofessional, a family mediator, and a team player during writing a statement for learners. This placed demand on the teacher to be knowledgeable. Guthrie *et al* (2011) noted that limitation in knowledge affected assessment. As earlier mentioned, IEPs in Kenya were developed by individual teachers. Masha (2013) noted that the diversified role of teachers impacted on their ability to adapt the curriculum. They ended up using the regular curriculum for learners who were deaf blind without any modifications or accommodations. This could have been a result of contextual challenges they were encountering. These contextual challenges indicated that functional abilities could not be easily achieved.

4.7.2. Efforts Made to Address the Challenges

The study sought to find out the efforts that had been made to address the challenges mentioned above. Addressing the challenges would point to the fact that improvements were being done which in turn affected not only the provision of SNE but both the formulation and implementation of the IEP. The finding is presented in Figure 4.22

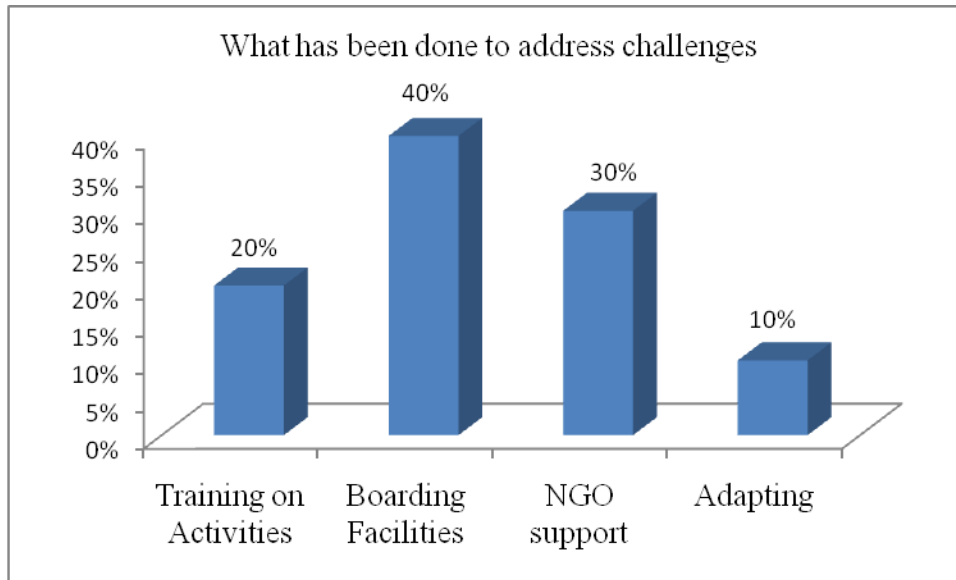


Figure 4.22. What has been done to Address the Challenges (N=54)

Figure 4.22 indicated that, several actions were put in place to improve the education of learners who were deaf-blind in terms of IEP drafting and implementation. The main steps taken included: provision of boarding facilities 22(40%), support of any kind from NGOs 16(30%), offering training opportunities that give parents an environment for sharing experience 11(20%) and finally, assisting in adapting the environment and equipment 5(10%). The findings indicated that provision of basic resources was stressed by teachers. Provision of boarding facilities and NGO support took the central place. It was established earlier that, the support given by NGOs was in form of material needs. This may be an indication that in education of learners who were deaf-blind, basic needs, were still the centre of focus. This may be an indication that the education of this group of learners' was relapsing back to custodial care.

Figure 4.22 revealed that, effort had been made to alleviate the challenges. Training could address lack of information, communication barriers and multiple disabilities since it equipped teachers with the required information. However, it was dependant upon the nature of training.

Masha (2013) suggested a form of training that was centred on adapting the curriculum to suit learners with deaf blindness in an inclusive setting. This was an indication that training in itself could not achieve the intended results without consideration of the quality of the content. Rowland, Stilman and Mar (2010) suggested that the training should be tailored to encompass alternate assessment. Gregory (2015) suggested training that would improve teachers self efficacy so that they could be confident to write IEPs.

Training therefore was an important step to be taken. However, the nature and content of training had to be considered. The curriculum for training in Kenya did not equip teachers with the required skill to write and implement the IEP alone. Norwich (2015) observed that training only equipped teachers with knowledge of disability and not the skills to perform. Thus, unless enrichment was done to the training curriculum, with evidence based researched activities, the training offered to teachers still remained wanting in terms of content.

NGO's support, both in monetary value and material support, could alleviate challenges of shortage of materials and staff. This could be realised when funds were availed for hiring extra staff at school level. Kiseu (2012) observed that NGO's and other well wishers played a major role in education of the needy. She established that they organised for advocacy campaign for the needy, provided them with equipment, free meals and medical camps as well as constructing buildings and water boreholes. Basically their support was geared upon meeting the basic needs of learners. She further added that they hired qualified teachers for the needy learner. This study identified the contribution of NGO'S. However, the attainment of functional support depended on the extent to which the help was offered. Thus, instead of regularly stipulated services, the NGO support gave what they had. The education of LWDB was therefore left the education of learners who were deaf blind to charity.

The findings however were not consistent with those of Aldreason, Onsjo and Isaksson (2013) who placed emphasise on the development of a poliicy. According to these authors, the greatest step that would have been taken was for Kenya to develop a olicy that would adress all these challenges. They noted that in order to improve formulation and implementation of the IEP, there was need for a policy-level guideline in schools. Kahtani (2014) also noted the importance of a policy. He stated that it could give direction to special needs education.

4.7.4. Factors that Need to be Addressed in order to Improve IEP

The study sought to establish the factors that teachers felt needed to be addressed in order for the formulation and implementation of the IEP to be appopriately done. This information was meant to capture barriers to implementation of IEP. The findingsare presented in Figure 4.23

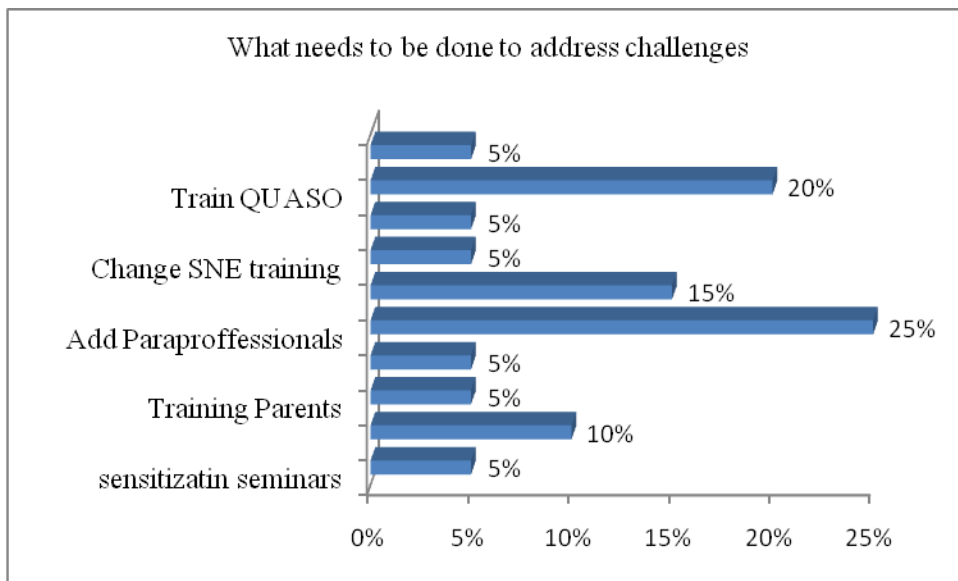


Figure 4.23 What Needs to be Done to Address the Challenges (N=54)

Figure 4.23highlighted the main issues that teachers felt they needed to be addressed as: staffing in terms of paraprofessionals 13(25%) and training of QUASO 10(20%).Others included: provision of a policy 8(15%), follow up activities for learners who were deaf-blind which should

encompass home activities 5(10%), sensitization seminar to parents and the community at large, training of parents, adapting the environment to suit learners with disabilities, changing SNE training to be more comprehensive, having a common IEP format and funding 3(5%). The teachers seem to have knowledge of how the system needed to be run. This finding therefore implied that teachers were aware of the flows that were present in both the drafting and implementation of the IEP. Infact what they stated could be taken as a comprehensive summary of improving instruction and service delivery that could yield the desired goals of special education.

Figure 4.23 indicated that, there was need for training QUASO. These professionals were charged with the responsibility of ensuring quality in education in Kenya. The fact that, teachers suggested that they should be trained implied that, teachers saw a gap in the provision of services which could have been addressed by trained QUASO. This findings concurred with Walingo (2010) who noted that, QUASO did not have the capacity to supervise SNE and thus were not doing it. She further added that, they also evaded the supervision of technical programs that seemed challenging to them such as units for the deaf. It was earlier establish that, teachers, especially those trained in SNE, felt that they were more qualified than education officers. Blacwell and Rossetti (2014) recommended wholesome training that captured SNE as part of preparation professionals who are to provide services to LWDB. This could be, however, complicated bearing in mind the diversification of SNE. The challenge of content and structure would automatically arise

Staffing was an issue that affected both underdeveloped and developed countries. Though developed countries had shortage of specific staff (Fisher and Pleasants, 2012), this study established that staffing was acute in all areas. Shortage of staff affects service delivery in that

one may not have enough time to write, research, consult and implement the IEP as required (Costa, 2014). Thus, it was not possible to empower staff in this case, hence, limiting the implementation of the current practices. Teachers strongly believed that paraprofessionals needed to be added.

In general the findings seem to point at the solution to the challenges as systemic. This seemed to contradict the depicted challenges which as discussed above were contextual in nature. Thus, funding was to be done by the government. Trainings for both QUASO and parents needed to be coordinated by the education system. Policy change in curriculum, followup activities, adapting the environment as well as staffing , required the system input. The above tend to suggest that the system needed a total redress. However, the challenges they encountered in the provision of services to learners as depicted in Figure 4.21 tended to suggest otherwise. In fact only sensitisation seminars, which had a small percentage pointed to a contextual remedy.

4.8. Summary

This chapter presented the findings of the study on analysis of the IEP implementation in attaining functional support for learners who were deaf blind in selected schools in Kenya. The findings revealed that the findings established that teachers of learners who are deaf-blind were the sole developers of their IEPs. Quite few depended on the support of their colleagues. The purpose for their drafting the IEP was to meet individual learners' needs. The main personnel present when drafting the IEP were the special teachers themselves and the learner. In their drafting of IEPs, most of the teachers relied heavily on the knowledge gained from general training in SNE.

Teachers were responsible for the assessment that led to formulation of goals. The assessments made were neither alternate assessments nor assessment with accommodation. The assessments yielded traditional IEPs which were inclined towards standard based IEPs. Relevant and current IEPs for learners were not present in most programs. The available IEP statements did not capture the presence of various components. The components of IEP tools were also not consistent in all documents. Only the present level of functioning was captured by majority of the IEPs.

Very few IEPs had services recommended to address the learners' needs. These services in the order of recommendation were: speech therapy, music therapy, assistive devices or specialized materials, counseling, PT, OT, OM, environmental adaptation and transport. The number of IEPs with goals and objectives were very few. Most of the IEPs had benchmarks which captured the following areas; reading, arithmetic, spelling, written language, science, social studies, behavior, social/emotional, prevocational/vocational, life skills, motor skills, communication, residual senses and finally cognition. Learners however, had little chances of mixing with the non-disabled peers.

There were no national or school policies on assessment and IEP in general. The only policy available was the national policy on special needs education. This policy was so general and did not offer adequate guidance on specific services that learners required in terms of IEP.

The main drafters of the IEP were teachers. During the drafting, the teachers wrote the entire IEP, advised on activities to be performed, convened the IEP meeting and set the IEP goals. During the implementation, more than half of the teachers engaged in teaching. A small percentage was involved in parental guidance, evaluating the progress of the child and performing some therapy.

The teachers reported the presence of other service providers. However, the service providers who were relevant in promoting the function abilities of the learners were physiotherapists and occupational therapist who were not present. Teachers received minimal help from paraprofessional personnel. The support received was in form of materials items.

The needs of learners that were identified were those that required activities (abilities to perform actions) and participation (experience of being part of a society) as an intervention measure. Almost all identified needs were linked to body function and structures (body system including anatomical features and physiological factors of the body) while few were related to environmental factors (physical, social and attitudinal factors). Activities and participation alone was inadequate in identifying and meeting the needs of learners. The goals that had been formulated were of low quality in that they were not measurable while the skills that were captured in the IEP were those required for student to function in the environment. The generality aspect indicated that the skills were vague and could yield general outcomes. They could not address the specific needs identified. The skills, however, could not be applied to a variety of settings.

The needs of learners that were captured by the IEP tool were: positive behavior interventions, language needs, communication needs, Braille instruction needs, auditory instruction or direct instruction and finally assistive technological needs. The needs were not commensurate with the intervention measures taken and the nature of assessment that was employed.

There was no evidence that the learners' progress was being evaluated. These informal assessment tests did not actually evaluate progress but the present level of performance of the learners. There was mention of the use of teacher made checklists, functional skill assessment and standardized tests in reevaluation of IEPs. These assessments were not informative hence

could not facilitate acquisition of knowledge for reevaluation. There was no evidence in terms of documentation on the assessments done except the test tools that were used to establish the level of present functioning of the child.

Teachers reevaluated the IEPs alone without the involvement of a multidisciplinary team as recommended. The reevaluations were not adequate in establishing new goals. The duration taken before reevaluation was a term. The duration was too short for any meaningful intervention to have been made. Some teachers took a year before reevaluation. There was no evidence of documentation on the same, hence, it was not easy to establish whether reevaluation were done.

The reevaluation done targeted: setting of new goals, re-evaluating of how the activities were being performed, how the skills were being performed, how the child was developing and finally the achievement of objectives. The reevaluation was not based on the identified needs of the learner and the intervention made as the case is in most IEPs.

Teachers reported that they experienced challenges in staffing such as inadequate staff, communication barriers, handling learners who had multiple disabilities apart from deaf blindness and inadequate information that could aid in IEP writing. Most of these challenges were contextual in nature and not systemic. However, the overall percentage of teachers who stated that they had challenges was few

The provision of boarding facilities to learners who were deaf blind, the material support provided by NGOs, the training of teachers on activities especially therapeutic activities and finally adapting the environment had been put in place to address the challenges. However, a lot must be done in terms of adding more paraprofessional staff, training of QUASO, establishing a policy, making follow up in that order of priority to address the challenges.

5.0. CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This study aimed at analyzing the IEP implementation to establish whether it was supporting the development of functional abilities in learners who were deaf blind. In chapter, an introduction of the study, the statement of the problem, objectives that guided the study, the rationale of the study and its limitation have been discussed. Literature was reviewed in chapter two, and was guided by the objectives of study. In chapter three, the methods that were used were discussed which encompassed the design, the sampled population, the instruments that were used, how data was collected and finally how analysis of data was done. The findings of the study have been presented in chapter four.

This chapter therefore, presents the summary of the research findings, the conclusions drawn from the discussion of the findings and the recommendations that have been made. These are dichotomized into those related to policy and those related to further research. The presentations of the summary and the conclusion have been presented per the objectives of the study.

5.2. Summary

The study took place in three programs of deaf blindness namely, Kabarnet School for the Deaf-blind which is a full seclusion school, Maseno School for the Hearing Impaired that has a unit for learners with deaf blindness and Kilimani Primary School which has units for both learners who are blind and deaf-blind and practices inclusion. The target population was learners with deaf blindness, thus their IEPs and the teachers who teach these learners. The sample population analyzed was fifty four IEPs for the three institutions and forty-eight teachers. The tools used in

the study were observation in terms of PEPSE, R-GORI and ICF-CY which were used to analyze the documented IEPs, a questionnaire was given to teachers and an interview done. The study employed a mixed methods approach.

5.2.1. Strategies Used in the Formulation of IEP Goals for Learners with Deaf-Blindness

This objective was supposed to establish the strategies that were used during the formulation of IEPs and during the implementation to verify if they supported the development of functional abilities. The strategies that were targeted were; approaches to IEP goal formulation, assessment for IEP goal formulation, the quality of the IEP as a tool for implementing the IEP, and finally the policies that enhanced the formulation and implementation of the IEP. Below are the summed-up results.

The findings established that there were no specific strategies employed in the development and implementation of the IEPs. There was no indication of a curriculum based approach, developmental approach nor multi-disciplinary approach. The teachers of learners who were deaf-blind developed their own IEPs and implemented them. The assessment done did not take on a multi-disciplinary approach or alternate assessment. Teachers used their own assessment tests to evaluate learning needs of the learners. The IEP tools used were not standard. The whole IEP development process was not guided by a policy.

5.2.2. Role Played by Different Personnel in IEP Formulation and Implementation

The IEP requires writing, implementation and evaluation. These activities need the input of various personnel. In this study, the main drafters of the IEP were teachers. During the drafting, the teachers wrote the entire IEP, advised on activities to be performed, convened the IEP meeting and set the IEP goals. During the implementation, more than half of the teachers

engaged themselves in teaching. A small percentage was involved in parental guidance, evaluating the progress of the child and performing some therapy.

The teachers reported the presence of other service providers. However, the service providers who were relevant in promoting the function abilities of the learners were physiotherapists and occupational therapist who were not present. The others were therapy, information about services to be provided and drafting of the IEP.

5.2.3. Quality of IEP goals in identifying the Needs of Learners that Support the Development of Function Abilities

The goals that had been formulated were of low quality. They were not measurable thereby impeding proper evaluation of the quality of intervention. In terms of functionality, the skills that were captured in the IEP statements were those required for student to function in the environment. The generality aspect indicated that the skills were vague and could yield general outcomes. They could not address the specific needs identified. The skills, however, could not be applied to a variety of settings. The needs of learners that were identified were those that required activities (abilities to perform actions) and participation (experience of being part of a society) as an intervention measure.

5.2.4. Criteria Used for Evaluation and Reevaluation of IEPs

The IEPs of learners who were deaf blind were never reevaluated. Teachers confused the term evaluation of learners to the actual IEP reevaluation. Teachers were the main evaluators in these term reevaluations. They used their own formulated assessment tests to evaluate the progress of learners. These assessment tests did not actually evaluate progress of learners but the present level of performance of the learners. They also used teacher made checklists, functional skill

assessment and standardized tests. These assessments were not informative hence could not facilitate acquisition of knowledge for reevaluation. There was no evidence in terms of documentation on the assessments done except the test tools that were used to establish the level of present functioning of the child.

5.2.5. Challenges Encountered in Implementation of the IEP

This objective was formulated to capture the challenges that were experienced by the formulators and implementers of IEP. Challenges that are not appropriately addressed will always lead to inadequate service provision. This, in turn, affects performance and the expected outcome. The study also captured teachers views on what they felt had been done to address these challenges and what needed to be done. This aspect aimed at indirectly establishing the understanding of teachers on how IEPs need to be handled to address the challenges. A summary of the findings is as below.

Teachers reported that they experienced challenges in staffing which were inadequate, communication barriers, handling learners who had multiple disabilities apart from deaf blindness and inadequate information that could aid in IEP writing. Most of these challenges were contextual in nature and not systemic. However, the overall percentage of teachers who stated that they had challenges was few.

The activities that had been done to address these challenges included; provision of boarding facilities to learners, material support provided by NGOs, training of teachers on activities especially therapeutic activities and finally adapting the environment. However, a lot has to be done in terms of adding more paraprofessional staff, training of QUASO, establishing a policy, making follow up in that order of priority to address the challenges. Other challenges mentioned

were; inadequate funding, not having a common format for IEP, need for changing SNE teacher training, adapting the environment, training parents on several issues including their rights and finally having sensitization seminars.

5.3. Conclusion

The study exposed revealing facts in relation to attaining functional support for learners with deaf blindness. There were no specific strategies used in both the formulation and implementation of the IEPs. The approaches used did not align with curriculum based approach, developmental approach or holistic/ multidisciplinary approach. The IEPs were written by individual teachers who had no training or knowledge on both assessment and writing of the IEPs. The assessments made could not yield traditional IEPs, standard based IEPs or IEPs from alternate assessments. The drafted IEPs did not have a connection between the assessment made and the drafted goals. Most of the IEP statements did not have essential components that could enhance acquisition of functional abilities. Several IEPs were not current indicating laxity in the whole IEP writing process. There was also no policy at national and school levels that could facilitate the formulation process, guide the implementation and ensure accountability through evaluation.

The whole process of assessment for the purpose of identifying the present level of functioning, establishing the learners' goals, writing the IEP, implementing the IEPs, assessing learners' progress and evaluating and re-evaluating of goals was left on special education teachers to perform. Learners' attainment of goals was therefore pegged on the teacher characteristics which did not guarantee the attainment of independence. The role of relevant specialized personnel such as orientation and mobility were ignored. Parents played the role of providing basic care.

The formulated goals for learners were poorly constructed and did not capture all aspects of functioning as postulated by the ICF-CY. The needs of learners that were documented in the IEP did not consider learners' functioning in the context of their environment. However, teachers made a lot of effort in identifying the needs of the learners using teacher made assessment tests. The efforts were however, not commensurate with the intervention recommended or done.

The IEP statements were also neither evaluated nor re-evaluated. The progresses of learners' towards achieving the IEP goals were not clear being confused with term evaluations made by individual teachers within a very short period of time and without any policy guidelines. There was no evidence of documentation of the evaluation made. This suggested that IEP and learners' progress may never have been evaluated.

Challenges experienced by teachers were contextual in nature. However, the suggestion put forward by teachers that could address them were systemic in nature. This created a gap on how to address the stated contextual challenges. The findings generally indicate that unless a lot is done, special needs education for the deaf blind is relapsing to custodial care but with minimal meaningful occupation of learners.

5.4. Recommendation

5.4.1. Policy recommendation

- This study recommends the need to develop a policy on IEP. The policy should clearly capture both procedural and substantive aspects of the IEP. The policy should clearly indicate how assessment for drafting of IEP should be done, the role that should be played by each personnel, who, when and where goal formulation should be done, how evaluation at all stages shall be done and finally, how reevaluation shall be done.

- The study also proposes the incorporation of ICF-CY in the identification of learners' needs and addressing each of them. ICF-CY should be a basis for drafting the IEP goals.
- This study recommends the evaluation of the educational system for special needs teacher education. Thorough training should be done to equip special educators with assessment skills and IEP drafting, this should be done with a view to preparing them for an inclusive education.
- That the curriculum for the deaf blind be evaluated nationally to identify the challenges and the successes in order to give the deaf blind befitting education.

5.4.2. Recommendation for further Research

- A thorough study should be done that shall evaluate the IEP tool for purposes of proposing a more recommended tool which will act as a guide to IEP drafting.
- The suggested IEP tool should be evaluated for the purpose of meeting individual needs of learners with deaf blindness.
- An evaluation of the Kenyan policy on SNE should be done with a view to highlighting its inadequacies for purposes of improving its ability to direct all practices on IEP.
- A study on the efficacy and effectiveness of IEPs in meeting learners' needs especially in an inclusive setting should be done.

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APPENDICES

APPENDIX I. Adapted PEPSE Scoring Guide

(Program Evaluation for Procedural and Substantive Efficacy)

General Instructions

This scoring guide contains checklist items that shall guide the IEP evaluation.

Compliance

This section contains those checklist items necessary for compliance with what is required for development of the IEP, content of the IEP, and IEP Team as per Reauthorized Individuals with Disabilities Education Act (IDEA) as adapted by Donelson (1999).

PART I (Compliance)

Instructions.

Item found (+)

Item deficit (-)

Student's Code

Student's Age

THE IEP INCLUDES A STATEMENT OF:

- 1.1 Present levels of performance, including student's strengths
- 1.2 Measurable annual goals with benchmarks or short-term objectives
- 1.3 The special education and related services and supplemental aids and services to be provided to the child, or on behalf of the child
- 1.4 The extent to which, if any, the child will not participate with nondisabled children in the regular classroom
- 1.5 Documentation of Teacher made assessment tests participation with without modifications or alternative assessment

1.6 Date for the beginning of services and modifications, and the frequency, location, and duration of those services and modifications

1.7 How the child's progress toward annual goals will be measured

1.8 How the child's parents will be informed of the child's progress toward annual goals and the extent to which that progress is sufficient to enable the child to achieve the goals by the end of the year

1.9 Appropriate personnel at IEP meeting

1. Special education teacher
2. Parent(s) - or documentation that the school attempted to gain parent participation
3. Representative of the education office
4. Individual who can interpret test results
5. Regular education teacher
6. At the discretion of the parent or agency, other individuals
7. AI teacher if student is auditorially impaired, VI teacher if student is visually impaired, both AI and VI teachers if student is deaf blind
8. If appropriate, the child (required when transition issues are to be discussed)

1.10 Special Factors Identified

- a. Positive behavior interventions, strategies (if needed)
- b. Language needs
- c. Braille instruction if blind or severely visually impaired
- d. Communication needs
- e. Assistive technology needs

APPENDIX II. IEP Goals and Objectives rating scale (R-GORI)

Dimension	Indicator
Measurability	<ol style="list-style-type: none"> 1. The target behavior has a beginning and an end and can it be seen and / or heard 2. Inclusion of performance criteria 3. The performance can be counted or measured
Functionality	<ol style="list-style-type: none"> 4. The child needs the target behavior to participate in all or most daily activities 5. The child needs the target behavior to complete all or most daily activities
Generality	<ol style="list-style-type: none"> 6. The skill represents a general concept or class of responses 7. The skill be generalized across a variety of settings, material and /or people
Instructional context	<ol style="list-style-type: none"> 8. The skill be taught across daily activities 9. The target behavior be taught / addressed by various team members

APPENDIX III. ICF-CY Component and Domain

BODY FUNCTION	ACTIVITIES &PARTICIPATION	ENVIROMENTAL FACTORS
b.1 Mental	d.1.Learning and applying knowledge	e.1. Products and technology
b.2 Sensory and pain	d.2.General tasks and demands	e.2. Natural environment and human made changes to environment
b.3 Voice and speech	d.3.Communication	e.3. Support and relationships
b.4 Cardiovascular and respiratory	d.4.Mobility	e.4. Attitudes
b.5 Digestive, metabolic endocrine	d.5.Self care	e.5. Services systems and policies
b.6 Genitourinary and reproductive	d.6.Domestic life	
b.7 Neural musculoskeletal and movement related functions	d.7.Interpersonal interactions and relationships	
b.8 Skin and related structures	d.8.Major life areas	
	d.9.Community social and civic life	

APPENDIX IV Questionnaire for Teachers

Instructions

The information provided below will be used for the purpose of academics. You are therefore requested to fill as required. Confidentiality will be observed. Please respond as required by each item.

1. In writing the IEP, did you write it alone

Yes No

If No, mention those involved

2. Have you received any specific training in IEP writing?

Yes No

3. Among the list below which one played a major role in assisting you to draft the IEP

Training

Experience

Natural senses

None of the above

4. Of the listed below, which one is the major purpose for your writing the IEP

An educational requirement

To in-calculate curriculum content to learners

Meet needs that can't be met by curriculum

None of the above

5. Do you have access to any policy guiding formulation and the implementation?

Yes No

6. Do you have a school policy on writing and implementing the IEP?

Yes No

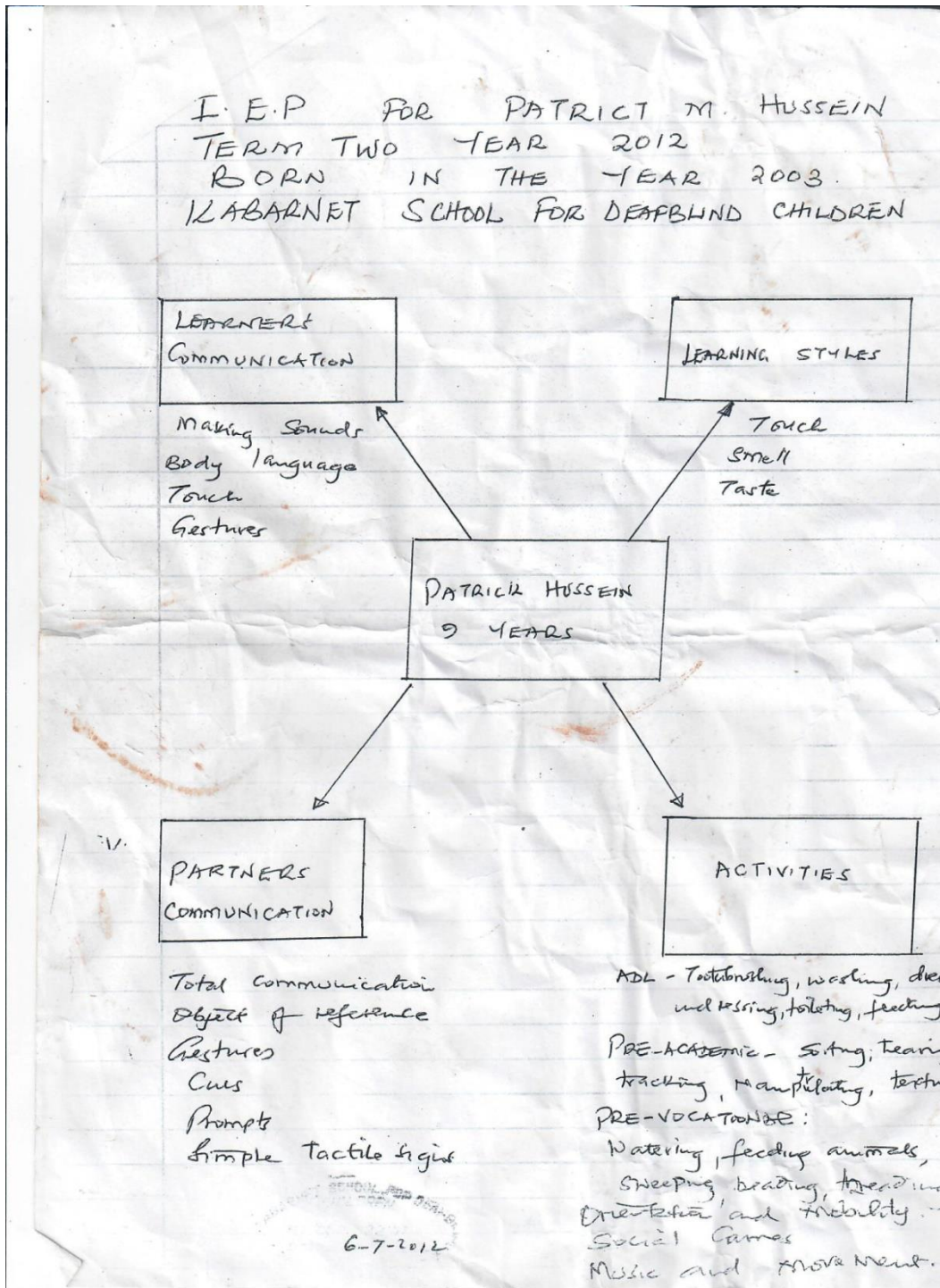
7. How did you acquire the policy?
- Provided by education office
- Provided by the school administration
- None of above
8. What exactly did you do as your role during the writing of the IEP?
-
-
9. Currently what is your role in the implementation
- Planning of activities
- Executing what has been planned
- Supervising the implementation
- Assisting others
10. Have you ever come across any other personnel apart from teachers while implementing your IEP?
- Yes No
11. How do you reevaluate these learners?
- Individually
- As a team
- None of the above
12. What duration do you take to evaluate?
- Termly
- Yearly
- 2 years
- Above 2 years
13. What challenges are you experiencing in the implementation of the IEP?
-
-

APPENDIX V. Interview Schedule for Teachers

TOPIC	QUESTIONS	PROBES
Types of assessment	How do you assess these children especially when you what to formulate an IEP	<p>After Learners were assessed by EARC officers for placement did you conduct any other assessment?</p> <p>The tool you used to assess, did you formulate yours or you used a standardized?</p> <p>What areas of need did your assessment concentrate on?</p>
Qualification of assessment personnel	Do you have any specific training in assessment of children with special needs?	<p>Are you trained in special needs education?</p> <p>What of assessment, have you been trained in it?</p> <p>Was the training done for the deaf blind or general?</p> <p>Have you had any training in drafting of IEP?</p> <p>Was it short term or long term?</p>
Role played by different personnel in IEP	What was the role played by the following Medical Personnel, EARCS,	What assistance did you receive from the following personnel, Medical, EARCS, Teachers, and Parents?

formulation and implementation	Teachers, Parents	<p>What help are they giving you as you implement the IEP?</p> <p>How do you get in contact with them?</p>
Evaluation of IEP	How do you evaluate attainment of goals?	<p>How do you assess the progress of learners?</p> <p>How do you report to parents the assessment results?</p> <p>Do you agree with the mode of assessment?</p> <p>How do you think assessment should be done?</p>
	How do you reevaluate the IEP/	<p>How do you reevaluate the IEP?</p> <p>What do you reevaluate?</p> <p>After how long do you reevaluate the IEP?</p>
Challenges	What challenges do you face in implementing the IEP	<p>What do you think should be done to address this challenges</p> <p>What has been done in your school to address your challenges</p>

Appendix VI Sample IEP 1



Sample 2

INDIVIDUALISED EDUCATIONAL PROGRAMME
LEARNER: BENSON IMMELI YEAR 2010

MAIN GOALS (LONG TERM GOALS)

To learn Activities of Daily Living Skills
To be able to use his hands

SHORT TERM GOALS

To be able to settle down and sit in class
To use his hands in manipulation things

ASSESSMENT

VISION - Low Vision
HEARING - Profound deaf

MAIN CHANNEL - Vision
SUPPORT CHANNEL - Touch, Smell

HOW THE LEARNER COMMUNICATES

Facial expressions
cries, smiles, natural gestures
Touch, tactile, goes places

HOW THE ADULT COMMUNICATES

Tactile Sign, object of reference
Hand Support signs
Body language

ACTIVITIES

Activities of Daily Living
Exploration
Music and movement



APPENDIX VII. Suggested IEP tool for Deaf blind

1. STUDENTS DETAILS

Name of child-----
Name of parent-----
Occupation of parent-----
Brief historical information of child-----

2. MEDICAL REPORTS

Report from speech specialist-----

Suggested intervention -----

Report from occupational therapist-----

Suggested intervention -----

Report from physiotherapist-----

Suggested intervention -----

Report from ophthalmologist-----

Suggested intervention -----

Learning media report-----

Suggested intervention -----

3. EDUCATION REPORTS

Report from EARC officer-----

Suggested intervention -----

Report from deaf blind specialist-----

Suggested intervention -----

4. IEP STATEMENT

S/NO	STRENGTH	WEAKNESS	ACTIVITIES TO BE DONE	AREA ADDRESSING	EVALUATION METHOD	EVALUATION REPORT

5. COMMENT FOR FURTHER ADDRESS

APPENDIX VIII. Research Permit



THIS IS TO CERTIFY THAT:
MS. JANET MBOGANI WARINGO
of KENYATTA UNIVERSITY, 0-10200
MURANGA, has been permitted to
conduct research in Baringo , Kisumu ,
Nairobi Counties

on the topic: AN EVALUATION OF THE
IMPLEMENTATION OF IEP FOR
LEARNERS WITH DEAF-BLINDNESS IN
KENYA.

for the period ending:
13th November,2018

.....
Applicant's
Signature

Permit No : NACOSTI/P/17/20114/20138
Date Of Issue : 13th November,2017
Fee Received :Ksh 2000



Director General
National Commission for Science,
Technology & Innovation



**NATIONAL COMMISSION FOR SCIENCE,
TECHNOLOGY AND INNOVATION**

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P.O. Box 30623-00100
NAIROBI-KENYA

Ref. No. **NACOSTI/P/17/20114/20138**

Date: **13th November, 2017**

Janet Mbogani Waringo
Kenyatta University
P.O. Box 43844-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "*An evaluation of the implementation of IEP for learners with deaf-blindness in Kenya*" I am pleased to inform you that you have been authorized to undertake research in **Baringo, Kisumu and Nairobi Counties** for the period ending **13th November, 2018**.

You are advised to report to **the County Commissioners and the County Directors of Education, Baringo, Kisumu and Nairobi Counties** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

**GODFREY P. KALERWA MSc., MBA, MKIM
FOR: DIRECTOR-GENERAL/CEO**

Copy to:

The County Commissioner
Baringo County.

The County Director of Education
Baringo County.