# AN EVALUATION OF EXISTING SERVICE PROVISIONS FOR STUDENTS WITH HEARING IMPAIRMENT AND THE CONDITIONS NECESSARY FOR EFFECTIVE IMPLEMENTATION OF INCLUSIVE EDUCATION PROGRAMME IN NIGERIA

BY

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SUBMITTED TO

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## PREAMBLE

How best to educate students with special educational needs is one of the most dominant and controversial issues confronting the educators around the world today. It is a complex and dynamic issue that demands careful analysis. It requires that we examine such fundamental questions as: What is education? What are schools for? How best to teach diverse learners? How should they be assessed? How should they be classified; indeed should they be classified at all? How important is the place in which they are educated? What choices should their parents have? What support do they require? How should they be funded? How can agencies that are involved with their education, health and welfare be coordinated? Some of these questions are common to general education, but some are specific to the education of students with special educational needs. In many respects, Special education is a microcosm of education more generally and indeed of the society as a whole. How we address issues to do with students with special educational needs provide us with significant leads as to how similar issues can or should be addressed in the broader context. (Mitchell, 2010) www.educationcounts.govt.nz/publications/special\_education

## CERTIFICATION

This is to certify that this research work on 'An evaluation of existing service provisions for the students with hearing impairment and the conditions necessary for effective implementation of inclusive education programme in Nigeria' was carried out by Ewa, James Abua, NCE,(SP. EDU) B.ED (SP. EDU), M.ED (EDU HEARING HANDICAPPED) ISIC NO 80043708, under my supervision.

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## **DEDICATION**

This research work is dedicated to the glory of God Almighty and to who ever that is fighting a just course for the individuals with special needs in the society.

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## ABSTRACT

The main purpose for the conception of this study was to evaluate the existing service provisions for the students with hearing impairment and the conditions necessary for effective implementation of inclusive education programme in Nigeria. To achieve the purpose of this study, five null and one alternate hypothesis were formulated to guide the study. These included: There is significant relationship between positive/negative attitudes toward students with hearing impairment in the regular secondary schools environment and effective implementation of inclusive education programme in Nigeria. There is no significant relationship between the students with hearing impairment use of Assistive Technology (AT) devices in the inclusive secondary schools and effective implementation of inclusive education programme in Nigeria. Teachers' training in the regular school setting does not significantly have a relationship with effective implementation of inclusive education programme for the students with Hearing impairment in Nigeria. There is no significant relationship between Government commitment to the course of inclusion of the students with hearing impairment into regular school setting and effective implementation of inclusive education programme in Nigeria. The availability of supportive staffs in the regular school environment does not significantly influence effective implementation of inclusive education programme for the students with impaired hearing in Nigeria. There is no significant difference in the provision of educational service resources between the Northern and Southern geo-political zones of Nigeria and effective implementation of inclusive education in Nigeria. Literature was reviewed according to the variables under study. Survey research design was adopted for the study. This design was considered appropriate because it allows the researcher to make inference and generalization of the population by selecting and studying the sample for the study. Samples of seven thousand four hundred respondents were randomly selected for the study. The selection was done through the simple random sampling technique. This was to give equal and independent opportunity to all the members of the population to be selected for the study. A four point Likert-like QUESTIONNAIR ON CONDITIONS NECESSARY FOR EFFECTIVE IMPLEMENTATION OF INCLUSIVE EDUCATION PROGRAMME FOR STUDENTS WITH HEARING IMPAIRMENT IN NIGERIA (CONEIIEPSWHIN) and executive interview were the main instruments used for data collection. The instruments were subjected to both face and content validation by the supervisor and experts in measurement and evaluation in the Faculty of Education, University of Calabar. The reliability estimate of the instruments was established through

split-half reliability method. The reliability co-efficient from the split-half was corrected with Spearman Brown Prophesy Formula. Pearson Product Moment Correlation Analysis and independent t-test were the statistical analysis techniques adopted to test the hypotheses under study to ascertain whether to reject or retain them. These statistical tools were used because of the nature of the variables involved in the study. All hypotheses were subjected to testing at .05 level of significance with relative degrees of freedom. The results of the analysis revealed that, positive/negative attitudes toward students with hearing impairment in the regular secondary schools environment is not significantly related to effective implementation of inclusive education, while the students with hearing impairment use of Assistive Technology (AT) devices in the inclusive secondary schools, teachers' training in the regular school setting, Government commitment to the course of inclusion of the students with hearing impairment into regular school setting and the availability of supportive staffs in the regular school environment have significant relationship with effective implementation of inclusive education programme in Nigeria. The study also revealed that there is no significant difference in the provision of educational service resources between the Northern and Southern geo-political zones of Nigeria and effective implementation of inclusive education in Nigeria. Based on the findings of the study, recommendations and suggestions for further studies were made.

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## **CHAPTER ONE**

## **1 INTRODUCTION**

In this chapter, the researcher presented the background of the study, the statement of the problem that prompted the research and as well other characteristics associated with research procedures were delved into:

#### 1.1 Background of the study

The concept of inclusion is far from being new in educational paradigms and its origin is in the field of Special Education and Disability. During the 19<sup>th</sup> century, pioneers of special education argued for and helped to develop educational provisions for children and young education people who were excluded from (Dagnew 2013. retrieved **(***a*) http://www.resjournal.com/ERJ ISSN.2026 6332, Renolds and Ainscow 1994). The education of children, youth and adults with special educational needs and disabilities is now given credence and priority as a key policy objective in the education system of many countries of the world.

The underpinning idea of inclusive education is that all children have the right to be educated together regardless of any special need or degree of disability. Originally, the Inclusive education movement was focused primarily on persons with disabilities and learning difficulties. This assumption can be seen in different literatures and across a number of legislative documents (Dagnew, 2013 and Ainscow et al 2006). They pointed out that inclusive education looks at both the rights of students and how education system can be transformed to meet the needs of diverse group of learners, disability status notwithstanding. It emphasizes the need for opportunities of equal participation for any student with disability or special needs in the education system, preferably in the mainstream environment.

Some of these reasons are associated with disability, gender, race, ethnicity, language, care status, socio-economic status, degree and type of disability, sexuality or religion (Gerschel, 2003). One major reason for this broader approach is that many of these factors interact or act in combination and can result ultimately in marginalization or exclusion. Therefore, focusing on a single factor such as disability in isolation has the potentials to lead to faulty assumption (Popping and Maloney, 2005). In this context, policies on inclusion have not been restricted only to the education of pupils identified as having special educational

needs (NPE, 2004, Booth and Ainscow, 1998). The most compelling rationale for inclusive education is based on the fundamental human rights. As people with disabilities challenged the stigmatizing and limiting nature of segregated education system, this gave voice to their anger and dissatisfaction, issues of equality of access and educational opportunities gained impetus and integration became the centre stage. Political pressure from Disabled Persons Organizations (DPOs), parental and other advocacy groups began to challenge the society's values and which ultimately brought legislative changes to educational practices. Educators were increasingly exploring ways of supporting the previously segregated groups so that they could find a place in the mainstream schools. Researchers also began to highlight the fact that the special schools system selected children disproportionately from racial minorities and socially disadvantage group (Mercer, 1970). Under the United Nation Convention on Rights to education, children with or without disabilities have the same right to educational opportunities (UNITED NATIONS, 1989).

The Centre for studies on inclusive education presents a further view of inclusive education as "All children and young people with/without disabilities or learning difficulties can learn together in ordinary preschool, provision schools ,colleges and universities with appropriate network or support (Ozoji, 2006,). Inclusion means enabling all students to participate fully in the new life and work of the mainstream settings, whatever their needs maybe. There are many different ways of achieving this and an inclusive time table might look differently for each student.

All students are unique, differing from one another intellectually, emotionally, socially and physically. Most students are taught in regular classes, without the need for special education teachers services and the classroom teachers feel capable of meeting their instructional needs. Some students however, deviate so greatly from the "normal limits" that the regular classroom teacher must seek special help in dealing with their learning and behavioural problems. Students with hearing impairment may have learning problems/difficulties in one or more several of the academic areas such as reading, arithmetic/mathematics, language and spellings (Ewa, 2006, Ojile, 2006, Liu & Hong, 2007). These individuals may lack social adjustment, motivation and self management skills and are often described with terms such as hyperactive, poor attention span, underachievers, clumsy and poor memory due to the presence of hearing loss. Their estimated intellectual functioning abilities may differ markedly from their actual achievement (Mercer & Mercer, 1989).

Some Students with hearing impairment exhibit wide span between skills they excel in and those that are problem areas. Others are merely slow in acquiring school related skills and behaviours. Some of the students with impaired hearing may demonstrate only one problem area such as reading comprehension, where as others may have a combination of learning and behavioural problems. For some time past, many students with hearing impairment were placed in special education classes, which placed emphasis on segregation options. With the current trend in policy formulation which marked a shift from segregation to inclusion, these students' needs have been charged to be met as much as possible in classes/schools with non handicapped peers (Mercer et al, 1989).

Historically, the education of persons with disabilities/special needs has been categorized into different stages ranging from sheltered workshops, segregated placement alternative, integration, mainstreamed, resource room services and so forth. With the present call on inclusive education, efforts are being made to get the special needs persons (Hearing impaired students) educated in the regular school setting. Over the years, there have been various forms of educational programmes/service provisions for the children with Hearing impairment. It was believed that since the population of this category of persons was negligible, the best way to carry them along was to attend to them separately. The rationale may seem correct but in practice, it was detrimental to the students with impaired hearing. In addition, in the special schools, most of the learning inputs were inadequate and inappropriate. Hence the students/individuals with hearing impairment were considered unteachable in the regular setting, so the learning content was watered down and their classroom would be any available space. Moreover, since this category of students have been labelled as being unable to learn, it was believed that any teacher would do, even if the teachers are inexperienced and untrained. (Obani, 2006).

The various educational programmes/service models that have been accessible to the students with hearing impairment include: Regular class placement option, the Consultative service option, Itinerant services; Resource room placement alternative, Special/integrated class facility; Special day school, Residential special school, Home/hospital bound service options among others (Bishop, 1979, Okeke, 2001, Ikpaya, 2004, & Obi, 2006).

In the Regular class placement, the students with impaired hearing are made to be in the same class with the non hearing impaired students with some adjustment and would still fall back to

the segregated setting to have their special needs met by the special education teacher (Florin, 2013).

In the Special day school for the Deaf, the educational needs of the students with hearing impairment are attended to during school hours but at the close of the day, they return home to their parents/guardians.

The Residential schools for the Deaf on the other hand provide both educational and social services by housing the students with hearing impairment in the facilities. The students can only return home at the end of the term/session. This marks a complete isolation from the mainstream society.

The Itinerant service option implies the situation where a special education teacher renders services to the students who are hearing impaired in three or more schools within the locality at a specified time. This could be due to dearth of special educators.

It is worth noting that almost all these service models/programmes placed emphasis on segregation. But the current upsurge in the field of education is inclusion, which upholds that the global trend in the provision of educational services to the special needs children (students with hearing impairment) today is inclusion. It is an ideal way of making education accessible to the special needs children. The aim is to achieve a better academic and social integration than the traditional segregated approach and institutionalization of the special needs children.

The placement of the students with hearing impairment in the inclusive education classes will necessitate the regular and special education teachers cooperate in the planning and delivery of instructions to this category of students. Moreover, in the current inclusive education approach, the regular teachers are providing more direct instruction to the handicapped learners in general and students with hearing impairment in particular than before and are working closely with special education teachers as well.

Meeting the special needs of the students with hearing impairment, in the inclusive classroom environment continue to be a formidable task to both regular and special education teachers. At the elementary /primary level, teachers are faced with the task of helping the youngsters who are hearing impaired to acquire basic tool/skills in language, explore careers and develop independent work skills and numerous other skills. While at the secondary and tertiary levels, teachers are faced with the task of helping the adolescent hearing impaired students acquire

academic contents, vocational skills and life management skills. Therefore to meet the educational needs of the students with hearing impairment in the inclusive school setting, teachers must develop strategies and techniques that will enable them to alter the type and amount of instruction offered to this category of students. Altering the type of instruction might involve signing the reading passages on tapes or using a sign language interpreter, while altering the amount of instruction means increasing demonstration and practical activities, since their learing is more visual oriented. In other word, to succeed in the regular school setting, students with impaired hearing have a wide range of needs and school varying demands concerning the types of resources available. Hence, the needs and the resources must be examined, taking into consideration individual differences of the students and must not be guided by trends or philosophies insensitive to uniqueness or individual differences. Students with hearing impairment therefore, require a systematic instructional program that is planned according to their individual needs. This individualized approach does not means that each student must be taught in a one to one or small group instructional method. It does imply though that the students with impaired hearing receive daily instruction tailored to meet their educational needs. It is pertinent to note that inclusive education affects not just the conceptualization of special educational needs and the nature of education provision for the special needs children, but it calls into question the broader aim of education, the purpose of schools, the nature of the curriculum, and approaches to assessment as well as schools' accommodation to diversity.

In view of the above stated facts that this research is poised at determining the necessary conditions that would enhance effective implementation of inclusive education programme in Nigeria to enable the students with hearing impairment attain their educational and social potentials in the mainstreamed society.

#### 1.2 Statement of the problem

A programme developed for the students with hearing impairment is a comprehensive school/educational setting at which the students with impaired hearing receive formal training based on the needs of the society. The rationale for educating the children with hearing impairment is that, each child irrespective of his/her uniqueness or disability status, ought to be given appropriate opportunity to be educated in order to earn a living and contribute to the development of self in particular and the society in general (NPE, 2004, UNESCO, 2005).

The type of education the students with hearing impairment are given determine to a large extent their roles in the community/society development.

Creating an inclusive society is the main objective of inclusive education. Special needs education incorporates an eclectic array of pedagogies from which all learners may benefit. It is assume that human differences are normal and that learning must accordingly be adapted to the needs of the child rather than the child fitted to pre-ordained methodologies regarding pace and nature of the learning process. It should be noted that prior to the Salamanca Statement and Framework for Action (1994) on inclusion, various forms of programmes/models of providing services for the students with hearing impairment were advocated for and used around the world. This was with the aim of making education accessible and life in general convenient for this category of individuals in the society.

Inclusive education paves the way for a training ground for a people oriented society that respects both differences and the dignity of all human beings. Thus the Right of every child to education is proclaimed in the Universal Declaration of Human Rights which was reaffirmed by the World Declaration of Education for All (EFA), "every person with or without disability has a right to self expression with regards to education as far as can be obtained". It can therefore be deduced that inclusion as proclaimed by the Salamanca Frame work for Action is an expression, as well as a merger of the already existing services models to serve the students with impaired hearing around the world and Nigeria in particular.

Consequent upon the foregoing that this research was designed to evaluate the different models of service provisions for the students with hearing impairment and the conditions necessary for effective implementation of inclusive education programme in Nigeria with a focus on:

- 1. The place of attitude as it affects effective implementation of inclusive education programme for the students with hearing impairments in Nigeria.
- 2. The use of assistive technology (AT) devices by the students with hearing impairment as it affects effective implementation of inclusive education programme in the Secondary Schools in Nigeria.
- 3. The impact of teacher training/recruitment and deployment as it affects effective implementation of inclusive education in the regular secondary schools in Nigeria.

- 4. The level of Government commitment as it affects effective implementation of inclusive education programme of students with hearing impairment in Nigeria.
- 5. The role of supportive staff and effective implementation of inclusive education programme for the students with hearing impairment in Nigeria.
- 6. To draw a compariion on the provision and availability of educational resources between the states in Northern Nigeria and Southern Nigeria as to ascertain effective implementation of the inclusive education programme in Nigeria..
- To ascertain the place of reading curriculum in the inclusive education programme for thestudents who are hearing impaired in Nigeria.

### 1.3 Purpose of the study

The main purpose was to evaluate the service provisions for students with hearing impairment and the conditions necessary for effective implementation of the inclusive education programme in Nigeria. The study was also poised at ascertaining:

- The degree at which positive or negative attitudes significantly affect the successful implementation of inclusive education of the students with hearing impairment in the Nigerian secondary school settings.
- The extent to which the use of Assistive technology (AT) devices by the students with hearing impairment can enhance effective implementation of inclusive education in Nigeria.
- The study was designed to explore the extent to which teacher training/recruitment can enhance effective implementation of inclusive education programme for the students with hearing impairment in Nigeria.
- 4. The role of the Government towards the inclusive education programme of the students with hearing impairment equally constituted an anchor point in this research.
- 5. The roles of the supportive staffs as it affect successful implementation of inclusive education programme for the students with impaired hearing in the regular secondary school setting in Nigeria.
- 6. To compare the extent to which educational resources are available and provided in the states locaed in Northern Nigeria and their counterparts states in the Southern Nigeria for effective implementation of inclusive education programme in Nigeria.

## **1.4 Research Questions**

The following Research Questions were generated to guide the study:

- 1. To what extent do positive/negative attitudes toward the students with hearing impairment in an inclusive school setting affect/enhance effective implementation of inclusive education programme in Nigeria?
- To what extent do the students with impaired hearing use of Assistive Technology (AT) devices in an inclusive classroom environment enhance effective implementation of inclusive education programme in Nigeria?
- 3. To what extent does Teacher training influences effective implementation of inclusive education programme for the students with hearing impairment in the regular school setting in Nigeria?
- 4. To what extent does Government commitment to the course of inclusion significantly influences effective implementation of inclusive education programme for the students with impaired hearing in the country?
- 5. To what extent does the availability of the supportive staffs in the regular schools serve as a booster to the inclusive education programme for the students with hearing impairment in Nigeria?
- 6 To what extent is the difference in the provision of educational service resources between the states located in the northern and southern geo-political zones of Nigeria?

## **1.5 Research Hypotheses:**

For the research work to be worthwhile and serve the purpose for which it was conceived, the researcher formulated five null and one alternate research hypotheses to guide the study:

- **HO 1:** There is a significant relationship between positive/negative attitudes toward students with hearing impairment in the regular secondary schools environment and effective implementation of inclusive education programme in Nigeria.
- **HO 2**: There is no significant relationship between the students with hearing impairement use of Assistive Technology (AT) devices in the inclusive secondary schools and effective implementation of inclusive education programme in Nigeria.
- **HO 3**: Teachers' training in the regular school setting does not significantly have a relationship with effective implementation of inclusive education programme for the students with hearing impairment in Nigeria.
- HO 4: There is no significant relationship between Government commitment to the course of inclusion of the students with hearing impairment into regular school setting and effective implementation of inclusive education programme in Nigeria.
- HO 5: The availability of supportive staffs in the regular school environment does not significantly influence effective implementation of inclusive education programme for the students with impaired hearing in Nigeria.
- **HO 6**: There is no significant difference in the provision of educational service/ resources between the Northern and Southern geo-political zones of Nigeria and effective implementation of inclusive education programme in Nigeria.

#### **1.6** Significance of the Study

A good research work is design to unveiling the successes or failures of a programme. The inclusive education programme is aimed at creating a barrier free society. Therefore this research work is conceived to serve as a recipe to ascertain if the inclusive education programme in Nigeria behoves in theory has transformed into practice. The study will serve as a centre piece which x-rays the level of commitment on the part of the government and other stakes holders in the course of inclusion which may calls for a rethink and positive re-engineering of the programme rather than resting on the oars.

The significance of this study can not be over emphasised as it tends to explore and project the students with hearing impairment capabilities in meeting the demands of the regular school setting as this will foster the sense of competition between the students with intact hearing (normal) and their counterparts who are hearing impaired in the inclusive school setting.

The study is conceived to helph debunk the earlier held wrong beliefs about the students with hearing impairment who are generally perceived as being aggressive and antagonistic. With their being able to make and maintain friendship with their hearing peers, this will lead to a refinement of attitudes thereby paving the way for a new educational climate to be created for all children in the inclusive school environments to attain their best potentials for utmost development of self and the society.

The study is poised to serve as a knowledge bank to all stake holders in education and as well foster further research into the subject matter of this work.

The study has added a feather to the researcher with the award of a Ph.D in Special Education from the prestigious Palacky University Olomouc, The Czech Republic.

## **1.5 Theoretical framework**

A theory is a set of ideas that provide a framework for asking questions about a phenomenon and for gathering and interpreting information about that phenomenon. In educational research, theories are used to explain phenomena or different view points held in education. Each theory spells out the researcher's basic assumptions, gives order to the field under study and set guidelines for its investigation (Kuhn 1962) in (Comer 2006). It is needful to note that a theory influences what the researchers observe as well as the questions they ask, the information they seek and how they interpret this information (Shart 2000). Hence from our understanding of how an educational researcher explains and handles some educational problems, we tend to know which theory shapes his/her mind.

For the purpose of this research work, the researcher anchored the study on the social theory of inclusion.

The social theory of inclusion sees disability as an emancipation move aimed at librating children with special needs. The model principally evolved from the Disabled Persons Movements in the 20<sup>th</sup> century. These movements were informed largely by the need for the disabled persons to emancipate themselves from the social oppression, discrimination and exclusion experienced in the society.

Obi (2006), opines that the social model/theory of disability is an emancipation theoretical move aimed at librating the disabled persons. The model/theory involves debiologistation of discourse about disability (Hughes and Paterson, 1997). Debiologistation as popularized by the social theory means an end to debate about body biology and emphasizes investigation into the sociology of the flesh. The social model insists that disablement has nothing to do with the body while impairment is simply a description of the physical body. It sees social barriers and oppressive polices as rather affecting the body functioning. The model according to Hughes et al (1997) & Obi (2006), advocates that rather than looking at the disability in the medical perspective, it should be looked at the social perspectives.

The social model insists that disabled persons (students with hearing impairment) are made so by the social system in Nigeria that fails to provide the basic facilities that will make them functional in the society. The model/theory believes that the social system rather than the physical impairment per se that creates disability through the socio-cultural, attitudinal and architectural barriers which results in discrimination and prejudices. Obi citing Avoke (2005), observes that disability implies all the things that impose restrictions on disabled persons ranging from individual prejudices to institutional discrimination; from inaccessible public buildings to unusable transport systems; from segregated education to excluding work/assignment and so on in developing nations in general and Nigeria in particular. In the same vein, Mittler (2000) further supports the fact that the social theory of disability is based on the proposition that it is the society and its institutions that are oppressive, discriminatory and disabling. He maintain that the theory calls for the refocusing of attention on the need to remove all forms of obstacles/barriers which hitherto inhibit the full participation of disabled persons in the life of the society, institutions and attitudes that lead to exclusion.

In the educational perspectives, Mittler sees the restructuring of schools along inclusive settings as a reflection of the social model. The reasoning here is that once discriminatory

obstacles are removed, children with special needs will have access to education and other services.

Okeke (2010) on the other hand noted that the need to make education inclusive came as a result of a number of factors. Major among them was the paradigm shift from within the child model to social model. The "within the child" model was based on the assumption that the origin of learning difficulties lie largely within the child. The social theory/model on the other hand is based on the proposition that the society and its institutions are oppressive, discriminatory and disabling and that attention needed to be focused on the removal of obstacles to the full participation of people living with disabilities in the life of the society and changing institutions, regulations and attitudes that created and maintained exclusion (Campbell & Oliver, 1991, Mittler, 2000). The social model aligned with the United Nations General Assembly's Declaration in 1975 that no society can or should deny any person the right to participate in the life of the community to learn to earn wages and live a full life as others just because he/she is disabled in some ways. But experience and studies have shown that most private and public establishments in Nigeria still violate and flout the above injunction (Ayoku, 1996, Agwu & Babalola, 1980).

In the same vein, Gary Thomas (1997) in Obani (2006), Stainback, Stainback & Sapon-shavin, (1994), put it that inclusion is about a philosophy of acceptance and provision of a framework within which all children regardless proven difficulties at school, can be valued equally, treated with respect and provided with equal opportunities at school. Accordingly, the goal of inclusion is not to erase or deny the existence of differences but to enable all students to belong to an educational community that values and validates their individuality as members of the society.

Inclusion necessarily demands the making of fundamental changes and rearrangements in the organization, administration, staffing and curricula of the mainstream school right from the start. This is to allow for diversity and for various needs of the pupils/special needs children to be adequately met without resort to segregation, labelling or the so called special attention in separate settings. Obani (2006) pointed out further that inclusion differs from integration in that everybody right from the beginning is an equal member of the school or class. For no one is the host and no one is the joiner (visitor) for whom adaptations and special arrangements have to be made, as in the case of integration. Inclusion represents a natural reflection of the natural population of the community in the school.

The viewpoints of the above theoretical framework constituted the main thrust of this research work which sought to ascertain the extent to which general attitudes held in the inclusive school settings; the use of Assistive Technology (AT) devices by the students with hearing impairment; the training/recruitment of teachers; the level of government commitment to the course of inclusion and as well as the availability of supportive staffs in the regular school setting can enhance effective implementation of inclusive education programme for the students with hearing impairment in Nigeria.

#### **1.6 Delimitation/scope of the study**

Contextually, the research is poised at examining the conditions that will necessarily facilitate effective implementation of the inclusive education programme for the students with hearing impairment in Nigeria. But with reference to the geographical location; this research work was designed to cover the whole country, Nigeria. Nigeria is divided into six geopolitical zones, made up of: The North West, The North Central, The North East, The South West, The South East and The South-South geo-political zones respectively. The North West geo-political zone is made up of seven states, the North Central, the North East, the South West and the South South geo-political zones have six states each respectively, exception of the South Eastern geo-political zone that is made up of five states only. This makes a total of 36 states in the country plus the Federal Capital Territory in Abuja.

The nation, Nigeria came into existence in January, 1914, following the amalgamation of the Northern and Southern protectorates by Sir Fredrick Lugard. Nigeria is located in the Western Coast of African sub-region. It is the most populated country in Africa with a current population of about 170 million inhabitants and is commonly referred to as the 'giant' of Africa.

Nigeria is bounded on the west by the Republic of Benin; to the North by Niger and Chad republics; to the East by the Cameroun Republic and to the South by the Atlantic Ocean respectively. Nigeria is a multi lingual nation with about 250 ethnic groups/languages and has English as its Official Language.

Nigeria as a country practices democracy (the Presidential system). It has 109 senatorial seats and 360 Federal constituencies' seats (upper and lower houses). There are 776 Local

Government Areas in Nigeria. The economy of Nigeria largely depends on oil/gas, agricultural products and other natural resources.

Nigeria is a member of the British Common Wealth of Nations and plays a great role in the committee of nations. Nigeria is also a signatory to the Salamanca Frame Work for Action on inclusion. (<u>www.factmonster.com/ipka/A0107847.html</u>), Nwazuoke, 2010 & Okeke, 2010, Olayi & Ewa 2013.

#### **1.7 Limitation of the study**

It is important to state that no worthwhile venture embark upon in this life that does not carry along with it positive and negative experiences. It is therefore necessary for the researcher to acknowledge some of the unpleasant experiences encountered during the process of carrying out the research. In view of this fact, the researcher had taken time to present some of the ugly and pathetic situations encountered while carrying out the research work/study.

One of the greatest challenges the researcher faced in carrying this research work was financial constraints. The problem became very obvious when the authority of the Czech Republic Minisrty of Education in conjunction with the Faculty of Education Palacky University, decided to stop the scholarship to study abroad from Czech. The researcher's home university could neither do anything better. Hence the researcher has got to depend on his meagre salary which has got to be shared between the family and in doing the research.

Another gruesome experience the researcher had was the risk involved in travelling especially to the North East zone of Nigeria which is characterized by the unidentified suicide bombers and killers from the Boko Haram terrorists. Travelling around these areas was always characterize with stops and check by the security agents which made the journeys tedious and exasperating.

The issue of administering and retrieving the research instruments as well as coding the instruments was another task to be reckoned with. The researcher found himself bailed out of this lybrainth through the efforts of the research experts in his home University, precisely Dr Ben D. Otu.The challenges of being a father and a student are enormous.The researcher was always caught in the webs of meeting up the home responsibilities as a father and living up to expectations as a Ph.D student. The non challant attitudes of some respondents in filling the

questionnaire can not be ruled out. Despite all the aforementioned challenges, the researcher was able to carryout the research successfully.

#### **1.8 Budgeting and cost of the study**

For this noble and fantastic work to come to fruition, the researcher stands to appreciate the kind gesture behoves on him by the Palacky University Olomouc, Czech Republic for the mentorship and developmental strives imparted on him. This feat also applies to his home University, University of Calabar, Calabar, Nigeria for sharing in the vision with the Palacky University, Olomouc and making him to become what he is today. He shall in due course take stock and present account of all the financial expenditure incurred while carrying this noble and worthwhile task.

As earlier pointed out, the stoppage of the scholarship to study abroad (field work in Nigeria) by the authority of the Palacky University, which was the main source of funding, and the non positive support from the home university for the execution of the research, the researcher has to make due with his meagre salary. The amount so far generated was used in travelling to the various zones ear marked for the study, production of the research instruments, mailings, making contacts through phone calls/SMS, payment of stipends to the research assistants and as well carrying out other exegencies involved in the research process.

A great sign of relief which caused the researcher to shed tears of joy came when the researcher's supervisor humble and amiable father and mentor, Prof Milon Potmesil, on his own volution volunteered to print and bound the final copies of the dissertation to be submitted to the Faculty of Education, Palacky University Olomouc, CZ and that made the dream comes TRUE.

#### **1.9 Definition of Terms**

Each discipline has specific language and terminologies that are used to convey meaning and thoughts in the discipline. There are obsolete as well as current terms in use in any profession. If we must appraise contemporary programmes, identify proven support systems that ensure successful programming, then it also follows we must use current terminologies in the field. Some of the terms used in this research work were operationally as well as contextually/technically defined.

#### **Students with hearing impairment**

Operationally, these are defined as students in whom the sense of hearing is defective or non functional as a result of problems associated with their auditory system. They may be categorized into deaf and hard of hearing.

Contexually, Ozoji (2003) refers to students with impaired hearing as children/students in whom the sense of hearing is defective and this could range from the ability to hear partially to total deafness. Abang (2005) viewed the students with hearing impairment as those in whom a sufficient loss of functional hearing is as severe as to interfere with ordinary communication. Azanor & Adigun (2013) see the students with hearing impairment as individuals encountering difficulties in their hearing system and who need provision in classroom adaptations and implementing communication strategies that will ensure success in their academic and social life. Some of the students may have permanent hearing loss (Deaf), while others may suffer temporary hearing loss (Hard of hearing) as a result of the presence of diseases/infection or other causative factors early or later in life which affects language development and access to the curriculum.

#### Services for the students with hearing impairment

This refers the various models or programmes that provide formal education to the students with hearing impairment. It is a generic term used in describing the educational placement alternatives for the Deaf and Hard of hearing students. This may range from Residential school for the Deaf, Special Day School for the Deaf; self- contain class to Regular classroom and many others.

Ozoji (2006) opines that services for the students with hearing impairment refer to the various educational programmes/learning environments accessible to the students with impaired hearing. There are many such programmes and these may include: Residential schools for the Deaf (private and government), Hospital schools, Students homes, Regular public schools and so forth. In the same vein, Gargiulo (2009), pointed out that services are provided by various educational environments for children with hearing impairment among which are Regular classroom, Separate class, Resource-room, Residential facility, Home/hospital bound, Separate schools etc.

#### Assistive Technology (AT) devices

These are materials or instruments that may be used by the students with hearing impairment to enhance their learning or used by the teachers to facilitate teaching and learning process for the students with hearing impairment in an inclusive classroom environment.

Assistive Technology (AT) devices are said to be any item, piece of equipment or product system, whether acquired commercially at the shelf, modified or customized that is used to increase, maintain or improve the functional capabilities of the persons with impaired hearing in order to bring out the best in them. These could also be said to be devices which aid in teaching and facilitating understanding for individuals with hearing impairment (Beard, Johnson & Carpenter, 2011).

Robitaille (2010), on the other hand observes that Assistive Technology devices are so important for individuals with hearing impairment because these devices can help in improving the physical and mental functioning, alleviate a disorder/hearing impairment, prevent the worsening of a condition, improve the capacity of the students with hearing impairment to learn or even replace a missing link in the inclusive learning environment.

#### Inclusive education environment/setting

This refers to the current trend of educational programme which focuses on the provision educational services to both the students who are hearing impaired and those students with intact hearing in the same classroom environment without any element of barrier in the form of segregation, discrimination, separation or being treated differentially, but all are seen as one with equal right in the school/classroom environment.

Inclusive education setting is an educational environment where all children with or without disabilities or learning difficulties learn/school together in ordinary pre-school; primary school, secondary school; college; polytechnic and universities without dichotomy with appropriate network of support put in place (Ozoji, 2006).

## **CHAPTER TWO**

### **2** LITERATURE REVIEW

As stated in the general introduction, the central focus of this study is to evaluate the different service provisions for students with hearing impairment and the conditions necessary for effective implementation of inclusive education programme in Nigeria. In other to understand these conditions, it becomes imperative to review some of the literature based on the implementation of inclusive education. This chapter therefore, attempted to x-ray an overview of the concept of hearing impairment and then presented a theoretical outline of the fundamental elements in an inclusive education system and as well review literatures pertinent to the implementation of inclusive education.

The chapter is divided into five sections: It progressed from the concept of hearing impairment in the first section, to historical overview of inclusive education internationally and the conceptualization of inclusion in the second section. It then journeyed to inclusive education practices globally/internationally in section three and there after spreads its tentacles on inclusive education practices in Nigeria as captures in section four and finally climaxed/rested the case on the conditions necessary for effective implementation of inclusive education programme in Nigeria in section five.

## **Section One**

### 2.1 The concept of hearing impairments

Hearing impairment is a general, audio-logical term which encompasses all degrees of hearing loss irrespective of the etiology and location (Michael, 2010, Paul & Quigley, 1994).Hearing impairment is a disability associated with hearing and it ranges in severity from mild to profound. It is classified into Deaf and Hard of hearing. A Hard of hearing is one who with the use of amplification/hearing aids has residual hearing sufficient to enable successful processing of linguistic information through audition. A Deaf individual on the other hand is one whose hearing loss is so great to the extent that he/she cannot benefit from day to day processing of linguistic information through audition with or without amplification (Abang, 2005).

Hearing impairment refers to all abnormalities, disorders, deviations etc in the mechanism generally referred to as the ear. It refers to all levels of hearing loss and abnormalities in the

hearing system. It covers both individuals with mild hearing loss to severe and profound hearing loss (Deaf and Hard of hearing). Hard of Hearing are individuals with hearing loss that with the use of amplification can benefit from day to day oral communication through audition. Deaf on the other hand refers to individual whose hearing loss is so great to the extent that he/she cannot benefit from day to day oral communication through audition even with or without the use of amplification. They can only benefit in communication through the use of other means of communication such as lip reading, pen and pad, manual sign language(s) and/or involvement of the interpreter etc (Ewa, 2006).

Ojile (2006) posits that hearing impairment is a generic term indicating a hearing disability which may range from mild to profound. It includes the subsets of Deaf and Hard of hearing. A Deaf person is one whose hearing disability precludes successive processing of linguistic information through audition with or without a hearing aid. A Hard of hearing person is one who generally with the use of hearing aid has residual hearing sufficient enough to benefit from successive processing of linguistic information through audition. He explains further that Hearing impairment can also be defined using age of on-set of the hearing loss. This includes pre lingual and post lingual deafness. Individuals with Disabilities Education Improvement Act (2004), defines Hearing impairment in the educational parlance as a condition/disability which adversely affects the academic performance of the individual with hearing loss irrespective of the degree of loss.

It is a common place among Special Educators to use the term Deaf and Hard of hearing. Deaf refers to students who have a hearing impairment so severe that they are unable to understand speech even with the use of amplification. Hard of hearing on the other hand, refer to students who have hearing impairment that affects educational performance but allows some linguistic information to be processed aurally with or without amplification (Beard, Carpenter & Johnson,2011; Heward, 2009, Heller, Alberto, Forney & Schwartzman, 1996).

Other terms that are necessary to explain the types of hearing impairment student may have range from pre-lingual to post lingual deafness. Pre lingual deafness implies hearing loss occurring before language develops. In other word, pre lingual deaf children do not develop speech and language. Appropriate instructional strategies and use of assistive technology devices goes a long way alleviating the educational problems of this category of students. Post lingual deafness on the other hand implies a hearing impairment occurring when speech and language has been developed. Hence individual learning needs of the persons in this group differs from those who have never developed speech and language. According to Heward (2009), the educational programme for Hearing impaired students who have pre lingual deafness must emphasize on language and communication skills, while those with post lingual deafness must focus on maintenance of the existing speech and language pattern. Moreover, Hearing impaired students who exhibit either a pre lingual or post lingual hearing loss will most likely benefit from the use of assistive technology devices.

Hearing impairment is also measured on a continuum from normal hearing to severe and profound hearing loss. A Hearing impaired student may have a unilateral hearing loss (involving only one ear) or bilateral hearing loss (both ears are involved). Hearing impairment is either caused by a conductive hearing loss, sensor neural hearing loss or mixed hearing loss. Gargiulo (2009) pointed out that one method of classifying hearing loss is by degree of loss. Hearing loss can range from mild to profound based on the level of intensity required as measured in decibels (dB) at various frequencies described in Hertz (HZ) to establish the hearing threshold. The hearing loss is measured in decibels (dB), which is a unit used to measure the relative intensity of sound. Hearing loss are categorized into mild loss 27-40 dB; moderate loss 56-70 dB; severe loss 71-90 dB and profound loss of more than 90 dB.

The communication system the students with hearing impairnent are exposed to is directly related to the individual's ability to hear and comprehend sound. Factors such as these as well as whether hearing loss is pre lingual or post lingua clearly have educational implications. For instance, individuals with mild hearing loss may encounter difficulty hearing in a noisy classroom setting or being able to distinguished distant sounds. However, their speech discrimination abilities are often within the normal limits. Appropriate accommodations for such students may include: preferred seating arrangement; possible use of hearing aid and /or personal FM system; greater dependency on the instructional models that will require increased collaboration with the parents to facilitate learning.

The individual with a moderate hearing loss on the other hand depending on the type, degree and age of on set, may experience significant delays in speech and language development. Articulation deficits, reduced vocabulary, difficulties mastering various grammatical and syntactical concepts and poor voice quality are common problems. Hence, hearing aid use coupled with personal FM system is necessary for such students, in addition to rehabilitative strategies. A severely or profound hearing loss individual again, depending on the degree and age on set, may suffer severely impede speech and language development. Individuals with severe to profound hearing loss frequently have poor auditory discrimination which may limit the effectiveness of conventional amplification devices. A team approach to remediation should be used which involves substantial interaction with the child managing audiologist and other professional to ensure accuracy of diagnostic information as well as appropriateness of amplification. Students with this degree of hearing loss will need significant accommodation in the educational environments to be successful, including intense visual language reinforcement for instruction in grammar and syntax (Ajuwon, 2012, Gargiulo, 2009).

As a matter of fact, whatever terminology is used, it is important for one to understand so that the individual needs of the student with hearing impairment can be identified so that he/she receives appropriate education because the description of a person's hearing loss is often based on the level of hearing at different frequencies as measured by the audiologist. Hearing loss levels are often broadly described as mild, moderate, severe or profound. Therefore generalizations based on these single word descriptors often do not accurately predict an individual skills across a variety of tasks such as speech, language, listening, communication mode, reading or social interaction.

# 2.2 Assessment of Students with hearing impairment in the inclusive education setting

The primary objective of an assessment of individuals with hearing impairment in the inclusive education setting is to put together an accurate picture of cognitive, communicative and personal characteristics of the individuals with hearing impairment (Simeonsson & Rosenthal, 2001). This information is central to the plan and designing of individualized instructional plan and other experiential activities to promote development of the individual who is hearing impaired.

#### 2.3 Educational achievement of students with hearing impairment

The educational achievement of students with hearing impairment may be significantly delayed in comparison to that of their hearing peers. Students who are deaf or have a partial hearing impairment have considerable difficulties succeeding in an educational system that depends primarily on the spoken word and written language to transmit knowledge. Low achievement is characteristics of students who are deaf (Geers, 2006). Deaf students are average three to four years below their age appropriate grade levels even students with mild to moderate losses achieve below expectations based on their performance on tests of cognitive ability (Williams & Finnegan, 2003).

Reading is the academic area most affected for students with a hearing impairment. Any loss, whether mild or profound, appears to have detrimental effects on reading performance of the students with hearing impairment in an inclusive school environment (Ojile, 2006). Research has reveals that pupils who are hearing impaired read approximately a third to fourth grade level below their hearing counterparts (Traxler, 2010, Gallaudet Research Institute, 2007, retrieved @ http://gri.gallaudet.edu/literacy & Kunitze, 1998). Consequently, many of these individuals will encounter difficulty reading a typical newspaper. Although researchers report slight variations in educational achievement scores, there is no question that high stakes testing is of great concern for this group of children. The difficulties majority of the students with hearing impairment across the globe experienced in taking high school exit (final) examinations and the fact that most of them do not pass these tests are issues of great concern to educators (Ajuwon, 2012, Johnson, 2003).

Another most serious factor/impediment to successful school achievement in general and to learning to read in particular is the deaf child's impaired language function. Studies of the academic achievement of the deaf child invariably find serious educational lag when compared to the hearing population. It is estimated that normal hearing children may have a speaking vocabulary of some 2000 words by the time they enter kindergarten, while the deaf child may only use 250 words by the same age. The problem tends to become accelerated with increasing age

(scholarworks.wmich.edu/cgi/viewcontent.cgi?article=2307&context=reading-horizon), retrieved from the internet. In a study by Hagris in Ewa (2006), reports a discrepancy of approximately eight years between the mean reading achievement of hearing and deaf children when comparison is made after the completion of their regular educational programmes. But the younger deaf children outperformed the older deaf children.

#### 2.4 Studies on Educational achievement of students with hearing impairment

Liu & Hong, (2007), retrieved @ <u>File:///C:/USERS/EWA</u>, Bonder-Johnson (1985), Kluwin & Moores (1985), Gregory, Shanahan & Welberg (1984), found out that the academic achievement of students with hearing impairment was significantly lower than that of their hearing peers. The authors pointed out that several factors placed deaf children at risk of underachievement. Nunes & Moreno (2002), noted that Deaf and Hard of hearing children/students generally are not exposed to many opportunities in their life to learn, resulting to information deprivation. In addition, the language abilities of Deaf/Hard of hearing students have been considered the critical factor to their academic difficulties with learning. Paquliaro & Ausell (2002) observed that in addition to the above factors, educators/teachers of the students with hearing impairment believed that students with high motivation to learn excel in more academic skills than students with low motivation. Stinson (1978) indicated that the manner in which teachers help and reward students with hearing impairment may affect their motivation to learn from the instructional material.

Liu & Chi (1992), carried out a study on the academic achievement of students with impaired hearing in Taiwan, the result revealed that teachers adopted low standards for the students with hearing impairment than the non hearing impaired students. Moreover, the parents of the students with hearing impairment also did not expect high academic achievement from their children. They observe further that students who are hearing impaired rarely do homework at home as teachers cannot provide the often required additional instruction and care after school activities. In the same vein, Gregory and Associates (1984) opined that students with haring impairment with low motivation to learn took fewer courses and studied less at home in comparison to their hearing counterparts. This therefore pose a significant challenge to teachers on how to provide after class learning care and assistance to help the students with hearing impairment that will sustain their motivation to participate in continuous learning activities.

Similarly, Ajuwon (2012) carried out a study on Analysis of Accommodation in National Examinations in Nigeria: analyses of experiences of candidates with disabilities. The result other than the hearing loss which posses a greater threat to the educational achievement of the students with impaired hearing revealed that:

- Invigilators and supervisors ignored students/candidates who are hearing impaired when assistance was sought by the candidates.
- Invigilators and supervisors were unaware of the special candidates (students with hearing impairment) assigned to the examination centres.
- There was perceived negative attitudes of invigilators toward candidates with disabilities (students with impaired hearing)

- Invigilators' unfamiliarity with sign language, thereby hindering communication with the students/candidates who are hearing impaired.
- Inability of examination agencies to provide the examinations in preferred format as well as delay in the release of results.
- Extended time was not offered to candidates who are hearing impaired to complete their examinations.
- Candidates with hearing impairment are made to write oral English exams. The practice of administering oral English examination to the students with hearing impairment where oral English has not been systematically taught to them in the mainstream curriculum is unfair and discriminatory. The reason being that the acquisition of language skills is a challenge to the students who are hearing impaired since many of them are born with hearing problems or developed them very early in life, thereby denying them the opportunity to learn the spoken language the way the hearing people do.

As a measure to better the lots of the students with hearing impairment in an inclusive education setting in Nigeria, the researcher recommended that:

- There should be periodic training of invigilators and supervisors on disability-specific needs of candidates with disabilities in general and Hearing impairment in particular.
- Provision should be made for noise free environment especially for candidates with hearing impairment using hearing aid/amplification.
- Supportive staff such as sign language interpreters should always be available and used to ensure effective communication with the students/candidates who are hearing impaired during examinations.
- Examination agencies/bodies should recruit and train special educators to assist with test development, administration and scoring to facilitate timely release of results.

# 2.5 Factors affecting academic achievement/performance of students with hearing impairment in the inclusive education environment

Ojile (2006), puts it that apart from the communication variations in the choice of methods/strategies or approaches adopted by teachers in educating the students with hearing impairment in the inclusive education environment, a number of variables/factors influence

the academic achievement of this category of students in the educational setting. These factors include:

- The age of onset of the hearing loss.
- The degree/extent of the hearing loss.
- Sex variation
- The intelligent quotient of the Hearing impaired individual.
- The socioeconomic status of the parents of the Hearing impaired students.
- The hearing status of the parents of the Hearing impaired students.
- The cause/etiology of the hearing loss.
- The presence of additional handicapping condition(s).
- The hearing impaired individual's rearing background.
- Ethnicity/racial background.
- Method(s) of communication available to the Hearing impaired individuals.

Liu & Hong (2007) likewise identified the factors affecting academic achievement of the students with hearing impairment to include: hearing loss; age of onset of the hearing loss; parents hearing status; state and family attitudes. Other factors they also identified that significantly lowered the academic achievement of the students with impaired hearing are none exposure of these students to many opportunities in life to learn resulting in information deprivation; language difficulties; poor/absence of motivation as well as the manner in which teachers help and reward students with hearing impairment may make or marred their motivation to learn from the instructional materials.

# 2.6 Communication strategies/approaches adopted by teachers in educating the students with hearing impairment

The professional field of the education of children with hearing impairment has been splits by controversy for the past two centuries and perhaps in no other area of special education have there been such disagreement. The basic area of conflict has been the communication controversy commonly referred to as the oral-manual controversy. To be able to meet the educational needs of the students with hearing impairment, one needs to be conversant with the various methods of communication and use them as the occasion warrants and/or modify others to suit the degree of loss and intellectual functioning levels of the hearing impaired individuals, as well as meeting their other needs in the inclusive education setting.

With the current trend on inclusive education, the instructional strategies of the students with impaired hearing to be adopted by the general education teachers therefore should suit the needs of the children with hearing impairment, taking into consideration that communication posses a greater challenge in their education and other aspects of development. The communicational approaches exposed to the students who are hearing impaired include:

- 1. The oral method
- 2. The manual method
- 3. The Rochester method.
- 4. Total communication/simultaneous approach.
- 5 The Cued speech method.
- 6. The Bi lingual Bi cultural (BIBI) method.

There has been a rift over the most suitable approach to be adopted in educating the students with hearing impairment in the inclusive education setting. Research has proven that no single approach is better than the other. Therefore, for the students with impaired hearing to benefit from instruction in the inclusive education classes, the teachers should adopt appropriate communication strategies that offer psychological nurturing environment which will enhance their psychosocial adjustment in general and academic achievement in particular by providing:

- A warm/natural environment for communication.
- Allowance for free communication and self expression without utilizing forceful dominant approach.
- Communication builds on a basis of mutual understanding and willingness of both parties to seek clarification through effective feedback.
- Allowance for communication being multidimensional and transcending the restriction to any particular model/approach.
- Acceptance of the hearing impaired condition.

# **Section Two**

#### 2.7 Inclusive Education: Historical overview of inclusive education internationally

One of the greatest challenges facing individuals with disabilities (students with impaired hearing) in the society throughout the world is exclusion from participation in economic, social, political and cultural life of the community. Inclusive education has evolved as a movement that seeks to challenge exclusionary policies and practices. It can be regarded as part of a wider struggle against violation of human rights and unfair discrimination (Stofile, 2008). It seeks to ensure that social justice in education prevails. Many writers have posited that Inclusive education is an articulate of a basic human right in the society. Thus Kristensen (1997), for instance pointed out that the exclusion or segregation of students with special needs is a violation of their human right and represent an unfair distribution of educational resources. Similarly, Lipsky & Gartner (1999) asserted that inclusive education is a fundamental right that is derived from the principle of equality, which if recognized would contribute significantly to a democratic society.

It is generally agreed that inclusive education has its origin enshrined in the human rights as pronounced in the United Nations Declaration of Human Rights in 1948 (UNESCO, 2005), which states that "Everyone has right to education. Education shall be free at least in the elementary and fundamental stage. Elementary education shall be compulsory. Education shall be directed to the full development of human personality and to the strengthening of respect of human rights and fundamental freedoms. It shall promote understanding, tolerance and friendship among all nations, racial or religious groups and shall further the activities of the United Nations for the maintenance of peace" (Article 26 Universal Declaration of Human Rights).

Inclusion has been indirectly advocated for since the United Nations Declaration (UN) in 1948 retrieved @ <u>www.un.org./documents/ga/res</u>, and has been cited in all phases in a number of key UN Declarations and Conventions (UNESCO, 2005, Stofile, 2008, Obi, 2013).Instances of these include:

• The 1948 Universal Declaration of Human Rights which enshrines the right to free and compulsory education for all children.

- The 1989 UN Convention on the Rights of the child which ensure the right to receive education without discrimination on any ground.
- The 1990 World Declaration on Education for All (Jomtein Declaration on Education), which sets the goals for Education for All (EFA).
- The 1993 UN Standard Rule on Equalization of opportunities for all Persons with Disabilities, which does not only affirm the equal rights of children, youths and adults with disabilities to education, but also states that education should be provided in an integrated school setting as well as in general education school setting, retrieved @ <u>http://www.org/document/ga/res</u>.
- The 1994 Salamanca Statement and Framework for Action on Special Needs Education, which requires schools to accommodate all children regardless of their physical, intellectual, social, emotional, linguistic or other conditions as the case may be (Inclusion on the full scale). The 2000 World Education Forum Framework for Action Dakar. EFA and Millennium Development Goals (MDGS), which stipulates that all children should have access to and complete free and compulsory primary education by 2015.
- The 2001 EFA flagship on the right to education for persons with disabilities towards inclusion.
- The 2005 UN Disability Convention which promote the rights of persons with disabilities and mainstreaming disabilities in development.
- The 2006 61 session of the United Nations General Assembly Convention on the Rights of Disabled Persons which included a significant commitment to inclusive education. Article 24 stated that:
- It is estimated that more than 300 participants and 92 Governments and 25 International Organizations, met in Salamanca in 1994 and under the auspices of UNESCO and the Spanish Government to further the objectives of Education for All (Ainscow, Farrel & Tweedle, 2000, Dyson, 1999, Enabling Education Network (EENET), 2004, Peters, 2004, retrieved @ http://www.worldbank.org on the 18<sup>th</sup> July, Mitchell 2010), retrieved 2014. UNESCO. 2005. Stofile, 2008. **(***a***)** http://www.educationcounts.govt.nz/publications/special...education . The Salamanca Statement on principles, policy and practice in Special Needs Education was drawn together with the draft Framework for Action (Peters, 2004, Obani, 2006, UNESCO, 1994, UNESCO, 2005). The statement proclaims five principles that reflect the rights

in respect of education that are enshrined in the Universal Declaration of Human Rights (UN 1948) and the United Nations Standards Rules on Equalization of Opportunities for Persons with Disabilities (UN 1993). These include the followings:

- Every child has a fundamental right to education and must be given the opportunity to achieve and maintain an acceptable level of learning.
- Every child has unique characteristics, interests, abilities and learning needs.
- Education systems should be design and educational programmes implemented to take into account the wide diversity of these characteristics and needs.
- Those with Special Educational Needs must have access to the regular schools which should accommodate them within child centred pedagogy capable of meeting their needs.
- Regular schools adopting this inclusive orientations is the most effective means of combating the discriminatory attitudes, creating welcoming communities, building inclusive society and achieving education for all: moreover, they provide an effective education for the majority of children and improve efficiency and ultimately the cost effectiveness of the entire educational programme (UNESCO, 1999).

Article 24 of the UN General Assembly Convention on the Rights of Disabled Persons corroborated the significance of inclusive education. It stated inter alia: The following:

- States parties recognize the rights of Persons with Disabilities to education. With a view to realizing this rights without discrimination and on the basis of equal opportunity. State parties shall ensure an inclusive education system at all levels and life-long learning directed to:
- a. The full development of the human potential and sense of dignity and self worth, and the strengthening of respect of human rights, fundamental freedoms and human diversity.
- b. The development of persons with disabilities of their personalities, talents and creativity, as well as their mental and physical abilities to the fullest potentials.
- c. Enabling persons with disabilities to participate effectively in a free society.
- 2. In realizing these Rights, State parties shall ensure that:
- A. Persons with disabilities are not excluded from the general education system on the basis of disability and that children with disabilities are not excluded from free and compulsory primary education, or from secondary education on the basis of disability.

- B. Persons with disabilities can access an inclusive, quality, free primary and secondary education on an equal basis with others in the communities in which they live.
- C. Reasonable accommodations on the individual's requirements are provided.
- D. Persons with disabilities receive the support required within the general education system to facilitate their effective education.
- E. Effective individualized supportive measures are provided in environments that maximizes academic and social development, consistent the goals of full inclusion.

A total of 145 countries signed the Convention and as of June, 2010, only 87 countries had rectified it. (http://www.educationcounts.govt.nz/publications/special \_education....).

Thus Slee (2001) puts it that inclusive education is about the cultural politics of protecting the rights of citizenship for all students. Okeke (2010), on the other hand submitted that education system has failed disabled persons/students by not equipping them to exercise their rights and responsibilities as citizens, while the special education system has functioned to exclude them from both the education process and wider social life. He thus saw inclusion as a political as well as an educational process meant to liberate the special needs individuals from the chasm of the society.

Most countries in the world have adopted an inclusive education philosophy and are committed to its implementation. But what remains questionable is whether these countries interpret and implement inclusive education the same way.

## 2.8 The conceptualization of inclusive education

It is necessary to point out that there is a growing realization that inclusion means different thing in different contexts (Dyson, 2001, Florin, 2004, Green, 2001, Mitchell, 2010, Obi, 2006, Obani, 2006, Swart & Pettipher, 2007, Okeke, 2010, Olayi, 2014). Stofile (2008), citing Dyson (1999) attributes that multiple definitions of inclusion to different discourses through which different theoretical notions of inclusion are constructed. He refers to the rights, efficacy and political, social and pragmatic paradigms/discourses.

According to Dyson, the discourse of politics in inclusion is concerned with the extent to which a particular school system realized and protects the rights of its students and monitors power distribution accordingly. This discourse is concern with the eradication of injustices in schools. If one takes a look at Dyson's explanation of the political paradigm of inclusion, one can understand why some definitions of inclusive education focus on equity and social justice in education. One of such examples is found in Engelbrecht (1979) and Adelowo, (2006) who see inclusive education as a proposed strategy for achieving a democratic society. A similar view is expressed by Swart and Pettipher (1997), who view inclusive education as the development of inclusive society where all members participate optimally and contribute in a democracy and the growth of the society.

The discourse of efficacy of inclusion is about the cost effectiveness of educational services. In other words, more emphasis is on the cost effective ways of providing educational services. In the same vein, Okeke (2010) stated that in the Salamanca Statement, the right of the disabled child were looked at in respect of more profound implications. The Statement stated that every child has unique characteristics, interest, abilities and learning needs (UNESCO, 1994). This then calls for adjustment and modification of curricula and teaching methodology in schools around the globe as educational services provision are made to take into account the diversity of all children. It states that children with special educational needs must have access to regular schools which with an inclusive orientation would accommodate all children with child centred pedagogy: These would be the most effective/ideal ways of combating discriminatory attitudes, creating welcoming communities and building an inclusive society aimed at achieving education for all. Moreover, this would be cost effective for the entire education system. Governments are therefore call upon to give higher priority to making the education system inclusive and the adoption of the principle of inclusion as a matter of law or policy. India, for instance due to limited resources to operate the special education system separately, adopted the inclusive education approach to maintain cost effectiveness in the educational system.

The issue of cost effectiveness is a further rationale for an inclusive approach to education. A World Bank study identified a growing body of research indicating that inclusive education is not only cost-efficient but also cost-effective (Peters, 2003). Dyson and Forlin (1999) found that many countries had come to realise that the multiple systems of administration, organisational structures and services created by special schools might be a financially unrealistic option for retention over the long term. The cost of education is a critical issue for all school systems and needs to be considered when making decisions about various levels of provision. Inclusive education is not about placing students in mainstream classes to save money; it is about optimising learning environments by providing

opportunities for all learners to be successful. It is also about providing a range of resources such as teaching materials, equipment, additional personnel and differentiated approaches to teaching. Often this provision can be made within the regular school system with minimal adjustment. UNESCO indicated that in countries where resources are scarce, some cost-effective measures have been identified. These include:

- utilising a trainer-of-trainer model for professional development
- linking university students in pre-service training institutions with schools
- converting special needs schools into resource centres to provide expertise and support to clusters of mainstream schools
- building capacity of parents and linking with community resources
- utilising students themselves in peer programmes (UNESCO, 2005).

This is in line with what Tungaraza (1992) observed that "providing special education in separate settings gulped in more money." Hence inclusive education practice is seen as the best option for the developing nations as it maximises cost effectiveness in the management and delivery of educational services to the Hearing impaired students in particular and other handicapping conditions in general.

The pragmatic discourse is more interested in the effectiveness of the school. It is concern with what an inclusive school should look like in practice. Hence this provides an illustration of an approach which focus is on the inclusive practices and cultures within the school community. This Adelowo (2006), puts that inclusive school setting should serve as a veritable tool to eliminate poverty and promote participatory political, social and cultural life of persons with disabilities. Therefore sustainable policies must also be developed to overcome obstacles to the inclusion process such as exclusion/discrimination, negative attitudes, and inaccessibility to facilities, architectural barriers, inequality of access and ignorance and to carter for diversity where everyone is treated on the basis of equality, disability status notwithstanding.

The social discourse on the other hand as Lipsky & Gartner (1999), pointed out that in designing educational programmes for students with disabilities, the focus must shift from the individual impairment to the social context, a key feature which should be a unitary education system dedicated to providing quality education for all students. Olayi (2013), citing Mutale (2008), opines that children who learn together live together. In that wise inclusive education serves as both a social and educational tool for integration. The authors noted universal

education suggests that all children irrespective of their gender, creed, economic class, and learning difficulties as well disability status notwithstanding should have equal access to learning through the regular school system. This is because all children need an education that will help them develop relationships and prepare them for life in the mainstreamed society.

This views is further shared by Obani (2006), citing Thomas (1997) explains that inclusion is about a philosophy of acceptance and provision of a framework within which all children regardless of their proven difficulties at school can be valued equally, treated with respect and provided with equal opportunities at school. Therefore the goal of inclusive education is not to erase or deny the existence of differences but enable all students to belong to an educational community that would values and validates their individuality.

Furthermore, inclusive education necessarily demands for the making of fundamental changes and arrangements in organization, administration, staffing and curricula of the mainstreamed school right from the start. This is to allow for diversity and for various needs of students with disabilities to be adequately met without resort to segregation, labelling or the so call special attention in separate settings. In the social discourse of inclusive education, no one is the host and no one is the joiner as ever body is an equal member of the school/class.

In another perspective, UNESCO (2005) defines inclusive education as a dynamic approach of responding to pupils' diversity and of seeing individual differences not as a problem, but as opportunities for enriching learning. In accordance with this definition, UNESCO section for Special Education in E.E.NET (2004 & Department for Education and Enablement 2001), retrieved @ http://www.eenet.org.uk, Okeke, (2010) defines inclusive education in this way; "inclusive education is concerned with removing all barriers to learning and with the participation of all learners vulnerable to exclusion and marginalization. It is a strategic approach designed to facilitate learning successfully for all children, disability status notwithstanding. It addresses common goals of decreasing and overcoming all forms of exclusions from human rights to education at least at the elementary level and enhancing access, participation and learning in quality basic education for all.

In the same vein some authors describe inclusion in a way that contrasts it with Special education and uphold that inclusion is never a special education reform. Thus Stofile (2008), quoting Lipsky & Gartner (1999), contend that inclusive education imply the convergence of

needs to restructure the public education system to meet the needs of the changing society, and the adaptation of the separate special education system which has been shown to be unsuccessful for the greater number of students who are serve by it. Furthermore, Barton (1999) observes that inclusive education is not integration and is not concerned with the assimilation or accommodation of discriminated group of individuals within existing socio-economic conditions and relationships. It is not about making people normal....., it is rather ultimately about transformation of a society and its institutional arrangements such as education.

Some definitions of inclusive education focus on the inclusion of disabled children in the mainstream school. This Obani (2006) pointed out that inclusive education emphasizes that children with disabilities should be educated in the regular school programme alongside with their non disabled counterparts without a dichotomy. The author stated further that inclusive education refers to the practice of integrating children with disabilities into general education setting, with support services provided in the general classroom by specialists.

In another perspective Green (2001), sees inclusive education as a term used to describe educational policies and practices that uphold the rights of learners with disabilities to belong and to learn alongside their non disabled counterparts in the mainstream educational setting. Florin (2004), on the other hand claims that inclusive education is broader than simply inviting children with disabilities/special educational needs into mainstreamed classroom, rather it is a means of extending educational opportunities to a diverse range of potentially marginalized population of students worldwide who are still unable to attend school.

Many other definitions of inclusive education are operational. The NCSNET/NCESS (Department of Education 1977) provides one of such definitions. "The separate system of education which presently exists (special or ordinary) needs to be integrated to provide one system which is able to recognize and respond to the population of learners with diverse needs. Within this system, a range of options for educational provision and support services should be provided. Learners with hearing impairment Hearing impaired learners should have the ability to move from one learning context to another such as from early childhood education (ECD) to general education training (GET), from formal to non formal programme. This system of education should be structured in such a way irrespective of the learning context, opportunities for facilitating integration and inclusion of the learners with hearing impairment in all aspects of life are provided for"

It is of great significance to note that although variations are to be found in the way different people/authors view inclusive education, there are also common elements that tend to feature strongly in the conceptualization of inclusion. Among these elements include:

- A commitment to building a more just society.
- A commitment to building a more equitable education system.

Thus the United Nations Educational Scientific and Cultural Organization (UNESCO 2005), outline four perceived principles that are common elements to all definitions of inclusion:

- i. Inclusion as a process has to be seen as a never ending search to finding better ways of responding to diversity.
- ii. Inclusion is concerned with the identification and removal of barriers.
- iii. Inclusion is about the presence, participation and achievement of all students in general and Hearing impaired in particular in the general education programme without separation.
- iv. Inclusion places emphasis on those groups of learners (Hearing impaired students) who may be at the risk of marginalization, exclusion or under achievement.

In view of the above facts, Adebowale & Makinde (2012) outlined the following as benefits of inclusive education to the students with hearing impairment in Nigeria:

- 1. Placement of the students with impaired hearing in the neighbourhood schools: This implies children/students with hearing impairment do not need to travel far away from home before getting to their school since inclusive education is provided in the general education, therefore provisions will be made for them in schools nearest to their homes.
- 2. Zero rejection: This implies children who are hearing impaired of school age will not be rejected for the reason of disabilities, deformities, or ill health since they are all considered in the school curriculum. With this, the problem of discrimination, stigmatization, labelling/exclusion will be minimal or rooted out completely.
- 3. Age and grade appropriate placements: children/learners with hearing impairment under inclusive education precepts are placed in classes according to their age and mental abilities. No child would be considered unfit for a particular class placement.
- 4. No special class/school: Unlike what is obtainable in the residential/day school or integrated classes where a section of the regular school or whole school is designed for

the students with hearing impairment, inclusive education does not give room for dichotomy which leads to discrimination. Students with hearing impairment are not secluded from other regular pupils/students. All children are encouraged to learn in the same environment.

5. Cooperative learning practices: Inclusive education practices go a long way helping the students who are Hearing impaired and hearing students learn together in groups. Hence the more brilliant ones among them who may be with special needs or without, can peer tutor others. This helps to foster mutual understanding among them. Students with impaired hearing can hitherto and will learn better in such a free atmosphere.

In summary, inclusive education has been projected as having its origin from the human rights perspectives and aims at promoting social justice and equity in education for the well withal of the special needs persons in general and students with impaired hearing in particular in the society. It can be observed however that though many countries seemed committed to inclusive education in their rhetoric, but their legislation and policies practices often fall short. Reasons for the policy practice gap are manifold: these include barriers arising from social values and beliefs, economic factors, a lack of measures to ensure compliance with policies among others; it must be acknowledged that inclusive education is an elusive concept that is differently interpreted by different people in different contexts.

# **Section Three**

### 2.9 International perspective on inclusive education practices

This section intends to x-ray inclusive education practices as carried out in other countries of the world (developed and under developed). Lots of literatures on inclusive education indicate that many countries around the globe have adopted inclusive education practices. Although different countries are committed to inclusive education, but no coherent approach is evidenced. Hence the implementation of inclusive education in many countries is often based on a range of motives embracing different goals. Thus Mitchell and associates (2005) put it that the characterization, purpose and form of inclusive education practices reflect the relationships among the social, political, economic, cultural and historical contexts that are present in any one time in a particular country and/or local authority.

The countries to be examined include: England; Australia; Europe; India; Malaysia; Norway; South Africa; Lesotho; Spain; Namibia and America. The reason for selecting these countries is the desire to understand the factors that impinged on inclusive education in other countries that are characterized by poverty and underdevelopment as well as those countries that are developed. The section will focus mainly on when inclusive education was introduced on each country, how it is conceptualized and the implementation approaches/strategies adopted in these countries.

#### **England:**

In this country, the 2004 document 'Removing barriers to achievement': The Government's strategy for Special Education Needs (SEN) (Department for Education and Skills, 2004), made a clear commitment to inclusive education by embedding inclusive practices in every school and early years setting. It cited the 1997 Green Paper, Excellence for All Children as signalling the government's commitment to the principle of inclusion and the need to rethink the role of special schools within that context. It also referred to the SEN and Disability Act of 2001 as delivering a stronger right to mainstream education, making it clear that where parent want a mainstream place for their children everything possible should be done to provide it. A small, but significant caveat to the principle of inclusion however, can be found in the 2001 Code of Practice (Department for Education and Skills, 2001), which stated that 'A parents' who wish to have their child with a statement educated in the mainstream should only be refused in the small minority of cases where the child's inclusion would be incompatible with efficient education of other children. A further commitment to inclusive education is the government's decision to paced the index for inclusion (Booth & Ainscow, 2002), in every school. http://www.educationcounts.govt.nz/publications/special\_education.

#### Australia:

Australia is one of the countries that embrace the principle of inclusive education. Several states have made a commitment to inclusive education. In Western Australia, for example, the aim of Building Inclusive Schools (BIS)strategy since it commencement in 2002 has been to raise awareness across all levels of education system of changing societal expectations in relation to the education of students with disabilities and the legal imperative that now impact the school. It is described as a professional learning programme that promotes and supports the cultural shift of inclusive educational practices in all public schools. Thus Florin (2005), pointed out that mainstream schools in Australia are becoming progressively more multifaceted as they now include a wide range of diverse abilities. In another instance, Florin (2005) also indicated that there are variations in the way special learners are supported in Australia. This range from segregated to special schools and then to autonomous educational support centres attached to mainstream schools to special classes within the mainstream schools.

### India:

India was one of the signatories to the Salamanca statement and has committed herself to the development of inclusive education in her country. Singai (2005) noted that while inclusive education is defined as providing equitable opportunities for all learners in India, such an assertion seems to operate only at the level of rhetoric. This comes to light in the two projects carried out in India.

These were Project Integrated Education for the Disabled (PIED) and Multi-site action Research Project (MARP) that were implemented in India. These projects according to Singai were aimed at providing equal opportunities as well as equal educational experiences for Disabled children. The way in which inclusion was implemented in these projects suggests that in theory, inclusion is about the provision of equal opportunities for all learners but in practices, inclusion is an ideal opportunity for all children with disabilities who have no access to education (Singai, 2005). The author further pointed out that the evaluation of these projects showed remarkable results that relate to increased enrolment of Disabled children, comparable achievement with their non disabled peers as well as improved school environment

It is worth mentioning that researchers such as Mani (2002) have suggested different models for implementing inclusive education in India. These range from the strengthening of Special schools and inclusive education with technical support from Community Based Rehabilitation (CBR) programme. Singai observes that while ones argument for inclusive education is to reduce the cost of special education provision, more special schools are being developed in India.

### Namibia:

In line with other countries, Namibia has committed herself to the provision of equal educational opportunities and equal access to all learners. According to Zimba, Mowes & Nacda (2007), Namibian's educational reforms are based on educational goals of access, quality and democracy. This is to be achieved through integration of learners with special needs and those without disabilities. Zamba et al (2007) noted that although Namibian National Policy on Disability commits itself to the inclusion philosophy, it does not provide the current Ministry of Education with clear legislative power and mandate on how inclusive education should be conceptualized, contextualized and implemented. In other words, there is no specific policy and legislative framework on inclusive education in Namibia. In addition, although Namibia is one of the signatories to the Salamanca Statement, inclusive education rarely features on the agenda of meetings and conferences (Stofile, 2008).

#### Lesotho:

Lesotho's national movement towards inclusive education began as early as 1987 (Johnstone, 2007). The rationale for the movement was based on the cost effectiveness of inclusive education and its cultural congruence with Lesotho's tradition (Stofile, 2008). In addition, inclusive education in Lesotho is based on the rights of disabled people and it is about the integration of disabled persons into primary schools. The focus on rights rather than on charity has been an important influence of the development of an inclusive education in Lesotho (EENET, 2000).

The Government of Lesotho through its Ministry of Education and Training (MOET) established Special Education unit to implement inclusive education. According to Maqelepo (2008), this unit was mandated to implement and support integration/inclusion of learners with Special Educational Needs (SEN) in the mainstream education. Learners with Special Educational Needs (LSEN) in this country are classified under four main categories namely: Learners with physical disabilities, visual impairments, Hearing impairment and Intellectual disability (Maqelepo, 2008). To support integration/inclusion, Lesotho has appointed Inspectors, Assistant inspectors and Itinerant teachers that are responsible for specific disability category.

Lesotho, like other countries started off with integration of all learners but experienced challenges at all levels of education system. This Johnstone (2007), pointed out that the

greatest challenge in the Lesotho educational system is widening access to all levels of education and providing opportunities for excellence (Dewaal, 2008).

### Malaysia:

The initiative by the Ministry of Education to implement inclusive education in Malaysia started through the Malaysian involvement at international level in workshops hosted by the United Nations (Ali & Jelas, 2005). These workshops according to Ali and associate, paved the way for a change of emphasis from integration to inclusion. Inclusion was then formally introduced in the mid 1990s. As part of the reform initiative, students with Special Educational Needs in Malaysia are either partly or fully included, depending on their levels of ability to follow instruction in the mainstream classes (Ali & Jelas, 2005).

### Spain:

This state started the process of integration between 1992 and 1993, due to the introduction of reforms in the educational system driven by the General Regulation Law for the Education system of 1990, (European Agency for Development in Special Needs Education Report, 2004). This law gave learners with special needs the right to receive education that responds to their personal needs and characteristics in the schools closest to them. However, Special schools still exist to serve as a bridge toward high level of integration. It is estimated that about 4% of students with special educational needs receive tuition in this kind of centres.

The facts contain in the European Agency for Development of Special Needs Education Report (2004),retrieve @ <u>http://www.europeanagency.org</u>., reveals that there are many teachers in Spain who accept inclusion/integration in theory but that in the actual practice, the presence of students with special needs in the regular classroom pose a great challenge. It is evidenced that this causes their attitudes to become less positive and enthusiastic toward these children.

#### Norway:

During the 1990s, comprehensive changes took place in the Norwegian school system with respect to inclusive education, (European Agency for Development in Special Needs Education Report 2004). This report indicates that these changes led to a re-organization of special pedagogical initiatives for learners with special needs which included the closure of special schools and integration of learners with special needs into their local schools.

The definition of inclusion/integration in the Norwegian perspective asserts that the special needs learner will belong to the group, the special needs learner will share in the benefits that being part of the group provides and the learners will have joint responsibility for tasks and obligations (European Agency for Development of Special Needs Education Report, 2005). The special pedagogical support services or pedagogical psychological advice services established by the government was changed to the 1998 Education Law (Education Act), which now gives all learners with special educational needs the rights to receive tuition specially adapted to their needs in the regular school setting. The European Agency for Development of Special Needs Education and classroom practices in secondary education (2004) reveals that although there are assertions that Norway has shifted from integration to inclusion, the difference is minimal.

#### **Europe:**

The European Agency for Development of Special Needs Education has been developing indicators for inclusive Education with the aim of developing a methodology that would lead to a set of indicators suitable for national level monitoring, but that could also be applied at the European level: the indicators are expected to have a clear focus on the policy conditions that may support or hinder the development of inclusive education within schools (http:///www.european-agency.org/agency-projects/indicators-for-inclusive-education).

#### **South Africa**

Stofile (2008) asserted that the Education White Paper in South Africa declares its proposal, recommendations and objectives, the intentions to transform the educational system in South Africa to one which will effectively responds and support learners, parents and communities by advocating for the removal of barriers to learning and participation that exist in the education system.

The author further indicated that this policy outlines the government intervention strategy aimed at ensuring that children who are experiencing various barriers to learning and in development have access to quality education. It presents a vision which recognizes the Rights of all South African children to an equitable education, reflecting their constitutional rights to human dignity and quality education.

Accordingly the white paper holds the following facts:

- 1. It acknowledges that all children and youth can learn and also that all children and youth need support to scale through the educational learning process.
- 2. The white paper provides enable education structures, system and learning methodologies that would meet the needs of all learners
- 3. It acknowledges and respects differences in learners whether due to age, gender, ethnicity, language, class, and disability or HIV status.
- 4. It acknowledges that learning can occur in the home, the community and within formal and informal settings.
- 5. The paper recognizes the need for changing attitudes, behaviours, teaching methods, curricula and environmental adjustment to meet the needs of all learners.
- 6. It equally recognizes to mainstreams the participation of all learners in the culture of educational institutions and the curriculum (Department of Education 2001)The policy of inclusive education in SA formally came into effect in 2001 and has been implemented through the International donor funded pilot projects (SCOPE and DANDA) initiatives through field testing. The significance of these initiatives is that they are aimed at implementing inclusive education in the mainstream schools. The outcome of the initiatives indicated that the piloted schools demonstrated tremendous efforts to include learners who were excluded from school. However, there were realities and challenges that have acted as barriers to the desired outcomes.

# **United States:**

The United States has a voluminous literature and a range of policies relating to inclusive education, although the term is not employed in official documents. A recent reflection by Sailor (2002) will suffice to sum up the present status of inclusive education in the US: "without question, one of the thorniest policy questions to confront American education in the second half of the twentieth century and continuing today is the issue of placement for students served under the Individual with Disabilities Education Act (IDEA). Federal policy consistently has used the least restrictive environment (LRE) language in

statutory and regulatory policy to enhance the integration of students with disabilities and greater access to the curriculum of general education".

In addition, families assisted by advocacy organizations have litigated successfully to achieve these ends for their children with disabilities. Some of these cases have produced favourable interpretations at the level of the Supreme Court.

Finally, University researchers associated with Special Education Departments around the country built a strong case for more positive educational and social outcomes for children when they are educated alongside the non disabled peers. Despite these three-pronged efforts, educational segregation of students with disabilities continues on a large scale today (http://www.educationcoucounts.govt.nz/publications/specialeducation).

# **Section Four**

### 2.10 Inclusive education practices in Nigeria

Inclusive education is globally gaining serious attention all over the world. Nigeria is one of the signatories to the Salamanca Statement and Framework for Action on the inclusion of persons with disabilities. To facilitate this and the achievement of the EFA goals, in 1999, the Federal Government of Nigeria launched the UBE programme which is to serve as the pivot on which the wheel of inclusive education rotates.

For Nigeria, paying attention to the education of persons with disabilities has been emphasized in the National Policy in Education (NPE) (2004) section 10 (9) B & C, which states and read thus: "The education of children with special needs shall be free at all levels. All necessary facilities that would ensure easy access to education shall be provided via inclusive education/integration of special classes and units into ordinary/public schools under the UBE Scheme (45-49)".

Obani (2006) opines that the Government intention is to serve all children with disabilities of school age by undertaking to implement some major recommendations of the Sapa Report which underlined two cardinal principles that centred on "Access and Promotion of equity"; have strongly recommended effective implementation of inclusive education in the country. Thus in the launching of the Universal Basic Education Scheme, the government made the practice of the Special Needs Education an integral part of the scheme for providing equal

educational opportunities to all Nigerian children aimed at eliminating illiteracy and ignorance.

The practice of special needs education in Nigeria today begins from inclusive education premise. The NPE makes inclusive education the norm rather than the exemption. But there is no structure in place for early detection and identification of children with disabilities and special needs at the government level and the responsibility of bringing children with disabilities to school rest solely on the shoulders of the parents. The focus is on children with physical and neurological learning difficulties. Where such children are brought to school, they are assigned to special education teacher in self contained resource room setting for intensive teaching and learning to acquire all the necessary socialization and other transitional skills needed to move them from the self contained resource setting to a completely inclusive classroom within a short period of time as possible.

Suffice to say however, that the practice of inclusive education goes hand in hand with segregation programme in Nigeria. What is unique in consideration of the education of children with special educational needs in the country is the establishment of very many Special Schools corresponding and identifiable with the nature of the handicapping conditions of the enrolled students across the nation. For instance, we have School for the Blind to cater for the visually impaired individuals; School for the Deaf, to carter for the individuals with hearing impairment; while School for the Handicapped to attend to other categories of handicapping conditions (Okorosaye-orubite & Abdulrahaman, 2009), retrieved @ File:///C:/Documents/inclusiveeducation.

This approach according to Kristensen (1997), there exist some children who cannot participate in the ordinary classroom teaching with optimal benefits. His argument being that while it is true all children have the same needs and rights for development, some children will only require a little support while some others require more substantial assistance because of the nature and degree of their disabilities. Based on this premise then instruction for such children with adverse disabilities forms can and/or be provided within the embers of special classes in the regular school setting. This practice is given credence in the National Policy on Education (NPE) and the Blue-print on the education of the Handicapped (1996, 2004 & Obani, 1997).

The inclusive education practice requirement in Nigeria allows both Special education and general education teachers to cooperatively expose the Special Needs Children (SNC) to the general education curriculum as soon as possible and to the best possible. But one factor affecting the proper implementation of inclusive education in Nigeria impinges on the fact that there is no accurate data on the categorical proportion of the special needs students in public schools. However, estimates revealed that the largest category of students with special needs in public schools/inclusive education programme are the students with visual impairments, followed by those with Hearing impairments and then those who are orthopedically impaired as well as emotionally disturbed coming after (Federal Department of Education, 1999).

Nwazuoke (2010), expressing his worries pointed out that the greatest challenge the Federal Government of Nigeria is facing in its UBE programme is how to administer inclusive education effectively within the framework of the scheme, giving its avowed intention of universaltilizing access for all Nigerian children, condition of life notwithstanding (Olayi & Ewa, 2013).

It should however be mentioned that some regular and conventional secondary schools in Nigeria have started pilot testing inclusive education. Akinpelu (2009) in Okorosaye-orubite et al (2009), revealed that schools like Ijokodo High School Ibadan; Technical secondary school Umuoka, Enugu; Government secondary school Akabo, Kaduna; Government secondary school Nakka, Benue state among others have now gradually started integrating children with disabilities into the regular classroom with the normal children/students.

Put in another way, the goal of inclusive education is not to erase or deny the existence of differences, but enable all children/students to belong to an educational community that values and validates their individuality (Stainback, Stainback & Sapon-shavin, 1994). In recognition of this that Okeke (2010) opined that the reason for the establishment of the UBE programme by the Federal Government of Nigeria is to provide equal educational opportunities to all Nigerian children, disabilities notwithstanding. Therefore persons with disabilities ought to be actively involved in the UBE programme. The essence of the above assertion is based on the obvious developmental stride of the nation. Statistics has it that 10% of every country's population is disabled. If 10% of about 170million Nigerians are neglected from the scheme of things, that is to say 17million Nigerians are neglected and this does not

holds well to the nation's development agenda nor attaining the Millennium Development Goals (MDGs).

In the same vein, Adelowo (2006) subscribes that in Nigeria, children with special educational needs have not been left out unattended to. The country's National Policy on Education (1988, 2004), specifically mentioned that children with special educational needs should not be neglected in the planning process as they equally constitute a microcosm of the population. In 1993, the Federal Government of Nigeria promulgated a decree which provides a legal protection for the Rights of the Disabled persons to education, vocational training, means of livelihood for independent living, housing and so forth.

Obi (2013), on the other hand bare out her mind by observing that as laudable as the provisions in the National Policy on Education (NPE) on Special Education in Nigeria seem to be in line with best practices, they are marred with contradictions, for instance, the policy of inclusive education and integration of special education units in regular schools. Accordingly she pointed out that educational policies in Nigeria just like in most African countries are informed by external rather than internal considerations and variables. Citing Ajuwon (2008), the author explains further that policies are made perhaps to impress the international development agencies that the country depends so much on support or because the country is a signatory to the global convention, treaty or framework of action or as a result of the open door of our education system. This informed the idea of inclusive education in papers, nonetheless, while the actual practice remains segregation.

To buttress her stance, Mitchell (2010), holds sway that while many countries seem committed to inclusive education in their rhetoric and even in their legislation and policies, but practices often fall short. Reasons for the policy-practice gap in inclusive education are manifold. These include: Barriers arising from societal values and beliefs; economic factors; a lack of measure to ensure compliance with policies; the dispersion of responsibility for education; conservative traditions among teachers; teacher educators and educational resources; parents resistance; lack of skills among teachers; rigid curricula and examination systems; fragile democratic institutions; inadequate education infrastructures particularly in rural and remote areas; large class sizes;; resistance from the special education sector (especially special schools) and a top-down introduction of inclusive education without adequate preparation of schools and communities (http://www.educationcounts.govt.nz/publications/special education).

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In view of the above facts Ozoji (2006), asserted that if the inclusive education programmes in Nigeria must attain the goals associated with it in the school learning environment, the three elements of environment-physical, social and conceptual must be revisited in line with the new programme initiatives which rest its tentacles on:

- Government and its agencies should take a positive stance by accepting the inclusive education programme in reality and adopting a proactive measure towards its realization.
- Appropriate measures must be put in place for curriculum blending to accommodate the needs of the special needs children in the school system.
- There should be room for school plant re-engineering to ease accommodation and mobility for all children, disability notwithstanding.
- The school regulations should take into consideration the presence and active participation of the special needs children in the neighbourhood schools.
- New forms of pedagogy such as peer tutoring, collaborative teaching, mandatory assessment, support staff, parental and therapist involvement must be ensured for the successful implementation of the inclusive education programme.
- The need for refinement of attitudes on the part of the school community toward the special needs learners should be made a cardinal point.
- There should be adequate resource generation and utilization to carter for the needs of the special needs children in the regular school setting.
- There is need for the recruitment of special education teachers in the regular education/school system.
- There should be room for the recruitment of supportive staff to work with the teachers in the inter-disciplinary spirit.
- The issue of adequate funding for the inclusive education programme must not be taken for granted by the government.
- There should be effective public information including orientation for staff and student on the new concept (inclusion) through public enlightenment campaigns, seminars. Workshops, conferences, in service/on the job development among others.

This attest to the fact that in a learning environment that has all these measures put in place and functional, it must records impressive results for the special needs children. This Nigeria must pursue as the 'giant of Africa'.

# **Section Five**

# 2.11 Conditions necessary for effective implementation of inclusive education in Nigeria

This section was designed to examine the conditions necessary for effective implementation of inclusive education programme in Nigeria. The focus was therefore centered on: The place of attitude and effective implementation of inclusive education; the Hearing impaired students use of Assistive technology (AT) devices and effective implementation of inclusive education in Nigeria; others include: the impact of teacher training; Government commitment and the role of supportive staff in ensuring effective implementation of inclusive education, the importance of the reading programme in the education of the students with Hearing impairment as well as the provision of educational resources in inclusive school setting in Nigeria.

# 2.12 The place of attitudes toward students with Hearing impairment and effective implementation of inclusive education in Nigeria

Investigation of attitudes toward persons with disabilities has been of great concern to researchers since early 1930 (Antonak, 1988). It is not easy for scholars to have consensus on a definition of attitudes, or when defined, it has come in myriad ways. Concerning the aim of this study, a kind of positive or negative evaluation of attitude based approach will be applied.

Attitudes generally may be referred to as predispositions to responding in a particular way towards a person or object, be it a perceptual orientation or response readiness (Ozoji 2003). As attitudes are predispositions, they are not directly observable or measurable but are inferred from the way a person reacts to particular stimuli. Though there are divergent definitions of attitude but all the existing definitions agree upon common characteristics that an attitude entails "an existing predisposition variable which guides and directs the overt behaviour of an individual". The nature and the development of attitudes is not clear, nevertheless, the available evidence demonstrate that attitudes are formed alongside the

socialization process. As a result of the qualitative nature of the relationship between attitudes and behaviour, this tends to heavily influence stereotyped behaviour and may be regarded as the socialization process, since attitudes serve as mediating construct in behaviour as they play a prominent role in the treatment of any category of people.

Shindi (1991) in Ewa, (2000), posited that in active living, a person with a disability is handicapped in two ways: First he is handicapped simply because he does not physically possess the capabilities others have, the cumulative effects of which are social, emotional and financial deprivation. Secondly, because of the social doctrines that to have a disability is to be impoverished, he is perceived by others as handicapped. While it is possible to alleviate the first kind of handicap by taking appropriate physical measures, the second that is more damaging is more difficult to deal with because it is culturally entrenched. The prevailing attitudes toward persons with disabilities are reflected in the vocabularies often used. The vocabularies used to refer to this category of persons/individuals are often socially demeaning. It is most unfortunate, stereotyped and degrading as it categorizes as homogeneous, a diverse group of people with no behavioural commonalities on which is not sensible or proper to generalized.

Okuoyibo (1990, 2006), identified limited information, religion, social distance, physical appearance, sex/gender, age, ethnicity, beliefs, degree of the disability, as well as nearness to the handicapped person as factors that influenced attitudes formation toward persons with disabilities.

It is worthy to note that since attitudes serve as a mediating construct in behaviour, they play an important role in the successful implementation of inclusive education programme for the students with hearing impairment in the regular school setting. Hence, for positive results to be achieved, it is necessary that the planners of the inclusive education programme must take into account the teachers and normal students as well as other stakeholders' attitudes toward the handicapped in general and students with impaired hearing in particular in the inclusive education setting.

To provide a proper base for the write up, the review will focus on:

- 1. General attitudes of the society and persons with Hearing impairment.
- 2. Parents' attitudes and persons with Hearing impairment.
- 3. Normal/hearing students' attitudes and students with Hearing impairment.

- 4. Attitudes of students with hearing impairment toward self and others in the inclusive school environment.
- 5. Teachers/principal & helping professionals' attitudes and students with Hearing impairment in the inclusive school setting.

#### 2.12.1 General attitudes of the society and students with hearing impairments

The students with hearing impairments as members of the society must necessarily interact with the significant aspect of the society. The social relay involving the disabled and the society is mediated by attitudes. The society's attitudes are negative and obstructive of the efforts to improve the life of the persons with Hearing impairment. A renown Deaf-Blind scholar-Helen Keller, puts it that "not blindness/deafness but the attitudes of the society towards blindness/deafness is the greatest burden to bear". Ozoji (2003) observes that proper management of attitudes may mean happiness for the students with hearing impairment in the inclusive school environment.

Ajavon (2006) retrieved @ <u>www.idcs.info</u>, asserts that many Nigerians' negative attitudes toward students with Hearing impairment cannot be overemphasized. The negative attitude is often as a consequence of ignorance and lack of understanding of the special needs conditions of the individuals with hearing impairment. Some persons in Nigeria are still holding the erroneous beliefs that deafness and other handicapping conditions are come by as a result of a divine punishment or as a mark of evil.

In the same vein, (Okuoyibo, 2006, 1996, & Mba, 1995), maintain that the general attitude of the society towards persons with disabilities, particularly the Deaf is negative. This reaction can be attributed to many factors: Among which are superstitious beliefs that deafness is a punishment from God for the wickedness of the parents of the Deaf/hearing impaired child/student, the power of evil spirit's manipulation or as a result of disobedience by the expectant mother by venturing into the sacred grooves. Additionally, deafness is often erroneously thought to be contagious as a result of close contact. Okeke (2010) on the other hand shed light that individuals who are hearing impaired are perceived as second rated individuals among the Igbo folks in Nigeria. Hence it is considered a taboo as having an individual with hearing impairment ascends the throne as an 'igwe' (king) over his kinsmen.

Although societal attitudes toward persons with disabilities vary from one handicapping condition to the other, it is possible to make certain generalizations about attitudes of certain

category of persons toward the individuals with hearing impairment. Specifically if we consider the individual who is hearing impaired in his/her family and the attitude of the family members, attitudes of helping professional(s)/agencies and finally the community or society at large, there is ample evidence that all families are subjected to stress which they meet with varying degrees of success depending upon such factors as the personal qualities of the parents, the strength of the marriage, their social status and marital circumstances, educational status and degree of knowledge/information about the hearing impairment condition. Undoubtedly, the competing demand of each member of the family increases the strains in all these respects and imposes new ones which may radically alter the pattern of family life. The family may relinquish not only their hopes and aspirations for their members but also establish new routines.

#### 2.12.2 Parents' attitudes and students with hearing impairment

Studies particularly for the past years have indicated that the position of attitudes toward Handicapped persons in general and students who are hearing impaired in particular is negative. (Okeke, 2010, Okuoyibo, 2006 & Davis, 1963), found that parents' attitudes toward their children/students who are hearing impaired are either normalization, that is making light of the hearing impaired condition and/ or denying its social significance or by disassociation, that is by isolating the child with hearing impairment from any social contact that will force acceptance that the child was/is different in the family. They found that some parents in general tend to minimize the effect of the hearing handicap on the family despite the considerable changes it may have actually made. While some other ones found, display attitudes of outright rejection, open hostility, indifference and /or frustrations.

A number of investigations have led to the conclusion that children tend to adopt the same attitudes toward disability that their parents exhibit. If their parents worry about it, so would the children. On the other hand, if the parents are ashamed as a result of the presence of the Hearing impaired child in the family, the children/siblings will equally manifest the same attitude toward the affected child. But where the parents show love and acceptance of the child/student who is hearing impaired, the same will equally be shared by the children/siblings.

Okuoyibo, (2006, 1990), further alluded that the arrival of a child who is hearing impaired into the family/home at birth or news of a normal child becoming

handicapped/hearing impaired, is a crisis that most parents find difficult to accept. Parents are generally disillusioned/dismay and at loss of what to do. Being humane, parents show a wide range of feelings when they are first made aware that one or all of their child/children is/are born with or developing hearing handicap. Some parents feel confused, overwhelmed and hopeless, while some others react by being angry.

The impact of Hearing impairment on the family is never negligible, usually demanding and sometimes catastrophic. A few families may be bound more firmly together by experience, but in most of the cases the stress imposed far outweighs any benefit. Research evidence abounds to the fact that negative attitudes particularly of parents and others who matters in the life of the individual who is hearing impaired may create in him/her fear, anxiety and guilt feelings, some of the consequences which are difficult to develop proper social and emotional wellbeing in the child. There is therefore tremendous and urgent need for the parents to pay attention to these feelings and attitudes experienced by the children who are hearing impaired by showing acceptance if the services offered in the inclusive education setting are to yield positive results.

Parents' views on inclusion of hearing impaired students in the regular school setting vary greatly (Farrell, 1997). The increasing number of students with special educational needs (hearing impaired) in mainstream schools suggests that for many parents, inclusion is the preferred option. The factors that influence parents' choices of provision is relatively underresearched but according to Giangreco, central to inclusive practice is the acceptance that the family is part of the collaborative team. He puts forward the following assumptions that are considered crucial to working effectively with families in the interests of effective implementation of inclusive education:

- The family knows certain aspects of their children better than anyone else
- The family has the greatest vested interest in seeing their children learn
- The family is likely to be continuously involved with the child's education programme throughout his or her entire school career
- The family has the ability to positively influence the quality of educational services provided in their community
- The family must live with the outcomes of decisions made by educational teams all day, every day (Giangreco, 1997 p.196).

Parents play a critical role in bestowing social validity on inclusive education and in facilitating its implementation. Dohaney & Saland (1999) review 17 studies that investigated attitudes toward inclusive education held by parents of children with and without disabilities (Hearing impairment). They found out that these were complex, multidimensional and affected by a range of intervening variables. Both groups had mixed, but generally positive attitudes toward inclusive education. Parents of children with disabilities (Hearing impairment) believed that inclusive education will promote acceptance of the Hearing impaired students by the non-hearing impaired students/peers and thereby helping in their children with Hearing impairment social, emotional and academic development. Parents of the children without hearing handicap on the other hand valued their children's greater awareness of other people's needs and their enhanced acceptance of human diversity which constitute one of the salient virtues of inclusive education.

Some parents however, expressed misgivings that their children without disabilities would not receive sufficient assistance from their teachers and/or that they might emulate inappropriate behaviours of children with Hearing impairment. This Okuoyibo termed as ignorance and ill will towards persons with disabilities. Research evidence abounds that countries with more segregated provisions, reports on parental pressure for inclusion show positive parental support for inclusive education practices. However, parents whose children have more severe cases of special needs are said to prefer segregated settings for their children. (European Agency for Development in Special Needs Education) <a href="http://www.educationcounts.govt.nz/publications/special\_education">http://www.educationcounts.govt.nz/publications/special\_education</a>.

# 2.12.3 Students with intact hearing attitudes toward students with hearing impairment in the inclusive education setting in Nigeria

The degree of acceptance of the students who are hearing impaired by their non hearing impaired counterparts in the inclusive school environment is seen to be related to age, sex, self esteem, social relationship, sophistication, and by being talented, degree of the hearing loss and perhaps knowledge and information about hearing impairment.

Ikpaya (2004), observes that some students who are hearing impaired would not be accepted by their hearing peers as play mates, not even to exchange seats, sit next to or share their meals with them during lunch. He reported further that the attitudes of the non hearing impaired students toward the children with hearing impairment in the inclusive education school environment differ also significantly. He cited a study carried out by Jaffe (1968) to determine the attitudes of 477 adolescent students toward other children with hearing impairment as to ascertain their evaluation of the functionability of the Hearing impaired students in the school environment. The result revealed that students with hearing impairment were perceived as functioning adequately, attitudes toward them were more favourable.

Low esteem and prejudice were found to be associated with students with Hearing impairment by their hearing peers. In a study of non hearing impaired children age 9-13 years old Okeke (2010), found that children judged the Hearing impaired handicapped individuals by their personal qualities rather than by their handicapped. In the study, the researcher also found out that perceived social rejection and prejudice were vital factors in self evaluation and disability accommodation by the non disabled students toward their Hearing impaired counterparts respectively. The author further explains that with minor exceptions, the attitudes of the non hearing impaired students toward students with Hearing impairment in the regular school setting is characterized by overwhelming prejudice whereby the Deaf are systematically rejected and isolated from the mainstream regular school.

The non hearing impaired students' attitudes need to be modified. Many indicated hesitations in initiating contact with the students with hearing impairment based on their beliefs that hearing impairment is contagious and this makes the students who are hearing impaired to be lonely and socially rebuffed in the school setting. Moreover, most hearing students feel initiating a social relationship with the students with hearing impairment involves a higher degree of social commitment and one from which would be difficult to disengage. This act only helps to rob the students' with hearing impairment of the experiences that would have facilitated proper adjustment in the inclusive school environment.

Inclusive education involves several stakeholders, though not the least some of which are the students with disabilities and their peers without disabilities. Klinger & Vaughn (1999), presented a synthesis of 20 US studies of programmes involving students with high incidence of disabilities (hearing impairment), in settings ranging from kindergarten to grade 12. The consensus of the findings is that those with/without disabilities wanted same activities, books, homework, grading criteria and group practices. Both groups recognized that since not everyone learn at the same rate/speed, teachers should slow instruction where necessary, explaining concepts more clearly in a teaching/learning strategy. Hornby (2010), on the other hand in a study at New Zealand, challenged the assumption that inclusive education is applicable to all children with special needs, irrespective of their degrees of disabilities. He studied former students of two special schools. One of the schools for students with learning disabilities whiles the other for students with behavioural difficulties, who have been integrated into the mainstream schools for at least few years. The result indicated that many of the students subsequently exhibited limited inclusion in their communities as a result of negative attitudes which manifested in term of low level employment, educational and community adjustment. The students also reported many positive experiences regarding their time in the special schools/units, while they had negative experiences in the mainstream classes. Hornby attributed these findings to mean an improved societal attitudes toward the general goal of education of the children with hearing impairment with a focus on academic attainment, appropriate vocational, social and life skills which are provided to make for a successful transition to adult life through the inclusive education programme.(http://www.educationcounts.govt.nz/publications/special/\_education.)

# 2.12.4 Students' with hearing impairment attitudes toward self and others in the inclusive school environment

The individual with hearing impairment attitude towards his/her disability is also known to affecting such a one's emotional and social adjustment in the inclusive school environment. A student with impaired hearing who perceived self negatively manifest characteristics depicting poor self concept, displaying temper tantrum and other aggressive behaviours to self and others in the school setting. Ewa (2006) pointed out that the type and degree of the hearing loss as well as the age of onset of the hearing impairment plays a significant role in the attitude formation of the individual who is hearing impaired.

The student with hearing impairment's acceptance of his/her handicap and self evaluation are very crucial factors in his/her adjustment in the school environment. It has been found that many characteristics such as irritability, aggressiveness, crying often displayed by these category of students are not due to the basic disorders but are due to his or her strained feelings.

### 2.12.5 Attitudes of Teachers/Principals and Helping professionals toward the students with hearing impairment in the inclusive school setting

The attitudes of teachers/principals and helping professionals play an important role in the life of the children/students with hearing impairment in the inclusive education setting. The attitudes of the counsellors and psychotherapists toward persons with hearing impairment is closely related to the therapist self acceptance of the individual. The success of the helper depended on his/her positive attitudes toward the person with hearing handicap. Shindi (1991) in Ozoji (2006) pointed out that studies have found sex to be one of the variables affecting teachers and students attitudes toward students who are hearing impaired. Female teachers tend to be more favourable than the male teachers. It has been pointed out in research that it is important to have the teachers attitudes changed if the public's attitudes are to be changed toward the inclusion of the students with hearing impairment in the inclusive education programme in the country. The world research on Special needs education shares the assumption that teachers attitudes may act as an antecedent to facilitate or constrain the implementation of inclusive education.

Thus Ajayi & Koi (2008), Ofre (2015), observe that one of the greatest barriers to effective implementation of inclusive education in Nigeria and other African countries is negative attitudes of the school communities toward individuals with Hearing impairment. The attitudes and relationship of the general education teachers and para-educators toward the Hearing impaired poses alot of threats to effective implementation of inclusive education for this category of persons.

In a study carried out by Gare (2008), on the relationship between teachers and students with disabilities (Hearing impaired) in an inclusive education school environment found out that majority of the regular teachers are not even aware of the disabling condition as well as the learning needs of the Hearing impaired students in the inclusive education setting. The findings further revealed that some teachers often ignor the learning needs of the students with hearing impairment during instructional periods. Hence since teachers cannot meet the learning needs of these learners, this significantly reduces or makes the educational outcome of the students who are hearing impaired very poor which may tantamount to drops out from the school system.

Also, Okeke & Navan (2005) conducted a research on the inclusion of students with Hearing impairment in Nigeria; they reported that this category of learner faces differing attitudes in the school system: discrimination, isolation, neglect, marginalization, intellectual devaluation, peer indifference and loneliness. They reported that teachers and hearing students alike show great variability in their attitudes to the hearing impaired students. The researchers further contended that students with impaired hearing with low self determination skills and intrinsic motivation dropped out of school to learn vocational skill or resort to street begging consequent upon the dehumanizing attitudes in the school community. The authors lamented that this does not constitute a good breeding ground for effective implementation of inclusive education for students with Hearing impairment in Nigeria.

Ikpaya (2004), observes that certain teachers on one hand feel threaten by the presence of the Hearing impaired handicapped children in their class, and on the other hand, a sizable percentage of regular school teachers would not for any reason or anything have concern working with the Hearing impaired handicapped children/students. In the same vein Ladipo (2003) repoted that most prospective teachers enter colleges with negative attitudes toward disabilities.

In a study by Roy on 624 hearing handicapped and 60 non hearing handicapped children, Ewa (2006), pointed out that the result of the findings indicated that the children with hearing impairment when compared with their hearing counterparts, are significantly more rarely to be selected and/or highly rejected on a socio-metric measure and lastly, they are equally not likely to be engaged in any substantive positive interaction with their teachers.

In another study by Siberman on the attitudes held by teachers toward students with hearing impairment, Ewa (2006), reported four types of attitudes held by the teachers toward the students with hearing impairment for analysis of the description of their students. These include: attachment; concern; indifference and rejection. Attachment shows affectionate/close tie of the teachers to the students which is derived from the pleasure they bring to the teachers working with them. Concern indicates the empathy/sympathy and support from the teachers on the students' academic and emotional problems. Indifference connotes lack of involvement of the Hearing impaired students in any activities by the teachers. While rejection reveals out right refusal by the teachers to consider students who are hearing impaired in any form of activities in the classroom environment. The result of the study reveals that the first two categories of attitudes held by the teachers toward this category of students are positive and

welcoming in the inclusive educational setting, while the last two are negative and in no way will such negative attitudes better the lots of the students with hearing impairment in the inclusive education programme.

Put in another dimension, Donaldson, (1980) and Okuoyibo, (2006), asserted that there is inconsistencies in research findings on teachers' attitudes toward students with hearing impairments and that the attitudes toward this category of persons is complex and multidimensional and not a constellation of beliefs. It is therefore very important to state the fact that, for the regular teachers to meeting the educational and psychosocial needs of the students with impaired hearing in the inclusive educational setting in Nigerian, there is an urgent need for the refinement of the teachers attitudes, as well as possessing the knowledge and skills required in handling/dealing with this category of students in the school setting.

# 2.13 Students with hearing impairment use of Assistive Technology (AT) Devices and effective implementation of inclusive education programme for the students with hearing impairment in Nigeria

Before the advent of technology in the 21 century, individuals with hearing impairment in Nigeria use relatively low tech strategies in dealing with their environment and other people. But with the society's increasing reliance on technology, that is the use of radio, television, telephones, improved mass transportation system and use of computers, the need for as well as opportunities for assistance have become more highly technological. Hence an infinite array of homemade low tech and commercially available high tech assistive technological (AT) aids/devices now enable individuals with Hearing impairment to live, work and play more competently and safely in the inclusive educational setting.

In this wise, Gargiulo (2009), opines that modern technology is a very important component in the lives of all individuals with disabilities. He pointed out that in no field else are the effects of today's technological advances more evident in working with special needs students than in the area of hearing impairment. This ranges from sophisticated hearing aids, computers, alerting devices, cochlear implants, captioned media and adaptive devices/equipment are only a few of the items which use has revolutionized the field of education of the students with hearing impairment.

Assistive technology (AT) devices are said to be any item, piece of equipment or product system, whether acquired commercially at the shelf, modifies and/or customized that is used

to increase, maintain and improve the functional capabilities of the individuals with hearing impairment in order to bring out the best in them. These also could be said to be devices which aid in teaching and facilitating understanding in the students with hearing impairment.

Robitaille (2010) observes that assistive technology (AT) devices are so important to individuals with hearing impairment because these devices can help improve the physical and mental functioning, alleviate a disorder/impaired hearing, prevents the worsening of the condition, improves the capacity of the individuals who are hearing impaired to learn or even replaces a missing link.

In the same vein, Raskind (2008) puts it that Assistive technology devices are classified into low and high tech. Low tech assistive technology devices are simple tools that make life's daily activities easier or in some cases possible. These devices are non electronic and relatively in expensive. They may be as simple as pencil grips to help students who are hearing impaired with motor problem to grip pencils firmly, maps, models, cut outs and so forth. Low tech devices are simple to be used. High tech assistive technology devices on the other hand are generally electronic devices which are usually tied to power supply and typically required a careful planning so that they are not intrusive. A cost factor must usually be considered. Some good examples of high tech AT devices for the students with hearing impairment in the inclusive classroom include: hearing aids, computers, talking clocks, alerting devices, electronic wheel chairs that climb stairs, laser canes for the visually impaired individuals etc. It is important to note that all or some students with disabilities must have high tech devices in order to be successful learners in the inclusive education environment (Beard, Carpenter & Johnson, 2011).

The review of this variable shall be carried out under the following sub headings:

- 1. Types of assistive (AT) devices for the individuals with hearing impairment.
- 2. The use of AT devices by the students with hearing impairment.
- 3. AT devices amplifying/providing sounds for the students with hearing impairment.
- 4. AT devices that replaces sounds for the students with hearing impairment.
- 5. AT devices for independent living skills for the students with hearing impairment.
- 6. AT devices for students with hearing impairment learning in an inclusive classroom setting.
- 7. Studies on the students with hearing impairment use of AT devices.

# 2.13.1 Types of assistive technology (AT) devices for the students with Hearing impairment in the inclusive school environment

Individuals who are Deaf/hard of hearing utilize a variety of assistive technology devices to provide them with improve accessibility in numerous environments. Most devices either provide amplified sound or in alternate ways to access information through vision and/or vibration. These technologies can be grouped into three categories. These include: 1. Hearing technologies, 2. Alerting devices and 3. Communication devices (WI Assessing Students Needs for Assistive Technology, 2009) <u>http://www.dpi.WI.gov/sped/pdf/dhh</u> guide.pdf.

It is important to note that within each main category, there may be sub categories based on different purposes or intended audience when utilizing the technology devices. The overall goal of these devices is to assist students with hearing impairment gain improved accessibility to information that their hearing counterparts gain through intact hearing. These devices/tools are intended to provide readers/learners who are hearing impaired with a better understanding of their purposes, how and when they might be utilized. So depending on their needs in specific situations, Deaf/hard of hearing individuals may require assistive technology devices to function optimally. At times these assistive technology devices may be used singularly or simultaneously. Moreover, many of these devices developed for use by the Hearing impaired students/individuals may be found beneficial also to those without hearing impairment.

# 2.13.2 The use of AT devices by the students with hearing impairment in the inclusive education setting

As in teaching normal students without hearing disorders, teachers of students with hearing impairments must understand the individual educational needs of this category of students. For the students with impaired hearing with a slight hearing loss, very few accommodations may be needed to help the students gain access to and benefit from the classroom instruction. The teacher of the students with hearing impairment in the inclusive education setting needs to work in collaboration with other regular teachers and personnel with regard to instructional strategies and the assistive technology devices types that the students with impaired hearing may use or need to successfully learn in the class.

To meet up the educational/communicational needs of the students with hearing impairment in the inclusive education class through the use of appropriate assistive technology devices, Beard, Carpenter & Johnson (2011), observe that environmental accommodations may be necessary. These accommodations may include:

- 1. Sitting placement or position of the students with hearing impairment in the classroom.
- 2. Modification of the classroom
- 3. Accommodations/modification of instruction and instructional materials.

Assistive technology devices can be enhanced by accommodations and modifications through preferred sitting arrangements which allow the students with Hearing impairments to pair up assistive technology devices that amplify or provide sound with speech reading. On the other hand, in a situation where the students with impaired hearing have an interpreter, the classroom must be arranged in such a way that the students can see both the teacher and the interpreter at the same time.

Modifications of the classroom may entail improvement in the acoustics of the room thereby providing the students who are hearing impaired with less interference with background noise/sound in order to enable the AT device(s) work optimally/efficiently. Moreover, when students with hearing impairment use an interpreter, the classroom must have sufficient light so that they can see the interpreter especially when the video/slide turns off.

Finally, teacher(s) can use assistive technology devices to make accommodations to instructional materials such as by allowing the use of note devices so that the hearing peers can help take/copy note for the students with impaired hearing in the class.

In line with this that Raskind (2008) puts it that the use of assistive technology devices to enhance learning is an effective approach for the students with hearing impairment. Assistive technology devices are made available to help individuals with different types of disabilities ranging from cognitive problems to physical impairments to overcome their challenges. Students with Hearing impairment often experienced greater success when they are allowed to use their abilities (strengths) to work around their disabilities (challenges). AT devices/tools combine the best of these practices.

It need not be over emphasizes that Assistive technology devices have the potentials to enhance the quality of life for the students with impaired hearing and this is made possible by providing them with the means to compensate for their difficulties and highlights their abilities. This is because students who are hearing impaired have individual strengths, limitations, interest and experiences. Therefore selecting appropriate technology devices for this category of students requires a careful analysis of the dynamics of interactions between the individual, technology tool/device, the task and context in which the technology device will be applied.

# 2.13.3 Assistive technology (AT) devices for amplifying/providing sound for the students with hearing impairment in the inclusive classroom environment

For the students with impaired hearing who can benefit from sound amplification, the hearing aids will most often be prescribed. According to American Speech Language-Hearing Association (2004a), children as young as four (4) weeks of age can be fitted with amplification such as hearing aids and any/other assistive technology device deem necessary (www.asha.org).

There are many types of hearing aids in use today. These range from body worn, eye glass/spectacle hearing aids, behind the ear (BTE) and in the ear (ITE). Included in this group or category of in the ear (ITE) hearing aids are: in the canal (ITC) and completely in the canal (CIC). While the body worn and eye glass/spectacle types of hearing aids were regularly used 40-50 years ago, but they comprised only about 12% of all hearing aids marketed today. Instead most individuals with hearing impairment choose to use in the ear (ITE) type today. (Approximately there are 80% users of the ITE and 20% users of the BTE among the population of hearing aids users).

It is important to note that this transition in style/types, use and preference is occurring for a number of reasons which include: Reduction in size of the component, durability and social/cosmetic concern of the part of the users. Better Hearing Institute (2005): Your guide on hearing, Alexandra. <u>www.BETTER</u> HEARING.ORG.

The purpose of the hearing aids is to pick or localize sound, magnify it and then deliver to the appropriate auditory pathways to enable the children who are hearing impaired benefit from sound. It is of great significance to note also that the sound generated by the hearing aid may be distorted but it is still advisable to fit hearing aids as early as possible on a hearing impaired child, in order to enable such a child learn to use the device for the awareness of the environmental sounds and as well ease communication.

Hearing aids are effective if the students who is hearing impaired can actually hear/identify and understand spoken language. A student with hearing impairment in a noisy class or environment receives little or no benefit from the use of hearing aids. For this reason, group of assistive listening devices increase the use of important sound for learning while decreasing the less meaningful noises in the classroom environment. In most instances, the teacher wears a microphone from the transmitter and the students with impaired hearing have a receiver that may be like a hearing aids. These devices may be in an FM system, an infrared system, an electromagnetic induction loop or a sound field system.

In all cases, the teacher(s) of the Hearing impaired students should be trained on how to use any of the system chosen for the benefit of the Hearing impaired students' individual educational needs in the inclusive classroom environment in Nigeria.

# 2.13.4 Assistive technology (AT) devices that replaces sound in the inclusive classroom environment

As technology is becoming more prominent and sophisticated and as well as offers the students/individuals with hearing impairment access to real live/ time presentations such as a class or lecture, conference, a speech to text transcription/translation, this technology devices equally enables the students who are hearing impaired to have access to the general education curriculum and also provide avenues for the teachers to meet the communicational demands of these students. Speech to text transcription/translation enables a trained captionist to type the teachers' instructions and the students with hearing impairment comments into a loop computer using a screen or the students' personal lap tops or computers. It may not be a verbatim translation but somehow keeps close to the original.

Most students with impaired hearing are made aware of the TV programmes and moves through captioning which are inbuilt in closed caption decoders clips. In the general education classroom, these students are exposed to information through the use of media such as DVDs, and CD-ROMs when they have them captioned. Hence the Captioned Media Program (CMP) provides access to communication, information and media through the use of Captioned Educational Media and Supportive Materials. The CMP also acts as a captioning training centre.

The American with Disabilities Acts mandated all states in the federation to provide all persons with hearing impairment access to telecommunication information. The law as well

provided for the hearing impaired individual independence and access to information in addition to safety. Thus, the text telephone (TTS) formerly called Teletype (TTY) or telecommunication device for the Deaf (TDD) systems, enables persons with Hearing impairment to communicate with the hearing individuals on conversational phones. Here also the Hearing impaired students must use a TTY and relay numbers to participate in telephone conversation. The users have to contact the telecommunication system relay service system and type his/her message. Whiles the TRS then relays the message to the person receiving the call and the person responds in voice and vice versa the TRS again types the reply as a text to the individual or student with hearing impairment (Beard, Carpenter & Johnson, 2011).

### 2.13.5 Assistive technology (AT) devices for independent living skills for persons/students with hearing impairment in the inclusive society.

The students or individuals with severe to profound hearing impairment need AT devices for help with daily living skills in order to function optimally. These devices promote independence and self determination as well as psychosocial fulfilment and adjustment. These devices help to reduce the over dependence of the individuals with hearing impairment on the hearing in order to function well in the society. For example, bells in the school that ring with light flashing can give the students warning of class/lesson changes and /or an idea of emergency signals. A vibrating clock that can be placed on tucked into the pillow gives the students the idea of time /responsibility to starting his/her day on time. Moreover, bell knocks can be designed to make light flash when someone is at the door. Also, a baby monitor device to alert the hearing impaired person or mother when the baby is crying, as well as smoke detection devices help to in still independent living skills thereby promoting the self worth of the individuals living with hearing impairment in the inclusive educational setting and/or society

### 2.13.6 Assistive technology (AT) devices for the students with hearing impairment learning in the inclusive classroom setting

One of the most important considerations in learning for the student with hearing impairment is how the students communicate effectively with significant others in the school setting. Students with impaired hearing represent a heterogeneous group and their individual communication needs varies greatly. Thus Easterbrooks & Baker, (2001) in Beard, Carpenter

& Johnson, (2011) pointed out that in the inclusive school environment, the communication needs of the students with hearing impairment determine how successfully the student will be learning. They advocated therefore that a multidisciplinary team should ask and explore all areas that will provide the most concrete information about the communication need of this category of students. Accordingly the authors pointed out that the attention of the team should be focused on the following variables:

- 1. The preferred learning styles of students with hearing impairment in the inclusive classroom environment.
- 2. Placement options of how and where the students with hearing impairment will receive instruction.
- 3. How to ascertain access to appropriate choice of language modes for the students with impaired hearing in an inclusive classroom seting.
- 4. The provision of assistive technology (AT) services and the use of AT devices in the inclusive school environment.

In addition, just as the team addresses the communication needs of the students with hearing impairment, the team must take an in depth look at how any assistive technology service or devices will aid the students. In that wise, the team should evaluate the current and future of the appropriate AT devices to be given considerations by asking questions such as following:

- I. How does the AT devices contribute and promote learning in the students with hearing impairment?
- II. How does the AT devices enable individuals with hearing impairment to respond in meaningful ways to learning?
- III. What type of AT devices will the parents or caregivers support?
- IV. What kind of training might the students with hearing impairment, parents and teachers need in order to use the AT devices?
  - V. How and when will the students with hearing impairment use of the AT devices for learning be evaluated

# 2.13.7 Research/studies on the students' with hearing impairment use of Assistive technology devices

Ojogwu (2013) carried out a study on the significance of educational technology: A need for promoting the teaching and learning of persons with hearing impairment in Nigeria. He reported in his findings that:

- Employing the use of educational/assistive technology devices in the classroom setting would significantly complement for the disadvantages or difficulties brought about by hearing impairment which the learner with impaired hearing would have encountered in understanding abstract concepts.
- Assistive technology devices infused into the education of persons with hearing impairment would not only facilitate teaching and learning processes, but would also enhanced retention, promote to a larger extent dexterity in vocational related endeavours and also create room for a first encounter or experience with objects or materials of learning.
- The use assistive technology devices would significantly increase independence and active participation of students with hearing impairment in the teaching and learning process.
- The use of AT devices significantly encourages self exploration as it gives frequent opportunities for the students with hearing impairment0fs to demonstrate their learning through the use of technology tools/devices for optimal functioning.

In another related study: The need for assistive technology for special needs persons in Nigeria, Goni & Nkwoagba (2013) up hold that:

- Assistive technology devices will improve the learning and achievement of special needs persons of all ages, enhances their abilities and as well aids special needs persons to meet high standards.
- The use of AT will significantly improve achievement of the students with hearing impairment in reading, writing, mathematics and results in gains on high stakes tests that will enable schools to meet educational goals. If inclusive schools will be equipped with assistive technology devices, basic productivity soft ware and high speed internet connections, Hearing impaired students will score higher in every subject.

- AT devices will significantly engaged students with impaired hearing in the learning various concepts because it deepens their interests and engagements in academic learning. Thus the use of AT makes learning interesting and relevant to the students with hearing impairment in/outside the classroom setting.
- With the use of assistive technology devices, students with hearing impairment will take charge of their own learning independently. This will afford them the opportunity to have more freedom to pose questions, explore topics of interest and work at different levels of depth. Moreover, this category of students will cooperate seriously with other hearing students and teachers as well as helping each other where necessary.
- Assistive technology devices can be used significantly as tools to increase productivity and efficiency and also improves communication among parents, teachers, students with hearing impairment and the community at large.
- In comparison on the provision/availability of Assistive technological devices and other educational resources in the Secondary Schools located in the northern part of the country with the Secondary Schools in the southern part, the schools in the north have an edge over the ones in the southern part of the country.

Liu & Hung (2007) carried out a study on providing students with haring impairment with learning care after classes through Smart phones and the GPRS network. The study was to examine the effectiveness of providing after class learning care through wireless technology to ascertain the motivational level of the students with impaired hearing by applying experimental design.

The study developed a learning care system that utilizes smart phones and the General Packet Radio Service (GPRS) network. The study considered the following variables:

- A. After class interaction system
- B. Interactive strategies for improving after class learning participation
- C. Students and parents' reactions.

The after class interaction system was aimed to implement a learning system that will help a teacher to create opportunities for communicating with the students who are hearing impaired through the GPRS network. This is because in class students learning participation may affect after class learning motivation. Hence, the proposed learning care system allows the teacher

avenues to asses and reports students in class participation level including confidence, interest, efforts and report system. The system then generates a report for students participation status which is displayed in the after class interaction system. The after class interaction system was designed to assist the teacher in providing students with after class learning support through the use of various technology devices.

The interactive strategies for improving after-class learning participation of the study applies strategies to maintain students learning motivation and improve learning activities when students are off campus, reminding students of the course work to do, encouraging, rewarding, praise, assisting and peers awareness. Also in considering the students and parents reactions, the study administered an exploration trial to confirm the effectiveness of the proposed learning care system in improving after-class activities.

The result of the investigation revealed that the use of wireless network and hand held devices can positively improve the learning of the students with hearing impairment. The students and parents reactions support the use of the GPRS and Smart phones to provide afterclass learning support and enhance after-class learning. Most students and parents considered the after-class student-teacher interactional strategies effective in improving students learning at home. Finally, Hearing impaired students achieved a better home work completion rate when the teacher used smart phones and the GPRS Ubiquitous to network to provide learning support.

On the other hand, in a survey carried out by Agba, Olayi & Ewa (2010) on the current opinions on the availability and use of assistive technology devices among special needs persons in Nigeria, the result revealed the assistive technology devices commonly used by the students with hearing impairment in the inclusive education setting in Nigeria are the hearing aids and conventional cell phones. The survey summarized among the problems affecting the effective use of assistive technology devices by this category of students in Nigeria to include:

- Absence of legislation compelling Government and other stake holders in the education of the Hearing impaired students on the mandatory provision of assistive technology devices for these students in school at all levels.
- Poor/inaccessibility to internet facilities in the country.
- Inconsistent/poor electric power supply to schools and the public.

- Inadequate/absence of technical knowledge on the use of the assistive technology devices.
- Poor/lack of maintenance culture on the parts of the students, parents and school authority.
- Overcrowded classrooms in the inclusive school setting.
- All assistive technology devices are foreign based manufactured; hence the high cost of importation and maintenance when the need arises.
- In comparison on the availability of Assistive technology devices and other educational reources in schools between the North and Southern Nigeria, the schools in the northen Nigeria seemed better equipped than the ones in the southern part of the country.

Similarly, Kuna (2005) posited that the problem of funding has affected every aspect of Nigerian education system. The author decried that the issue of poor funding has led to the lack/inadequate provision of Information and Communication Technology/Assistive Technology Devices/facilities which help the students with hearing impairment to improve in their academic performance and somewhat compensate for the lack due to impaired hearing among students with hearing impairment.

In the educational system, such facilities, materials and equipment according to Maduagwu (2008) are diverse set of technological tools and resources which are used to communicate, to create, disseminate, stored and manage information. These technological devices include: computers, the internet, broadcasting technologies, telephones etc. In recent years, there has been a ground swell of interest on how computers and internet can best be harnessed to improve education of the deaf and hard of hearing students at all levels in the inclusive education settings/classrooms where they are to compete favourably with their non hearing impaired individuals.

Ekanem (2009), on the other hand holdsway that Assistive technology devices/ICT facilities have also proven to increase the performance over and above what used to be and the maximization of the potentials of the special needs children in general and students who are hearing impaired in particular. ICT/AT devices have now become essential components of the Special needs education system which attempt to increase access and provide quality education to all learners despite the degree/severity of the disability.

But Hasting (2006) bemourned that despite the significance of the AT devices/ICT facilities in the education of the individuals/students with hearing impairment in the inclusive school environment, obtaining appropriate equipment ranging from hearing and visual aids to electronically adapted mobility devices, to walk frames fo the physically challenged and so on, to better the lots of these students in an inclusive education setting has continue to be a mirage due to poor funding in Nigeria.

### 2.13.8 Teachers' training/recruitment and effective implementation of inclusive education of the students with hearing impairment in Nigeria

This aspect of the review shall focus on:

- Teachers' recruitment/competency.
- Teachers' training.
- Attitudes of teachers toward inclusion of Hearing impaired students.

It is never rigmarole if one states that in order for inclusive education to work in practice, teachers and principals of the regular schools must accept its philosophies and demands. Ewa (2013) opines that appropriate preparation of educational personnel especially teachers stand out as a key factor in promoting progress towards inclusive education of the students with hearing impairment. Good and effective teaching is the key to effective learning in the inclusive classroom learning environment. No doubt good teaching normally emanate from good teachers who are trained and equipped with appropriate skills. It involves skills and the ingenuity of the teachers to restructure the curriculum, redesigned the environment and changes one's behaviour so that the learners with impaired hearing would have experiences, resources and support they need to develop their sensibility, compassion and intelligence. Moreover, the teacher is the initiator of the learning process, the facilitator of the learning skills and is regarded as the single most important factor of fostering the frontiers of knowledge in the inclusive education setting (Umar, 2010 & Ewa, 2013).

Winter and O'Raw (2010) noted that central to successful inclusion of the students with hearing impairment in particular and the Disabled generally is the role of the mainstream teachers who take the ownership of inclusion and belief in their own competence to educate students with special educational needs. This may present a challenge since the underlying assumption has been that students identified as having special needs belong to a different place as well as different pedagogical category, and thus could not be taught successfully by ordinary teachers. Avramidis et al (2000) put it that teachers' effective practices are central to inclusion and a number of studies have explored this theme. Among elements of practices identified as supporting effective inclusion of students with special educational needs are: A: Scaffolding, B: Modeling, C: Contingency management and other effective instructional methods, such as feed backs (Flem 2004). Collaboration and team work are also essential aspects of inclusive practice, according to recent research (Lindsay 2007).

Also critical to the success of team work is time for planning and reflecting together (Hunts 2003). According the Hunts the role of the specialist educator needs to be re-examined and redefined if inclusion is to be successful. Apart from providing individualized instruction, potential roles include adapting curriculum, co-teaching, supporting the mainstream class teacher through team work, training, support staff such as classroom assistants and selecting and adapting materials to suit the visually impaired and other groups in the classroom (Giangreco 1996). In general, International research evidence suggests that the success of inclusion stand or falls on the availability of in-class support (Farrell 2000).

Furthermore, with respect to the current trend on inclusion, it is required that children with handicapping conditions are educated in the inclusive education environment. In that wise many children with special educational needs would be found in the regular classrooms. Hence the regular teachers will be faced with the responsibility of teaching them. This does not mean wholesale abandonment of the students with hearing impairment and other category of special needs learners from the special resources available to them in the past. It does means that such children will be spending more of their school time in the regular classes. Here, they will continue in most cases to receive direct assistance from specially trained persons/teachers on part time basis or indirect assistance via the classroom teacher who in turn would receive instruction and help from the special education teacher(s) serving as a resource person. In any case, the regular class teacher would have an increased responsibility in the education of the special needs children/students with hearing impairment. (scholarworks.wmich.edu/cgi/viewcontent.Cgi?article=2307&content=reading-horizons).

#### 2.13.9 Teachers' competency

For the inclusive education programme to be worthwhile, it is pertinent the teachers must be both competent and confident in their teaching ability. The classroom teachers are responsible for any adaptation that may be necessary for the students with hearing impairment to success in the inclusive learning environment. Consequently, these teachers must have the skills to develop and adapt the curricula to meet individual learning needs of the students with hearing impairment in the inclusive education setting.

Ladbrook (2009) posits that inclusive education demands new competency in teaching methodology which requires recognition of multiple intelligences and learning styles and also welcomes differences. Furthermore, new perspective in the dynamic pedagogy in the inclusive education setting no longer allows the teacher to teach as if all learners learn the same way or at the same pace. Outcome education based education is meant to empower teachers to achieve success in their newly defined roles in the inclusive classroom. Therefore, teachers as the principal implementers of inclusive education, hold the key to its successful implementation. It is the teachers who have to educate each and every learner under their care. Their challenges are multifaceted in dealing with the students with hearing impairment in the inclusive education classrooms and are expected to live above board.

Today some children have a shaky schedule of values; lack positive and ideal role models and as well some come from divorced or single parent homes. Therefore apart from their roles as educators; teachers play duplicated roles of mother and psychologist, social worker, nurse and a minister or spiritual guide. Counsellor and friend to the special needs hearing impaired students in the inclusive education environment.

Teachers at times feel ill equipped to face these challenges of broken homes, child headed families, child abuse, rape, incest, drug abuse, violent crimes among others which are on the increase in the society and serve as threat posers to the inclusive education chagrin. Teachers therefore, as part of the dynamic and multilevel ecosystem in the inclusive education programme need to be versatile and competent to have all areas of needs of the students with hearing impairment addressed as to enable them (Hearing impaired students) successfully faced the challenges found in the inclusive classroom environment.

As noted earlier, no single acceptable definition and the practice of inclusion has been fully articulated by the teachers. Some groups, especially in the US, differentiate between inclusion and full inclusion. Advocates of full inclusion support the notion that the presence of all students with disabilities in general and Hearing impaired students in particular in regular classes will force an end to the type of traditional instructional practices they oppose. Sapon-Shevin (20001) noted that while placement options such as special classes or schools exist,

educators (teachers) will not have to address the restructuring of the system to meet the needs of all children. Where alternate placements are maintained, students who pose challenges to the existing system or who do not 'fit in' are simply removed from the mainstream, placed elsewhere, and the system does not have to change'. She suggests further that the belief that some students cannot be included is based on the false assumption of a lock-step curriculum. A lock-step curriculum is one in which all students complete the same lessons at the same time. According to Sapon-Shevin, the world is an inclusive community; since the school is a macrocosm of the community, therefore, it is very important for the children/students with hearing impairment to grow within the school communities that represent the kind of world in which they will live when they finish school.

Furthermore, Rogers (1993) observes that the schools that most readily adopt the concept of inclusion are generally those that the teachers already embrace instructional practices which are designed to provide challenging learning environments to children with very diverse learning characteristics. Such practices include heterogeneous grouping, peer tutoring, multi-age classes, middle school structures, "no-cut" athletic policies, cooperative learning, and the development of school media centers which stimulate students' electronic access to extensive databases for their own research'.

#### 2.13.10 Teachers' training

Teachers must be both competent and confident in their teaching ability. Brownell & Pajares (1999) emphasized that teachers' beliefs are important determinants and predictors of teaching practices. In a review of several literatures on inclusion, Avramidis and Norwich (2002) cited a number of studies providing evidence that the school ethos and the teachers' belief have a considerable impact on teachers' attitudes towards inclusion which in turn are translated into practice.

Teachers training both pre-service and in service is essential to develop the skills necessarily to teach successfully in inclusive setting. Mittler (2000) stated that ensuring that newly qualified teachers have a basic understanding of inclusive education is an essential ingredient to the success of inclusion; hence, teaching is the best investment that can be made.

Thus On the need for training and retraining of teachers for the inclusive education programme in Nigeria, Okeke (2010) observes that teachers can only give out what they have. Therefore the retraining of regular teachers to meet up the challenges of educating the

students with hearing impairment in the inclusive education setting has become imperative and vital in enhancing teachers' competency. Therefore the issue of training and retraining of teachers should not be underestimated if the inclusive education package must be fruitfully assuaged.

The teachers' role is central to none in implementing and as well accomplishing educational goals and objectives. Ukeje (1991) observes that education may unlock the door to modernization but it is the teacher who holds the key. It is the teacher who determined what happens in the classrooms especially in preschool classroom where children with hearing impairment are not only helpless but in dare need of the direction through the assistance of the teachers. It is the duty of the teachers to implement the curriculum if the inclusive education practices must scale through.

Teachers' training and retraining is paramount to the successful implementation of inclusive education practice. This will equipped them with new skills and knowledge to effectively deal with the challenges in the inclusive education settings. Lack of constant training and retraining of teachers can lead to regimentation and status co rather than promoting enterprises amongst the teachers (Okeke 2010).

Many general education teachers complain of being asked to teach special needs (Hearing impaired) children/students in the inclusive classroom environment without adequate and necessary skills preparation. In order to ascertain this complains, Okeke (2010) carried out a study on the teachers knowledge level and skill competence required for the practice of inclusive education. The result revealed low level of knowledge and poor competence among teachers.

In another related study, Obi, Mamah & Mensah (2005) reported that many teachers in Nigeria and Ghana have not been adequately prepared for the inclusive education programme going by their curricular. This is against the two countries policy that elements of special education be introduced into the curriculum of pre-service and in-service teachers. This assumption is based on the fact that it constitutes part of the global best practices for providing inclusive education services to the special needs hearing impaired children/students. A leaf can be borrowed from the US for instance, where teacher trainees are made to combine work in strategies for working with the special needs children with practicum experience as a requirement for an educational degree and licensure. This measure then calls for collaborative efforts in the provision of services for the special needs hearing impaired students in the inclusive education setting. Thus Hawes (2003) observes that it is important for educators (teachers) and other professionals to increase their collaborative efforts to facilitate cooperative planning, teaching and service provision for the utmost benefit of students with hearing impairment in the inclusive education programme.

It is necessary to point out that it needs not be over emphasized that inclusive education requires close collaboration between regular class teacher and a range of other people/professionals, specialist teachers, teaching assistants, therapists and parents. The regular classroom teachers having the primary responsibility for the student with hearing impairment overall programme, also having equal professional status between the regular and specialist teachers, the involvement of the parents in the planning and decision making about their children as well as supportive staff working in partnership with teachers to provide supplementary services will go a long way making the inclusive education programme thrives for the benefit of the students with hearing impairment in the country.

Hence the Nigerian Government apparent efforts in putting in place inclusive education could be seen in the in service training and other programmes mounted such as the pivotal teacher training programme organized by the National Teacher Institute (NTI), regular/sandwich programmes in the institutes/faculties of education in the universities and other tertiary institutions are geared towards bettering the lots of teachers as to enable them meet the demands of inclusive education practices globally in general and in the country specifically.

#### 2.13.11 Teachers' attitudes toward inclusive education practices

The principal's attitudes and approaches to inclusion is the key to its success. Administrative support has been found to be a significant factor in determining teachers attitude toward inclusive education practices as teachers feel reaffirmed if the school principal posters a positive learning environment for both teachers and students. Teachers believe the support of the principal and other school stakeholders is critical to the successful implementation of inclusive education programme.

It is worth noting that an important factor in determining the success of inclusive education for the students with hearing impairment is the attitudes of the teachers. According to O'Brian (2000) the real key to a successful inclusion lie inside the teachers. Some mainstream teachers have considerable reservations about the feasibility of inclusion in reality. These reservations sometimes tend to be related to the teacher's own beliefs about the students and about their own ability to deal with them and the insufficient capacity of the mainstream school to addressed the difficulties experienced by the students involved (Croll & Moses 2000).

Recent studies with regards to inclusive education indicates that the success of the inclusive education programme is dependent on the teachers' attitude toward the inclusion of the special needs children into the regular school programme. It needs to be pointed out that central to the successful inclusion of the students with hearing impairment are the regular teachers who take ownership of the inclusive education practices and who believe in their competencies to educate this category of students in the inclusive classroom setting with ease.

Eteneshe (2000) carried out a study on teachers' attitudes toward the inclusion of special needs students in the inclusive education classes; the result revealed that teachers with negative attitudes rejected the admission of students with disabilities into the school. The same further indicated that such teachers with negative attitudes also refused the placement of students with disabilities in their classes with a notion that it could be unrewarding and burdensome. The rejection level is stronger with children with severe disabilities than those with less severe disability.

Mitchell (2010) reported that the study by Salend & Duhancy (1999) on teachers' attitudes toward inclusion reveals that:

- Teachers have varying attitudes toward inclusion, their responses are being shaped by a range of variables such as their success in implementing inclusive education, students characteristics, training and level of support
- There was report of positive outcomes for the teachers manifesting increased skills in meeting the needs of their students and developing an increased confidence in their teaching ability.
- 3. The negative outcomes on the other hand included the fear that education of the non disabled children might suffer and also as a result of lack of fund to support their instructional needs.

4. For the special educators, the benefits of inclusive education included increased feelings of being an integral part of the school community and the opportunity to also work with students without disabilities in the inclusive education setting.

Similarly, Scruggs & Mastropleri (1996) reported generally positive and negative attitudes held by teachers toward inclusive education. They reported that about two-third of the US teachers they surveyed supported the concept on mainstreaming/inclusion. A smaller majority was prepared to include students with disabilities in their classes, but their attitudes depending on the type and severity of the disability. On the other hand, about one-third or less believed they have sufficient time, skills or resources necessary to facilitate successful inclusion, especially for the students with special educational needs.

While Stanorich & Jordan (1988) in their study of Canadian teachers and principals' beliefs about inclusive education, found two strong predictors of effective teaching behaviour in the inclusive education classrooms. The strongest one was the subjective school norm, as operationalized by the principal's attitudes toward heterogeneous classrooms. The second major predictor was an interventionist school norm, being a measure derived from a scale ranging from the idea that problems exist within the students ('path gnomonic') at one end, and to the idea that the problem results from the interaction between the students and their learning environments in the society ('interventionist' at the other end (http://www.educationcounts.govt.nz?publications/special\_education).

In the same vein, Olayi (2013), Okeke (2010), Obi, Mamah & Mensah (2005), in their various study on teachers attitudes toward the inclusive education programme reported both positive and negative attitudes held by the teachers toward the inclusive education saga in the Nigerian education system.

### 2.13.12 Government commitment and effective implementation of inclusive education programme for the students with hearing impairment in Nigeria

Serious Government involvement in and commitment to the development of special education in Africa began in Nigeria, Kenyia and Zimbabue in 1976,1977 & 1980 respectively, when the Universal Primary Education (UPE) was introduced in those countries. Even though the UPE is a global education programme, it has nonetheless engineered an all inclusive education development. Several policy statements were enacted by the different countries; for instance the Nigerian National Policy on Education 1977, revised in 1981,

2000, 2004, the Blue Print on Education of the Handicapped Persons in Nigeria, 1993. Kenyia started all inclusive education programmes by establishing education administration and inspectorate in 1977 while Zimbabue serious concern began with the adoption of the universal primary education programme in 1980. All these states accepted the responsibility of training teachers in special needs education through their Policy statements in relation to having special needs education hazy and often embodied in global policy pronouncements (Najjingo, 2004, Ewa, 2013).

Olayi & Ewa (2013) equally stated that special education services in Nigeria remained under the control of the missionaries and voluntary agencies until 1975, when the various Governments of the federation decided to embrace meaningfully the provision of special education services to Nigerians with disabilities. This noble position of the Government to get involved in building on the foundations laid by the missionaries and voluntary agencies was a worthwhile venture.

As can be seen, for the first time, Government through the Federal Executive Council approved rehabilitation programme for Nigerians with Disabilities is propelled across the states of the Federation. This action was in line with the United Nations Resolution and the declaration of the Decade for the Disabled Persons (1983-1993), as well as the International Year for the Disabled Persons (IYP). This Government commitment served as renewed hope for the Disabled Nigerians (Ogohojafor, 1995). Thus apart from the various Governments working to better the lives of Nigerians living with disabilities, some of the achievements/gains recorded by Mba 1982 include:

- Awarding of scholarship to interested Nigerians in the field of special education, both able and disabled to study special education abroad.
- The establishment of special education units at the Federal and various states Ministries of Education.
- The establishment of Institutions/Departments of Special Education for teacher preparation.
- The involvement of the Nigerian Education Research and Development Council (NERDC), in the research into the field of special educational services in Nigeria.
- The evolution of many more states own Special Schools in the federation.

• The inclusion for the first time special education issue in the National Policy on Education in 1977.

The inclusion and recognition of special education practices also reappeared in the 1981, 1998, 2000 & 2004 versions of the NPE. Another document worthy of note which demonstrated the Nigerian Government commitment to her citizens with special needs was the design of the Blue Print on the education of Handicapped persons in Nigeria. Also, by 1993, the Federal Government promulgated a decree providing for the legal protection of the Rights of the Disabled Nigerians to education, vocational training, and means of livelihood for independent living, housing and so forth. However, the provisions when compared with those of other developed and developing countries fall short of expectations of the professional and beneficiaries. The provisions are scanty and too general for effective and successful implementation.

Again, the establishment of Special Schools was legitimatelized and the curriculum designed for different conditions of disability, this yet was another flaw because not all stakeholders including Special Education professionals made any input in the document. Next were the efforts of the Nigerian Government in the year 2000 to legislate on the integration of the Disabled which unfortunately could not scale through. Hence, the Bill was only concern with social integration and falls short of comprehensiveness. Silverstein (2000) observed that the Disability Policy Framework (the Nigerian Bill) should have provided a professional guidance for developing and executing integration.

Another document was the Disability Discrimination Act (2001) which according to Adelowo, (2006) did not fare any better. The author observed that the caption itself by inserting the word 'discrimination' was not encouraging. Furthermore, the content of section 2(6), 2(3) appeared contradictory and seems to support discrimination and segregation which is another feature of too many uncoordinated efforts aimed at solving a single problem. This document would have augur well if it had cognizance of the contributions of the advocacy groups, Disabled persons Organizations(DPOs) themselves and professionals in the field of Special Education and then synchronized with the earlier ones rather than focusing on the opinions and viewpoints of politicians.

Ozoji (2006) pointed out that the contemporary educational programming for the students with hearing impairment, that is inclusion, came into effect in 1994 following its

adoption at the Salamanca conference in Spain. Nigeria was in attendance of the conference and also a signatory to the new policy. The author observed that other countries have made significant progress in trying to implement inclusive education in their countries. But Nigeria on the other hand since its world adoption, is still raising awareness about what it is. This suggests that how to get it implemented is yet to be addressed very seriously. Instance of this can be seen as the National Policy on Education (NPE) (2004) only gave a tacit acknowledgement of inclusive education without any strong policy statement or directive to back it up as "Inclusive education or integration of special classes/units into ordinary or public schools under the UBE pg 49".

Therefore for inclusive education to be given the right place in Nigeria, a lot of resources, services and demands are needed to make it succeed. It is not by relying on our oars that we have inclusive education programme in papers, but it is more important to justify how functional the programme may be. This therefore calls to mind to ponder: are supportive staff and equipment in place to equalize learning opportunities? Equalization in number is never the same as equalization of Learning. There should be a functional networking of the salient issues related to its implementation. The ultimate target of these efforts at whatever level of education is to provide these special needs children with appropriate education which will lead to self sufficiency, accessibility, equal opportunity as well as attain their highest potentials in life. Inclusive education programme in Nigeria is doomed for failure if appropriate resources and facilities are not put in place.

Mention needs to be made that though the Nigerian Government has made frantic efforts in policy formulation with respect to the special needs persons in the nation, implementation of these policies is yet to be desired. As a status co in developing countries like Nigeria, educational services provision for children and youths with special needs are far from being adequate and are in conflict with educational philosophy behind the Education for All programme. It seems that in these countries, children with special needs are a third world within the third world (Hammerman, 1981 in Adelowo, 2006). Consequent upon this, these children are only superficially mentioned in development plans and this maybe to please some funding agencies. Or even in some situations sometimes, when these funds are obtained, education has to compete for allocation with other areas of the economy and special needs education is either given minimal consideration or simply placed among the bring up later issues/items or even dropped entirely.

#### **2.13.13 Inadequate funding**

Funding in a general perspective is to provide resources usually in the form of money or other values such as efforts or time for a project, person, business or other private or public institutions.According to Business Dictionary, funding refers to an act of providing financial resources to a need, programme, or a project. The indispensible role of funding in the successful implementation of inclusive education for students with Hearing impairment cannot be over emphasized: Hence, funding determines the level of personnel services, the educational environment, recruitment and staffing policies as well as the availability of the instructional material in the inclusive school environment, (Ozoji, 2010).

Connor (2002) acknowledged that the importance of funding in the successful implementation of inclusive education as it bridged the gap between students with Hearing impairment in particular and other category of children in general, improves the level of communication, provides facilities and equipment/aids etc to enhance wellness of the students with Hearing impairment in an inclusive education setting. On the other hand he lamented that poor funding is bound to hamper the smooth implementation of inclusive education programme for the students who are hearing impaired in Nigeria. He pointed out further that any system that is properly funded is bound to achieve meaningful progress and the attainment of the goals for successful implementation of inclusive education programme for students with hearing impairment in Nigeria.

There is no gainsaying that the successful implementation of inclusive education programme marks a sure way for the advancement of the special needs persons to contributing their quota to the positive development of the nation cannot be underated, as it advocates for the non exclusion of persons with disabilities from the general scheme of activities of the society.

Sherlock and Peterson (2002) on the other hand shed more light by upholing that inclusive education is a varitable tool for ensuring equality and a channel for removing the interpersonal barriers of discrimination in the larger society and is predicated on the fact that inclusive education supposedly require a large percentage of funding in order to ensure effective implementation/execution of programmes, betterment of the welfare of staff and structural adaptation of the learning environment for the students with hearing impairment in particular and other category of handicapping conditions in general in the inclusive school environment.

Eleweke (2008) submitted that recent research on the funding of Special Needs Education programmes in Nigeria, points to inadequate funding as the major challenge to the successful implementation of meaningful programmes for the students with Hearing impairment and other special needs learners.

Maduagwu (2008) contends that though the government has taken over the responsibility for the education of the special needs learners with a view of providing enabling learning environment and therapeutic educational programmes (NPE,2004). But reliable data on governmental monetary allocation for the implementation of educational programmes for all learners generally at the federal, state and local government levels are scanty and inadequate.

Nell (2008) observes that though in the Natioal Policy on Education (NPE) 2004, education, is described as a social service for the special needs children, research and experience has shown that education in Nigeria is relatively exorbitant considering the economic meltdown. Typically educating children in the inclusive education setting in develoing countries is a hard nut to be cracked, what then becomes the fate of the special needs persons in general and Hearing impaired in particular whose education is more expensive?

Semi (2006), opined that just as Special education is an integral part of the general education, so also the cost of education of the special needs child extends beyond what is expended by a non disabled child. In a research conducted by Urua (2011), on the review of the National Policy on Education reported that the Federal Government of Nigeria, State and Local Government Agencies are oblivious of the education of the learners with disabilities as opposed to NPE 2004. The researcher describes this as a cosmetic and window dressing display act. The finding of this research has unveiled the unfaithfulness of the Federal government to chart the course of inclusive education of the special needs persons in Nigeria.

In another dimension, Ayadu (2008) conducted a research on funding of special needs education in some states in the South south region of Nigeria, the result revealed that special needs education is under funded. Although the researcher believes that the dynamics in funding is gradually improving, but it does not paralled the growing population of the special needs persons in our institutions of learning. This result of this research is in consonance with The World Bank Report (2005), which upholds that sufficient resources are still not being

made available to build and maintain infranstruture, providing important educational materials and recruitment of staff and their welfare.

Likewise Adima (2000) in a research on funding in Cross River State revealed that most government officials feel that inclusive education and special needs provisions for students with hearing impairment are privileges or social programmes and the basic right of citizens with disabilities. In the same vein, Eneji (2008) investigated the ways of resolving the consistent issue of inadequate funding of education of persons with disabilities, he discovered that the involvement of many private individuals and voluntary organizations that raise fund consistently to support the education of this category of children is the most feasible way to bail the cat out of the bag. Hence he alludes that poor funding does not yield quality education to the citizens in the country.

It is necessary to point out that funding is the primary factor that controls all aspects of governance both in education, cultural, social, political, religious organizations etc. Therefore the underlying factor why inclusive education of the special needs persons in general and the students with hearing impairment in particular has remained unsuccessful over the years in the country is due to poor funding and also misappropriation of funds budgeted for special education.

Another factor still holding the successful implementation of inclusive education programme in Nigeria at ransom is ignorance and negative attitudes. Over the years, the majority of education and economic planners have not come to terms with the need to educate the special needs children even with the fact that they can be educated, but the political will/desire to adequately include them in educational development plan has been negligible.

Thus Nsika (2004) noted with dismay that available evidence shows that all the loafty promises as contained in the National Policy on Education (2004) with regards to the provision of essential services for special needs individuals in Nigeria however, remained theoretical

#### 2.13.14 Absence of the legislation

Legislation is an instrument used in modern society to protect the intrest and rights of its citizenry. Legislation is concerned with the law or justice and a decree being passed by the authority or parliament to safeguard the education and interest of the special needs persons (Amwe, 1991). Legislation can circulate and reinforced a country's policy on the provision of special education services to persons with special educational needs; it can be used to secure resources or appropriate channelling of resources, and can be used to target expenditure on special needs children. Effective legislation promotes equity and prevents the students with hearing impairment from discrimination and dehumanizing attitudes from the public. Any country without good legislative structure/laws on the provision of services to the special needs persons in general and the students with impaired hearing in particular, is bound to fail on its commitment to this category of persons, thereby promoting anarchy towards persons with disabilities in the socirty.

Parents, civil right organizations, education and advocacy groups' intiated a socio-political movement towards inclusive education in the 1960s by challenging education authorities to include students with special needs in regular school settings. They argued from a 'rights-based platform that reflected the ideals of equity and social justice expressed in a number of international statements including, for example, the Universal Declaration of Human Rights (1948) and the United Nations Convention on the Rights of the Child (1972). It was not until legislative changes were made in the United States, however, that schools were required to educate students with disabilities alongside their non- handicapped peers to the maximum extent possible. Since then, special education and the management of inclusion in schools have become public and accountable through the law and the pace of litigation over issues that relate to inclusion, special students rights, disability and discrimination significantly increases each year (Osborne, 2000).

The guidelines are obvious from the Universal Human Right Declaration (1948), The Salamanca statement and Framework for Action (1994), Individuals with Disabilities Act (2004), Nigerians with Disabilities decree (1993) and some others positioned that the Hearing impaired and other category of special learners demands special provisions educationally, politically and as well in terms of employment opportunities. But sadly enough, all these policy statements and efforts are largerly halted by different states government in Nigeria due to the absence of legislations to give support and domesticate the already existing laws and provide equitable playgroung for persons with disabilities in developing countries, Nigeria.

For instance Nkiru and Bella (2010) carried out a study and submitted that there is no single legislation in Nigeria for persons with disabilities (PWDs). Accordingly, this accounts for the reason(s) why the implementation of inclusive education programme for students with

Hearing impairment in particular and other category of special needs persons in general remains backward in the country. The authors therefore advocated for the passage of some Bills on disability into laws by the senate.

Similarly, Ihenacho (1988) contended that without a supporting legislation, the implementation of the provisions in the NPE document is not mandatory or even obligatory on the Nigerian government. Consequently, there is frequent disrespect of the existing policies due to absence of laws to enforce the radical application of these blueprints.

Hegarty (1993) carried out a study comparing the behaviours of people where there are legislations and those where there are no legislations; he reported that there is anarchy among people without adequate legislations than where there is legislation. He concluded that legislation is a key strategy for improving services provided to individuals with special needs in Nigeria.

In a similar venture, Eleweke (2008) holdsway that mandatory laws play overarching roles; hence they have protective safeguards which guaranteed the rights of the beneficiaries for noncompliance, accountability, evaluation and monitoring procedures and financial backing and other necessary structures to make life worthwhile for individuals with disabilities in Nigeria.

It is necessary to point out that formulating certain legislations will help to curtail some negative views held and directed towards the successful implementation of inclusive education of students with Hearing impairment in Nigeria. For instance, in the USA, the violation of the rights of persons with disabilities in the form of humiliation or discrimination in terms of job opportunity or education is entitled to pay a huge amount of money (about a million Dollars) if found guilty. But the reverse is the case in Nigeria.

Harry (2008) in a study revealed that the implementation of inclusive education of students with hearing impairment in Nigeria is largerly viewed by school administrators as a privilege or a charity service: Hence there is a prevalent noncompliance in the country due to the absence of obligatory laws.

Studying on the successful implementation inclusive education of students with Hearing impairment and their academic performance in some selected Secondary Schools in Nigeria, Egbeson (2009) carried out a survey research in two different countries that is Nigeria and the

USA. The result revealed that students with hearing impairment in the USA out performed their counterparts in Nigeria. This is consequent upon the variations in the two countries and principally due to the absence of laws in Nigeria that guards the operations of special education as is the case of the USA. He finally advocated for the enactment of appropriate legislation(s) to carter for adequate provision of special educational services for persons with disabilities (PWDs) in the country to enhance the quality of services rendered to students with hearing impairment in an inclusive education setting in Nigeria.

Thus Obi (2013) observe that policies, declarations, treaties and statements for the provision of educational services for children with special needs in general and and the individuals with hearing impairment in particular in the inclusive education setting in Nigeria is mere rhetoric and not practicable except there are enabling legislation backings. This is because Nigeria as a nation is yet to have a Disability Law put in place to give children with disabilities the legal backing to service provisions. Legislation will primarily address the rights of children with special needs with reference to services provision and once service providers know that the special needs children have rights to services, more efforts will be geared toward making such services available to avoid litigation.

It is sad to note that persons with special needs/disabilities in Nigeria today rely only on the general laws such as Human Right Laws, Child Right Act and the Constitution as the basis for their demands. There is a need for a radical law on education of children with Disabilities in Nigeria among other laws. Nigeria as a nation should borrow a leaf from the USA, UK and other developed nations in this respect.

In Ireland, the Education for Persons with Special Educational Needs Act (2004) provides for the education of pupils with special needs alongside their peers in an inclusive environment, wherever possible. In the UK, inclusion is underpinned by the 1996 Education Act and by the more recent Special Needs and Disability Act (2001), which strengthened the rights of pupils with statutory statements of special educational need to be educated in mainstream schools. Parallel legislation in Northern Ireland such as the Special Educational Needs and Disability Order (SENDO, 2005) provides similar impetus for inclusion and applies anti-discrimination legislation to schools for the first time. Lindsay (2007) asserts that this policy has been driven by a concern for children's rights; specifically, the concern that segregated education is a form of discrimination and, "children's rights are compromised by special education, isolated from typically developing peers, mainstream curricula and educational practices" (2007, p.2).

Proper legislation will bring in concurrence between policy and practices in the Nigerian educational sector. For instance, while the National Policy on Education (2004) talks about inclusive education in least restrictive environments, support services and personnel for special needs children to benefit from inclusive education practices, yet segregation has remained the placement option for the special needs children in Nigeria. Legislation is therefore urgently needed to define the Rights of the special needs children in Nigeria if we must move from the current lip services and political gimmicks given to issues of disability education of children with special needs in the country.

In corroboration Nwazuoke (2010) maintain that inclusive education programme for the students with hearing impairment in Nigeria cannot succeed under the present circumstances beret with poor infrastructural facilities, poor funding of special needs education, inadequate preparation of personnel for the programme including the absence of all necessary training equipment/materials for our teachers in training in our various higher institutions offering courses in special education as well as the absence of proper legislation and technological devices in our schools to be used by teachers and the students with hearing impairment respectively.

He observe further that inclusive education programme for this category of students in Nigeria has a far reaching implications and is bedevilled in the areas of personnel preparation, pedagogy, curriculum, learning environment, funding, conditions of service, school management structure, monitoring and evaluation. If the goals of inclusive education for students with hearing impairment are to be achieved in Nigeria, he calls for adequate attention to be paid to areas concern with personnel preparation for it is a very critical factor. Therefore capacity building in support of inclusive education for all categories of individuals living with disabilities should apart from training and turning out graduate specialists in managing the special needs children, should also focused in the training of regular classroom teachers so as to be able to respond appropriately to the challenges posed by the students with hearing impairment in the inclusive education classroom environment.

In this wise, Obi (2013) sounds a warning that special education services provision for students with hearing impairment in the inclusive education setting in Nigeria is never synonymous with the Government building more special schools, nor merely placing students with hearing impairment in the regular schools and classrooms. Services provision for the special needs hearing impaired students in the inclusive educational setting entails a

total rethink, careful planning, adequate and appropriate funding, legislation, the provision of basic infrastructure and materials, removal of all forms of barriers, attitudes refinement, an accessible library/classrooms, access to appropriate use of assistive technology (AT) devices and a competitive curriculum that will eventually earned the students with hearing impairment a place and recognition in the mainstream society of Nigeria in particular and other parts of the world in general.

#### 2.13.15 Inspection and Supervision of Education

In a bid for the inclusive education programme to thrive well in the country, the federal government of Nigeria has opted to establish an efficient inspectoriate services at the Federal, State and Supervisory services at Local Government levels for efficient monitoring and maintaining set standards at all levels of education below the tertiary level (NPE, 2008).

In that wise all state Ministries of Education and LocalGovernment Education Authorities in collaboration with the federal Inspectorate service shall be responsible for the organization of supervision and inspection of all educational institutions under their jurisdiction.

In order to ensure effective implementation of inclusive education programme in Nigeria, the inspectorate services shall operate as an autonomous body supervised by the Minister of Education/ Commissioner for Education at the state level as may be appropriate.

The goals of the inspectoriate services shall be to:

- Set, maintain and improve standards in all aspects of the school system.
- Ensure Minimun standards and quality assurance of instructional activities in schools through regular inspection and continuous supervision.
- Dissiminate information on regular basis on the problems and difficulties of the teachers and institutions and offer practical solutions to them .
- Encourage the dissimination of information on innovative and progressive educational principles and practices in school system through publications, workshops nmeetings, seminars, conferences and so on.

The primary responsibility of inspectors in the inclusive education programme shall be to:

1. Undertake rotuine inspection visits to schools to ascertain efficiency of the system.

- 2. Dissiminate information about instructional materials and tested effective teaching methods and good practices.
- Obtaine information from all levels in respect of difficulties experienced by teachers in schools and institutions as well as provide advisory solutions through appropriate authoriries.
- 4. Monitor, document and publish the overall quality of education in schools and proffer practical and positive advice.
- 5. Organize meetings with workshops for teachers when necessary with a view to improving their professional competence.

Therefore Nigeria "the giant of Africa" cannot continue to politicize the issues of inclusive education to the detriment of the students/children with hearing impairment. The Nigerian Government must be seen to have risen to properly key into the global trend in the provision of appropriate educational services to all her citizens with special educational needs in the inclusive education/regular schools environment.

# 2.14 The role of the supportive staffs and effective implementation of inclusive education programme of the students with hearing impairment in Nigeria

Meeting the special educational needs of the students with hearing impairment in the inclusive education setting, continues to be a formidable task to both regular and special education teachers. Aiyeleso (2007) observes that multidisciplinary approach is very essential in the provision of comprehensive services to any group of the special needs children in general and Hearing impaired in particular in the inclusive education environments.

Multidisciplinary team approach is essential as it facilitates initial assessment of the clients ( students with hearing impairment), to determined the degree of hearing loss, create room for appropriate educational placement options, recommendation of the use of appropriate assistive technology devices where necessary, providing medical services and treatment and as well rendering vocational training and counselling services to ensure proper adjustment of the students with hearing impairment for optimal benefits and to reduce the psychological effect of the hearing impairment on the individual student.

The supportive staffs provide ancillary services and work in pari -Passau the teachers and other stakeholders in the bandwagon of inclusive education to ensure effective implementation of the inclusive education programme. Among this group are included: Educational interpreters; Nurses/medical personnel; audiologist; social workers; psychologist; guidance counsellor and a host of others.

#### 2.14.1 Interpretation services/the role of the educational interpreters

Educational /sign language interpreters are qualified specialists/professionals that serve as a link between a teacher and the Hearing impaired student in the classroom or between the students with hearing impairment and other hearing members of the society. The role of the educational sign language interpreter is to facilitate communication for the students who are hearing impaired with other members of the hearing world.. A sign language interpreter serves as link between the students with hearing impairment and their hearing counterparts in many ways:

It may be as an educational link between the individual student who is hearing impaired and a learning process or it may be a communication link between the students with hearing impairment and the peer with intact hearing. Most of the students with hearing impairment stand not to benefit much from oral communication/language as a result of the degree of their hearing loss. This is possible because most of the spoken words are not visible on the lips thereby marring the ability to lip reads. The sign language interpreter therefore helps to bridge the communication gap by mediating between the two parties. So also in some situations, the sign language interpreter role complements the students withhearing impairment use of assistive technology devices in the inclusive educational setting (Ewa, 2006).

There are two types of sign language interpreters: Oral and Cued speech.

The oral sign language interpreter mouths speech to the students with hearing imparment using facial and other bodily expressions while signing. The cued speech sign language interpreter on the other hand mouths the words to the students with hearing impairment and as well uses the hand signs.

Obani (2006) observes that for effective inclusive education programme to hold sway for the students with hearing impairment in Nigeria, some special arrangements and adjustments need to be made in the school practices. Also, some specialized attention and handlings will be needed. The special and peculiar arrangements will include the provision and use of special teaching/learning equipment and materials to facilitate learning for the students with impaired hearing. Some specially trained staff will be recruited to provide specialized teaching and services not provided/given or expected in the regular classes/schools. Such specially trained staff would include: special education teachers and supportive staff such as sign language interpreters, audiologists; class attendants; counsellors and so forth for optimal functioning of the students with hearing impairment in the inclusive education setting.

In corroboration, Ozoji (2006) pointed out that classroom teaching is just one aspect of the many services the special needs children need in the inclusive education setting. Undue emphasis on the instruction to the neglect of other equally important services may not yield the expected results. Hence the education is neither appropriate nor balanced. Other services needed in the inclusive education setting include: counselling services; interpretation services; assistive and adaptive technology services; information and communication technology (ICT); recreational services; nurses/medical services; transition training for the children to equip them adequately for the challenges outside the school and the Individualized Education Plan (IEP).

Re-echoing on the significance of the sign language interpreters, the president of the Nigerian National Association for the Deaf (NNAD), Mallam Sulleiman Dagbo on the 11<sup>th</sup> October, 2011 at Abuja-Nigeria, expressed concern over the low number of skilled sign language interpreters in the country. This according to the president is incapacitating the involvement of hearing impaired individuals in national activities. He pointed out that sign language interpreters would bridged the current information gap which placed the persons with hearing impairment in Nigeria at a disadvantage in accessing information especially that involving oral communication.

According to Mallam Dagbo, Deaf/hard of hearing individuals are being marginalized in the scheme of affaires in the country due to the public misconception of deafness and the ability of the Deaf community to speak out at the appropriate time. He emphasized that having sign language interpreters was part of the fundamental Rights of members of the Association and urged the Government to assist in this regards.

The NNAD president equally urged Nigerians to encourage the individuals with hearing impairment to achieve their full potentials without discrimination in the inclusive schools or outside school environment. He further pointed out that the home and school environments of the child with hearing impairment must continuously provide appropriate motivating and progressive ingredients such as parental love and care, discipline, communication, interaction and adequate exposure to social function and realities of life.

Also speaking on the special education schools for the Deaf, President Dagbo said that there was need for Federal, State and Local government to restructure the existing schools for the Deaf in the country to meet international standards. Moreover, the inclusive education school environment should make provisions for qualified and skilful sign language teachers and a rich learning environment for the persons with hearing impairment in Nigeria (News Agency of Nigeria (NAN)), retrieved from the internet on the 4<sup>th</sup> September, 2014.

# 2.14.2 Social services

The social service worker often provides a direct link between the classroom teachers and parents/guardians of the students with hearing impairment. Social workers assist parents in coping with family problems that may arise as a result of hearing impairment. They are responsible for providing information on availability of placement and as well ensuring proper adjustment of the individuals who are hearing impaired at the work places. They equally assist both parents/guardians and teachers to obtain specialized consultation on care as well as proper placement of the individuals with hearing impairment in school and rehabilitation settings/centres.

# iii. Audio logical services:

The audiologist plays an important role in the education of the students with hearing impairment. The audiologist through his specialized training indulges in the measurement/assessment of the degree of the hearing loss in order to determine the hearing levels of th8s category of students for the purpose of proper placement options and/or recommendation for the use of amplification where necessary and applicable or other assistive technology as the case may be.

# 2.14.3 Medical services

The medical practioners play important role in the initial assessment and diagnosis of persons with hearing impairment, especially where other health related problems are prominent in the individual. The medical team service providers carry out evaluation and prescription of proper medication for the patient with hearing impairment where the condition needs medical attention.

## 2.14.4 Counselling services

Vocational counsellor assist the students with hearing impairment on vocational interest and how to adjust in their job placement and training of older individuals who are hearing impaired as well as preparing them for re-entry into the mainstream of the society.

## 2.14.5 Behaviour modification services

The psychologist provides assistance to both children with impaired hearing and their parents, and how to overcome problems posed by their children's condition. They take control of the behavioural problems that may be triggered by hearing impairment. They also assess the intellectual abilities of the children with hearing impairment and make necessary recommendation to classroom teachers based on their findings for effective implementation of inclusive education programme.

# 2.14.6 Community Rehabilitation Services

This is conceived as a strategy within the community development for the rehabilitation, equalization of opportunities and social integration of all persons with disabilities. CBR is implemented through the combined efforts of disabled persons (Hearing impaired individuals) themselves, their families, communities and appropriate health, education, vocational and social services. This implies services are provided to the individuals who are hearing impaired not only in the institutions as the case used to be but right in the heart of the community where the handicapped persons lived to enhance the quality of life and economic independence of the beneficiaries.

# 2.15 The Provision of educational resources between the northern and southern Nigeria

Ohiaeri (2006), identified the educational resources needed for proper education of students with hearing impairment in an inclusive education setting in Nigeria to include: Audiometers, group and individual hearing aids, bone conductor telephone receiver (optional), slides, overhead projectors, film projector and film scripts, television sets, tunning forks, drums, rattles, traditional manual alphabet charts, refractors, mirrors, sound magnifiers etc.

In the same vein however, the Federal Government of Nigeria in her desire to purse the course of successful implementation of inclusive education of students with Hearing impairment, posited in the country's National Policy on Education (2008) that: All necessary facilities, equipment, materials and other assistive technology devices that will ensure easy access to quality education of persons with special needs in general and students with hearing impairment in particular shall be provided for in all inclusive schools, eg ramps, wider doors, Perkins Braille, brailled text books, white/mobility canes, abacus, talking watche, talking calculators. hearing aids. audiometers. speech trainers, ear mould machines, educational/psychological toys, callipers, prostheses, crutches, wheel chairs, standard library, audiovisual equipment, internet facilities etc. But the reality of this big dream is yet to be come by (Ewa, 2013).

Thus Adima (2000) Ayadu (2008), Okeke & Navan (2005), Agba, Olayi & Ewa, (2010), uphold that the availability of educational resources and facilities in the regular school setting is very important for effective inclusion of persons with disabilities in general and individuals with hearing impairment in particular.

The authors contended that good classroom and facilities are capable of attracting more learners with hearing impairment in the regular school setting thereby embracing literacy education for optimal development.

The authors therefore advocated for the provision of specious classrooms with good seating arrangement and proper lighting to illuminate the teacher and interpreter during teaching and learning process in the inclusive classroom environment. Hence with the provision of all learning resources, learing will become real for the students with hearing impairment thereby facilitating successful implementation of inclusive education for this category of students.

Ofre (2015) puts it that generally; poor funding in the Nigerian system of education has characteristically given birth to inadequacy in the provision of facilities, books and other educational resources in the regular school setting.

Speaking further in comparison on the provision and availability of the assistive technology devices and other educational resources in schools located in the northern and southern parts of the country, the author upholds that most schools in the southern part of Nigeria lack basic facilities and other educational resources that will facilitate effective implementation of

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inclusive education of the students with hearing impairment in comparison with their counterpart schools in the northern part of the country.

In a research carried out by Agba, Olayi & Ewa (2010), on the deployment and availability of educational resources in tertiary institutios in Nigeria, the researchers' summitted that the schools located in the northern geo political zone of Nigeria are better equipped that those found in the southern part of Nigeria.

SimilarlyGoni & Nkwoagba (2013), in their research on the availability and use of AT devices and other educational resources in schools located in the northern parts and southern parts of the country respectively, the result indicated that the schools in the northern geo political zones in the country are better equipped that those located in the southern geo political zones. This feat may be possible as a result of the public outcry of the ravage and wantom destruction of lives and property occasioned by terrorist acts in the northern axis of the country.

It is necessary to submit that irrespective of what is obtainable in the northern parts as a result of the spate of Boko Haram and other terrorist groups, the distribution of educational resources should be even as this is the main tenate of the country's National Policy on Education.

# 2.16 Designing a reading curriculum/programme for the students with hearing impairment in the inclusive education classroom environment

Reading is not only a core academic subject but also a core life subject. More than any other single skill, the ability to read and read well allows a deaf child to succeed in school, learns about the world, functions in the society and some day have decent jobs options. So as educators, it is the duty of the teachers in the inclusive education setting to promote literacy through effective practices in reading, writing, speaking and listening. It is important to point out that while about 30% of the students in school may have significant difficulties learning to read, most students with disabilities face even greater challenges. Students with specific learning disabilities and other language based disorders often have as a hall mark of their disability, great difficulty learning to read. Likewise students with sensory or processing deficit as a result of visual/hearing loss may be unable to adequately access the visual and auditory codes necessary to read. It therefore behoves that proper preparation and relevant

activities be put in place to help this category of students attain their potentials in life. (File:///C:/users/Documents/Reading-PaTTAN.html) retrieved from the internet.

Paul (1996) opines that "Reading implies the ability to recognize words in print quickly, accurately and effortlessly and to associate them with the larger meaning of the text". For very young children with intact hearing who are learning to read, two strong early predictors of eventual success in reading stand out. These include the ability to name the letters quickly and accurately, and the presence of phonemic awareness (that is the ability to associate sound with the letters). Once these early skills are in place, the children can begin the task of associating the two systems-the spoken language and its written representation. The nature of that task when the written system is in the alphabetic order requires one to form an association between a sound unit, specifically a phoneme and the alphabetic character. But children who are at the risk of reading difficulty struggle to segment the spoken word into smaller units.

In addition to the decoding task, learning to read also involves extrapolating meaning from words and sentences in print. Decoding letters and blending them into words is not sufficient. The word must have meaningful contents to the reader. While recognizing that reading involves orchestrating many complex skills in an efficient way, Nagy (1988) describes reading as fundamentally based on the skills of recognizing the orthographic form and understanding its meaning. The developing reader may first need to sound out or form immediate association between sound and symbols, but as reading becomes more fluent and automatic, the reader directly recognizes the orthographic form.

However, it is needful to point out that the single most serious factor/impediment to successful school achievement in general and to learning to reading in particular is the child with hearing impairment's deficiency in language functioning. Hearing loss affects language development in the students who are hearing impaired which hitherto have negative impacts the development of reading skills in this category of students. Competency in reading is based on language acquisition and usage. Children with hearing impairment who have language delays/deficiencies as a result of hearing loss are at the risk for serious reading difficulties.

Children/students with hearing impairment learn differently from their hearing peers. This is sequel to the fact that hearing loss affects the way children with hearing impairment learn and this requires strategies which are specifically geared to their needs and learning styles. Therefore, for the children with impaired hearing who have significant hearing loss to acquire competency in language which will lead to developing reading skills in an inclusive education setting, they typically require intensive instruction provided by skilled teachers who have experiences in working with children/students who have language delays resulting from hearing loss.

Studies on the academic achievement of children/students who are hearing impaired invariably find a serious education lag when compared to the hearing population. It is estimated that normal hearing children may have a speaking vocabulary of some or about 2000 words by the time they enter the kindergarten. The child with hearing impairment on the other hand may use only 250 words by the same age. The problem tends to be critical with the age of onset and degree of the impairment. In a study by Hagris cited by Ewa (2006) reports a discrepancy of approximately eight years between the mean reading achievements of normal hearing and children with hearing impairment when comparison is made after completion of their regular education programme. But younger children who are hearing impaired out perform their older hearing impaired counterparts proportionately. Moreover, children who are hearing parents.

Furthermore research on reading ability in children with hearing impairment reports difficulty with average reading achievement at levels below age-matched peers. The general finding depict that the greater the hearing loss, the more likely the individuals have difficulty in acquiring reading skills/competence. Another predicting factor associated with reading difficulties in the children with hearing impairment is hinged on intelligence and the ability of the individual to use inner speech that is the ability to rehearse internally in vocal-like form while trying to remember words in print.

In addition to limited spoken language, deafness usually results in poor knowledge of the semantics and syntax of the spoken language. Studies of deaf individuals through life span show limited vocabulary acquisition coupled with limited knowledge of the multiple meanings of words (Paul 1996, Musselman 2000). The knowledge of grammatical rules among deaf individuals is delayed with particular problems evident in verb tenses and the rule for producing coordinated and compound sentences (Quigley, Power & Steinkamp 1976) www.edrs.com/webstore/Detail.CFM?Ednumber=ED 119447aZ.

In the same vein in terms of reading, Kelly (1995) asserted that most deaf teenagers and adults are severely delayed in developing appropriate comprehension reading skills and usually reaching a plateau at a grade 4 or 5 level.

Therefore in developing a good reading curriculum/programme for the students with hearing impairment in the inclusive education setting, it is needful for the teachers/designer of the programme to bear in mind that this category of students have limited exposure to a given word and as a result, they need to have literal and contextual understanding of words meanings. The following strategies should be adopted by the teachers to teach/develop comprehension reading skills in the students with hearing impairment in the regular classroom setting.

- I. Explain the meaning of the new words introduced in the class during the reading session.
- II. Provide the students who are hearing impaired with the opportunity to read a variety of materials on the subject/story and as well encourage them to check out similar subject information from the library.
- III. Send home the books the student with hearing impairment had read in the class so that the parents can review them with the child.
- IV. Role play and act out the story.
- V. Conduct hand-on activities involving objects depicted in the story.
- VI. Engaged the students in discussion about vocabulary and concepts contained in the story/passage prior to the reading experience.
- VII. Teach this category of students cognitive or language strategies that will help them understand the text (prediction, compare and contrast, recall, sequencing, reinforcing and so forth).
- VIII. Create an outline of the major points of the story with the class.

# 2.17 Summary of the review

The study focused on the evaluation of service provisions for students with Hearing impairment and the conditions necessary for effective implementation of inclusive education in Nigeria. The review examined the concept of hearing impairment; historical overview of inclusive education movement internationally and outlined its theoretical undertone. In trying to understand what inclusive education means and how it should be implemented, different definitions were examined. The inclusive education models and practices in different countries were explored. It is crystal clear that inclusive education is not only a clearly, unitary defined concept, it means different thing to different people in different contexts and the common language of inclusion disguises multiple strands of thinking. In some countries inclusive education connotes the integration of disabled/special needs education learners into the mainstream., inclusive education has been projected as having its origin from the human rights perspectives and aims at promoting social justice and equity in education for the well withal of the special needs persons in general and students with impaired hearing in particular in the society. It can be observed however that though many countries seemed committed to inclusive education in their rhetoric, but their legislation and policies practices often fall short. Reasons for the policy practice gap are manifold: these include barriers arising from social values and beliefs, economic factors, a lack of measures to ensure compliance with policies among others; it must be acknowledged that inclusive education is an elusive concept that is differently interpreted by different people in different contexts.

The review shows that the success or failure of inclusive education depends on the processes, structures, conditions and other mechanisms that need to be put in place to promote the development of inclusive education practices within the education system. The review further captured that the practice of inclusive education in Nigeria, though laudablely enshrined in the country's National Policy on Education, is marred with contracdictions. This inform the idea that inclusive education practice is in papers, while the actual practice remains segregation.

Absence of legislation, inadequate funding, negative attitudes, inadequate manpower/facilities put in place, lack of constant man power development among others are seen as barriers to effective implementation of the inclusive education programme for the students with hearing impairment in Nigeria.

The variables that are critical for effective implementation of inclusive education in Nigeria as captured in the review include: the nature of attitudes toward students with hearing impairment in the inclusive education setting; the students with hearing impairment use of assistive technology (AT) devices in the inclusive education setting; teacher training/recruitment in the inclusive education environment; The role of supportive staff in the implementation of the inclusive education programme as well as Government commitment to the course of inclusive education programme in Nigeria.

The review captured that to some extent there has been improvement in attitudes from the mainstream society, which has transformed from being negative to becoming positive

Since negative attitudes has been identified to be one of the greatest problems that squarely confronts the students with hearing impairment in the society in general and inclusive educational setting in particular, parents and a significant others dealing directly and/or indirectly with them should try as much as possible to develop positive attitudes toward them as this will facilitate proper adjustment in the inclusive education environment. In line with this assertion that Okeke (2010), observes that in families where parents demonstrated acceptance of their Hearing impaired children, siblings follow similarly. The same applies to the school setting. If the Hearing impaired students are accepted by the normal/non hearing impaired persons around, adjustment can easily be made by all concern in the inclusive educational setting.

Furthermore, it is important to note that openness of communication tends to influence positive adjustment of the Hearing impaired students in the school environment. Therefore in addition to the many ingredients for a successful inclusive education practices, reduction in class sizes, individualization of instruction, accessibility of school buildings, the use of assistive technology devices by group or individual Hearing impaired students to perform to his/her maximum potentials in the society, inclusive education programme can serve as a booster to the academic progress of the Hearing impaired students, but where the essential supportive services are lacking, inclusive education may serves as a platform to the Hearing impaired students' failure in life (Gbegbin, 1991).

Attitudes toward the students with impaired hearing could be said to be changing from hostile, prejudiced and outright hatred in form to a more refined, accepting, understandable and loving one from the society. The early period of darkness witnessed a very negative attitude towards the Handicapped persons in general and Hearing impaired in particular, where disability of any type disqualified the individual from integration into the mainstream society. On other hand be that as it maybe the more information and education one receives about a person, an object and/or culture or vice versa, the better a shift of stance. Hence many people are now becoming better informed and educated about hearing impairment; the former prejudiced and negative attitudes earlier held are now generally becoming positive and acceptable for the wellbeing of the individuals with Hearing impairment in the society (Okuoyibo, 1996, 2006, Ewa, 2000, Obi, 2004).

Consequent upon the above premise, if our purpose of education is to provide students with hearing impairment with equal educational opportunities to reach their maximum potentials and becoming contributing members of the society, we must provide them with equal educational opportunities and appropriate facilities to enable them be educated with their non hearing impaired peers/students in the least restrictive inclusive education environment. When this is possible and educationally appropriate, it is the best way to prepare them to live as successful adults in an integrated society.

The provision and use of Assistive technology devices for the students with hearing impairment in the inclusive schools is only captured in papers but a mirage in practice, though schools in the Northern geo-political zone seem to have an upper hand when compared to their counterparts in the southern zones (Agba, Olayi &Ewa,2010).

Suffice to state that the use of assistive technology devices by the students with hearing impairment in an inclusive educational environment cannot be over emphasized. Depending on the devices chosen, there may be to purchase or loaned for such things as alerting and telecommunication devices. However, many others such as personal amplification or captioning services required specialized equipment/software and/or support personnel including audiologist, trained captionist, or interpreters. Therefore to determine the benefit of a particular device or service should be implemented through a trial period to make sure that what is chosen is meeting the educational needs of the of the students with hearing impairment. Moreover, inputs regarding improved accessibility should be obtained from the students with hearing impairment themselves, parents and multidisciplinary team to ensure an all round development and functional lives of the students who are hearing impaired in the inclusive education setting in particular and the society in general (Beard, Carpenter & Johnson, (2011).

From the review, it can be deduced that inclusive education practices can never thrive well without the active involvement of the teachers/educators as major stakeholders. Ozoji (2006) observes that for the purpose of carrying out their duties with dedication in educating the special needs children/students in general and students with hearing impairment in particular in the inclusive education setting, training and retraining of the teachers is paramount to the system. Both the special education and regular education teachers who are involved in the teaching and education of the students with hearing impairment should be given equal opportunity to acquire and develop their careers/skills as related to their teaching and instructional activities for the utmost benefit of this category of students in the inclusive education of workshops; conferences; seminars; talkshops etc The issue of teachers training, seem to be on a better footing as much efforts is being exerted to meeting the yearnings of the individuals with hearing impairment in inclusive schools in particular and othercategory of special needs persons in general (Winter & O'Raw (2010), Hunts (2003) & Ewa, (2013).

From the foregoing, (Obani, 2006, Ozoji, 2006 & Aiyeleso, 2007), inferred that the inclusive education programme cannot thrive well without the ancillary services provided by the supportive staffs to boast the efforts of the teachers and government in the course of educating the students with hearing impairment an inclusive education setting. For this lofty dreams of integrating the students with hearing impairment into the mainstream to be achieved, adequate measures must be put in place by having all the supportive staff in schools to facilitate effective service delivery thereby enhancing the successful implementation of the inclusive education programme in Nigeria. But the dearth in the provison/availability of the supportive staff especially the interpreters is causing foot dragging to successful implementation of inclusive education for the students with hearing impairment in the Nigerian school system.

Olayi & Ewa, (2013), posited that from the onset, the Federal Government of Nigeria has undertaken some giant strides in making life worthwhile for all her citizens living with disabilities as encapsulated in the National Policy on Education (NPE) and other enactments. These beautiful policies and enactments are more reckoned with theoretically than in practice (Adelowo, 2006). Moreover in terms of government commitment to the course of inclusive education, Obi (2013), posited that much is still to be desired, as there are outright cases of inadequate/poor funding, absence of legislation to back up pronouncements and policies formulated and to hold any person responsible for failing to carry out the required assignment with respect to inclusive education practices. More to that, there is no clear cut definition of the policy and practise of inclusive education as Special or segregational schools still run at par inclusive schools and are even more preferred by the subjects under study.

In terms of the provision of educational resources/facilities, (Agba, Olayiu & Ewa, 2010) captured that schools located in the northern part of Nigeria, comprising the North West, North central and North east geo-political zones are better equipped and furnished than their counterparts schools in the southern part of Nigeria, comprising the South west, South east and South-south geo-political zones respective.

Hence; for the ship of inclusive education to successfully sails through the voyage of inclusion, serious commitment must be demonstrated by all the tiers of Government in Nigeria by providing all the necessary and appropriate human and non human resources, materials and infrastructures for a fruitful belching/anchoring in the mainstreamed society where no one is seen as better or different from the other but a just and egalitarian society where everyone's right is respected.

# CHAPTER THREE RESEARCH METHODOLOGY

This research work adopted the quantitative research approach which is based on the Positivist presumptions that generalization or principles which are verifiable govern both the social and physical world. Hence, in this case, if the general laws are discovered, they can be used in predicting behaviour.

In the Positivist's approach, the routine is to use accurate measurement in making objective observation and analyzing data for the purpose of answering questions and in explaining or predicting behaviour. The procedure is employed by devising objectively reliable measurement, collecting and analyzing data by way of hypotheses testing and making conclusions about the findings.

The key thing in the philosophy behind quantitative approach in the building of knowledge is that information obtained in the research process is represented in numbers. All that is required is the reduction of data obtained into numbers, the data which are later analyzed using stastistics both descriptive and inferential (Isangedighi, 2012).

Research under the Positivist's philosophy is cyclical, involving the following steps/procedures: Problem identification; Research questions/Hypothese; clarification of research design; Data collection; Data analysis; Interpretation of the findings; Presentation of the findings; Discussion of the findings and existing literature.

This chapter therefore presented the research methodology that was applied in carrying out the research.

# 3 Research Design

Educational research is a systematic method of enquiry which is applied in solving educational problems and answering questions relating to education (Macmillan 2000, Anderson & Arsenault 2010). For a successful research work to be carried out, it is imperative to take into cognizance the research design. The research design is referred to as the plan/framework for carrying out the research/study.

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For the purpose of this study/work, the researcher adopted the survey research design which is an aspect of the non experimental quantitative research, where the researcher has no direct influence on what has been selected to be studied, either because it has already occurred or because it cannot be influenced. In other word, the researcher is unable to manipulate or control any factor or phenomenon that may influence the subject behaviour or performance. This characteristic has important implications for the conclusions that are drawn. It usually means that the study can only describe something or uncover relationships between two or more variables.

Survey research was pioneered by a sociologist, Paul Jarzarfield in the 1930s. Survey research approach is specifically designed to systematically collect data about a group of individuals, who have the same characteristics, through the use of written or oral data collection instruments, interviews, questionnaires, telephone calls/interview, mails and the internet, concerning participants' responses on facts, opinions, attitudes etc. This is to enable the researcher study them as a group. This may not necessarily mean collecting data from the entire population. It is an efficient means of collecting data from a large number of the respondents, representing the entire population.

Idaka & German (2012), xrayed the characteristics of survey research to include:

- 1. To produce quatitative description of defined aspects of the study population. This might be groups' individuals' organizations, race, and communities.
- 2. Main strategy of data collection is by soliciting data from respondents who are members of the population by using structured instruments.
- 3. Information concerning the entire population is usually collected from a faction of the population referred to as sample; this could be direct on the respondents or framed in such a way that it represents what is obtainable by the population. This information is later generalized to the entire population.
- 4. It does not have control of all the independent and dependent variables of the study.
- 5. The phenomena of the interest must be studied in the raw form. That is the way it happened or it is. The phenomena of interest must not be not be in a long past, but it must be in current time.

# 3.1 Study Area

The nation, Nigeria came into existence in January, 1914, following the amalgamation of the Northern and Southern protectorates by Sir Fredrick Lugard. Nigeria is located in the Western Coast of African sub-region. It is the most populated country in Africa with a current population of about 170 million inhabitants and is commonly referred to as the 'giant' of Africa.

Nigeria is bounded on the west by the Republic of Benin; to the North by Niger and Chad republics; to the East by the Cameroun Republic and to the South by the Atlantic Ocean respectively. Nigeria is a multi lingual nation with about 250 ethnic groups/languages and has English as its Official Language

Nigeria is divided into six geo-political zones, made up of: The North West, The North Central, The North East, The South West, The South East and The South-South geo-political zones respectively. The North West geo-political zone is made up of seven states, the North Central, the North East, the South West and the South South geo-political zones have six states each respectively, exception of the South Eastern geo-political zone that is made up of five states only. This makes a total of 36 states in the country plus the Federal Capital Territory in Abuja.

Nigeria as a country practices democracy (the Presidential system). It has 109 senatorial seats and 360 Federal constituencies' seats (upper and lower houses). There are 776 Local Government Areas in Nigeria. The economy of Nigeria largely depends on oil/gas, agricultural products and other natural resources.

Nigeria is a member of the British Common Wealth of Nations and plays a great role in the committee of nations. Nigeria is also a signatory to the Salamanca Frame Work for Action on inclusion. (www.factmonster.com/ipka/A0107847.html), Nwazuoke, 2010 & Okeke, 2010, Olayi & Ewa 2013

# **3.2 Sampling technique**

A sample is a said to be subset of the population involved in a research study. In this aspect of the study, the researcher made an attempt to give answers to the issues relating to how the selection of the samples were handled and what parameters were to be employed in the selection procedures. In executing this research, the researcher made sure that some of the

respondents/participants such as the state Commissioners of Education, Heads of Inspectorate division of the Ministry of Education, Secretaries to Local Government Education Authorities (LGEA) and School heads/Principals were considered automatic participants, while others included students with Hearing impairment, parents, teachers, representatives of individuals with Hearing impairment Associations/organizations. These were drawn by applying the simple random technique using the hat and draw method. This in essence was to give equal chances to all the samples of being part of the study.

#### **3.3** Population and sample of the study

In this aspect the researcher presented the details of the accessible population that is the members of the population who can realistically be included in the study. These included individuals students with hearing impairments, parents, groups/organization, school agencies and persons saddled with the responsibility of providing service delivery to the students with hearing impairment were used as samples for the study.

The researcher provided information on the number of persons and types/categories to be involved in the study and as well justified the reasons for their choices and inclusion and then after what state how their use helped to obtain the desired outcome/data for the study. For the purpose of this study to be effectively carried out, 400 respondents were drawn as participants from each state and three states were drawn from each of the geo-political zones in the country, making a total of 1200 respondents from each geopolitical zone. Therefore six geopolitical zone plus 200 respondents from Abuja, the Federal Capital Territory made up a total sample of 7400 respondents. These were drawn from among the students with Hearing impairment in the secondary schools, parents, teachers, Government agencies/officials of the Ministry of Education saddled with the responsibility of providing educational services to the students with Hearing impairment in the secondary school and representatives of individuals with Hearing impairment Associations were selected to participate in the study. These included 19 Commissioners for Education, 152 officials from the States Ministries of Education/Local Government Educational Authority and 190 Schools' Principals making a toal of 361 officials from the six zones, while the remaining 7039 respondents constituted the teachers, students with hearing impairment, parents and members of Hearing impaired association, making a total of 7400 respondents.

# 3.4 Instrument for data collection

In any research work, instruments refers to the tool that the researcher would use or employ to get the data that would help to measure or give answer to the research questions and/or hypotheses. For the purpose of this study and taking into cognizance the research design of the study, the following instruments were put into use to illicit responses from the participants as well as generate data for the study bringing into focus what Anderson and Arsenault (2010) uphold:

## A. Questionnaire:

This is an instrument which is used to collect data that describes one or more characteristics of a specific population. Some survey researchers are able to work with the entire population which is referred to as a census. However, most survey research is conducted with a sample of the respondents from the population. If proper sampling techniques are applied, the researcher can generalized the results from the sample to the larger population. In this study therefore, a four point Likert-like questionnaire rating scale was used. This scale required the respondents to indicate the extent to which they strongly agree, agree, disagree or strongly disagree with the statement on the schedule.

B. Interview:

The researcher employed a guide to an executive interview schedule that would facilitate discussion and this was applied to individuals saddled with the responsibilities of making decisions based on key issues being investigated.

C. Anecdotal records:

Here the researcher consulted the school records to get data relating to the students' with Hearing impairment academic performances and other behavioural characteristics in the school.

# 3.5 Validation of the Research Instrument

Two kinds of validity were established for the research instruments. These were Face and Content validity. Face validity simply refers to the way the questionnaire items appear to take care of the relevant contents of the subject matter of interest, while the Content validity refers to the extent to which the instrument represent the contents of interest or how well the items on the instruments represent or sampled the content to be measured.

The content and the face validity of the instruments were established by experts in research. The Questionnaire and Interview questions were presented to some professionals with the knowledge of research in the field of Special Education in the Department of Special Education and also to experts in the field of Measurement and Evaluation and statistics, Department of Guidance and Counselling, Faculty of Education, University of Calabar for scrutiny and necessary correction. Then after, the instruments were presented to the research supervisor for his final appraisal. The supervisor vetted the instruments by eliminating the irrelevant items in the instrument, while the relevant items were upheld and later approved for administration in the field.

# **3.6 Reliability of the Instrument**

Reliability refers to the degree of consistency that an instrument demonstrated in measuring what it does. To determine the Reliability of the instruments (Questionnaire and Structured interview questions), a trial testing of the instruments was carried out on 100 respondents drawn from one of the states which was not part of my population area of the study.

Split-half method of Reliability was used to determine the Reliability estimate of the instrument. The researcher administered the instrument once to the respondents to complete.But at the time of scoring, two set of scores were derived (odd and even).

The scores derived from the two sets were correlated using Pearson Product Moment Correlation Analysis and then corrected with Spearman Brown Prophecy Formula. The reliability index was high, and ranges between 0.75 - 0.82.

# 3.8 Procedures for data collection

The main beauty of any research work/study lies in the ability of the researcher to develop, administer, gather and interpret data empirically which makes or gives the investigation/study a worthwhile look. This measure constitutes a process in any research study. Hence, in this study, the following procedures were put in use to obtain/gather data for the study.

# • Letter of introduction:

Here the researcher obtained a letter of introduction from the research/study supervisor, showing/indicating the approval of the research work or study to be carried out by the researcher. This was to help the erase the feelings of doubt from the respondents and give room for the desired information to be supplied.

• Personal Letter/note:

Here the researcher wrote a personal letter/note in accompany of the letter of introduction from the research supervisor, seeking for permission, cooperation and understanding from the respondents with respect to the issue(s) under study and also conveying the assurance of confidentiality to whatever information or data given out shall strictly be used for the research purpose(s) and nothing more than that.

• Development of the questionnaire:

The researcher applied the following steps in developing and administering the questionnaire as enunciated by Anderson and Arsenault (2010):

- 1. Determining the research questions as earlier presented including what is to be unravelled, the importance of the information so described, identifying issues from the research questions that are related to the questions and specifying by listing all issues so needed in the question key, identify the sub questions and as well as refining the list.
- 2. Drafting the items: This was done by translating the questions into items keys and formulating the type of questionnaire which adopted the four points Likert-like question scale.
- 3. Sequencing the items: Here the researcher grouped the questions into topic and by
- 4.
- 5. question type as well as rewriting the questions and eliminating any redundancy or clumsy features of the questions.
- 6. Designing the questionnaire proper layout: Here the following decisions were taken by the researcher:
- A. Choice of booklet or single sheet or leaflet form of questionnaire.
- B. If there shall be need for pre coding including the title and introductory explanations.

- C. Organizing into sections and grouping similar types of items together.
- 7. Pilot testing of the questionnaire: To ensure credibility of the research instrument designed, the items were pilot tested with a smaller group of respondents and after which the draft items were discussed with the supervisor and clarifications given by the wording including identified ambiguities should there be any, then the items were retrieved, revised and retested again.
- 8. Developing the strategies for actual data collection: Here the researcher employed the following steps:
  - I. Selection of sample population.
  - II. Determining the method or means of sending and distributing the questionnaire.
  - III. Developing a covering letter.
  - IV. Preparing a distribution chart.
  - V. Packaging and sending to the respondents
  - VI. Evolving avenues of monitoring return/retrieval of the questionnaire and follow up.
  - Executive interview:

In applying this mode of instrument to illicit responses from the key respondents, the researcher first sent a letter of introduction to the persons concern. Therein the purpose and need of the interview was stated and request for a formal booking of appointment for the interview, stipulating the date, time for the interview were made.

# Anecdotal records:

Here the researcher presented a letter of introduction from the supervisor to the school head as well as a personal letter seeking for permission to have access to the students' records in the school.

The choice of these instruments was based on the facts that they are suitable to provide all the necessary information that yielded positive result in the outcome of the study. During the research process, the researcher ever remained an active participant in any of the research activity or social interactions in line with the research ethics.

Moreover, for this study to yield the desired positive result, the researcher engaged the services of some research assistants to facilitate easy research work in the field. This was carried out with the consent of the research supervisor. Also, all the instruments designed

were subjected to scrutiny and vetting by the research supervisor and some experts in the field of research and statistics. This was to ensure validity and reliability of the instruments.

# 3.7 Method of data analysis

Taking into consideration the nature of the research design and the problem under investigation, the statistical tool that was used in analysing the data collected was the Pearson Product Moment Correlation Coefficient statistics; because this constituted one of the groups of descriptive statistics which is used to describe numeric data. The Pearson Product Moment Correlation Coefficient which is known in research as the Correlation Coefficient or as r is the most widely used correlation coefficient. It is a statistical tool used when measuring associations or relationships for interval or ratio level scales. The Values of r for pairs of variables are commonly reported in research Reports and Journals as a means of summarizing the extent of the relationship between variables (Awotunde & Ugodulunwa 2002).

The formula r = 
$$n\sum xy - \sum x\sum y$$
  
 $[n\sum x^2 - (x)^2][n\sum y^2 - (y)^2]$ 

Also, Student Population T test analysis was employed to test the sixth hypothesis. The T test is used to discover whether there are ststistically significant differences between the Means of two groups, using parametic data that are drawn from random samples with a normal distribution. The goal of Independent T test measurement in Research study is also to evaluate the Mean difference between two populations.

The formula for T test: T = 
$$\overline{x_1 - x_2}$$
  
 $\sqrt{\frac{S^2_1}{N_1 + N}}$ 

# **CHAPTER FOUR**

# **RESULT AND DISCUSSION**

This chapter deals with the result of the statistical analysis of data gathered for this study as well as their interpretation and discussion. The presentation of the data was done following the trends of the eight hypotheses directing the study.

# 4 General description of the variables

The main independent variables for this study are:

- I) Attitudes toward students with hearing impairment in inclusive secondary schools
- ii) The students with hearing impairement use of Assistive Technology (AT) devices in the inclusive secondary schools
- iii). Teachers' training in the regular school setting
- iv). Government commitment to the course of inclusion of the students with Hearing impairment into regular school setting
- v). The availability of supportive staffs in the regular school environment.
- vi). The provision of educational resources between the North and South.

The main dependent variable is effective implementation of inclusive education programme. The mean and standard deviation of the major variables are calculated and presented in Table 5. Total samples of seven thousand four hundred respondents were used for the study.

# Table 1

# General description of data (N=7400)

	<u>x</u> –	SD
Variables		
Attitudes toward students with hearing	36.34	2.09
impairment		
The students with hearing impairement use	33.33	4.07
of Assistive Technology (AT) devices in the		
inclusive secondary schools		
Teachers' training in the regular school	28.20	2.32
setting		
Government commitment to the course of	29.00	2.06
inclusion of the students with hearing		
impairment into regular school setting		
The availability of supportive staffs in the	25.59	3.24
regular school environment		
Provision of educational services	29.27	1.80
Effective implementation of inclusive	27.20	2.95
education programme		

# 4.1 Hypothesis-by-hypothesis presentation of result

In this section each hypothesis is re-stated, and the result of data analysis carried out to test it is presented. Each hypothesis of the study was tested at .05 level of significance.

# 4.1.1 Hypothesis one

There is a significant relationship between positive/negative attitudes toward students with hearing impairment in the regular secondary schools environment and effective implementation of inclusive education programme in Nigeria.

The independent variables involve in this hypothesis is positive/negative attitudes toward students with hearing impairment, while the dependent variable is effective implementation of inclusive education programme. Independent t-test analysis was employed to test this hypothesis. The result of the analysis is presented in Table 2.

# Table 2

Independent t-test analysis of the relationship between positive/negative attitudes toward students with hearing impairment in the regular secondary schools environment and effective implementation of inclusive education programme. (N=7400)

Variables	Ν	X	SD	t-value
Positive attitudes toward students with hearing impairment	4954	27.18	3.09	
Negative attitudes toward students vith hearing impairment	2446	27.23	2.67	640

The result in Table 2 reveals that the calculated t-value of -.640 is less than the critical t-value of 1.96 at .05 level of significance with 7398 degrees of freedom. With this result the null hypothesis was retained, while the alternate was rejected. This result therefore means there is no significant relationship between positive/negative attitudes toward students with hearing impairment in the regular secondary schools environment and effective implementation of inclusive education programme in Nigeria.

# 4.1.2 Hypothesis two

There is no significant relationship between the students with hearing impairement use of Assistive Technology (AT) devices in the inclusive secondary schools and effective implementation of inclusive education programme in Nigeria. The independent variable in this hypothesis is the students with hearing impairement use of Assistive Technology (AT) devices in the inclusive secondary schools; while the dependent variable is effective implementation of inclusive education programme. To test this hypothesis, The students with hearing impairement use of Assistive Technology (AT) devices in the inclusive secondary schools and effective implementation of inclusive education programme was correlated using Pearson Product Moment Correlation Analysis. The result of the analysis is presented in Table3.

# Table 3

Pearson Product Moment Correlation Analysis of the relationship between The students with hearing impairement use of Assistive Technology (AT) devices in the inclusive secondary schools and Effective implementation of inclusive education programme(N=7400)

Variables	x –	SD	r-value
The students with hearing	33.33	4.07	
impairement use of Assistive			
Technology (AT) devices in the			
inclusive secondary schools			
			0.997*
Effective implementation of	27.20	2.95	
inclusive education programme			

\* Significant at .05, critical r = .062, df = 7398

The result of the analysis as presented in Table 3 revealed that the calculated r-value of 0.997 is higher than the critical r-value of .062 at .05 level of significance with 7398 degree of freedom. With the result of this analysis, the null hypothesis which stated that there is no significant relationship between students with hearing impairment use of assistive technology (AT) devices and effective implementation of inclusive education programme was rejected. This result implies that, the students' with hearing impairment use of Assistive Technology (AT) devices in the inclusive secondary schools has a significant positive relationship with effective implementation of inclusive education programme. The positive r implied that the higher the The students with hearing impairment use of Assistive Technology (AT) devices in the inclusive secondary schools, the higher the effective implementation of inclusive education programme tends to be. On the other hand the lower the students with hearing impairment use of Assistive Technology (AT) devices in the inclusive secondary schools (AT) devices in the inclusive secondary schools (AT) devices in the inclusive secondary schools, the higher the assistive Technology (AT) devices in the inclusive secondary schools, the lower the students with hearing impairment use of Assistive Technology (AT) devices in the inclusive secondary schools (AT) devices in the inclusive secondary schools, the lower the students with hearing impairment use of Assistive Technology (AT) devices in the inclusive secondary schools tends to be.

## 4.1.3 Hypothesis three

There is no significant relationship between teachers' training in the regular school setting and effective implementation of inclusive education programme in Nigeria. The independent variable in this hypothesis is teachers' training in the regular school setting; while the dependent variable is effective implementation of inclusive education programme. To test this hypothesis, effective implementation of inclusive education programme was correlated with their attitude using Pearson Product Moment Correlation Analysis. The result of the analysis is presented in Table 4.

## Table 4.

Pearson Product Moment Correlation Analysis of the relationship between teachers' training in the regular school setting and Effective implementation of inclusive education programme

Variables	x –	SD	t-value
Teachers' training in the regular school setting	28.20	2.32	
			0.649*
Effective implementation of inclusive education programme	27.20	2.95	

(N=7400)

\* Significant at .05, critical r = .062, df = 7398

The result of the analysis as presented in Table 4 revealed that the calculated r-value of 0.649 is higher than the critical r-value of .062 at .05 level of significance with 7398 degree of freedom. With this result, the null hypothesis which stated that there is no significant relationship between teachers' training in the regular school setting and effective implementation of inclusive education programme was rejected. This result indicated that, teachers' training in the regular school setting has a significant positive relationship with effective implementation of inclusive education programme. The positive r implied that the more positive the teachers' training in the regular school setting is the higher effective implementation of inclusive education programme tends to be. On the other hand the lower

their teachers' training in the regular school setting the lower effective implementation of inclusive education programme tends to be.

# 4.1.4 Hypothesis four

There is no significant relationship between Government commitment to the course of inclusion of the students with Hearing impairment into regular school setting and students' effective implementation of inclusive education programme. The independent variable in this hypothesis is Government commitment to the course of inclusion of the students with Hearing impairment into regular school setting; while the dependent variable is effective implementation of inclusive education programme. To test this hypothesis, Government commitment to the course of inclusion of the students with Hearing implementation of inclusive education programme. To test this hypothesis, Government commitment to the course of inclusion of the students with Hearing impairment into regular school setting was correlated with effective implementation of inclusive education programme using Pearson Product Moment Correlation Analysis. The result of the analysis is presented in Table 5.

# Table 5

Pearson Product Moment Correlation Analysis of the relationship between Government commitment to the course of inclusion of the students with Hearing impairment into regular school setting and Effective implementation of inclusive education programme (N=7400)

Variables	x —	SD	r-value
Government commitment to the	29.00	2.06	
course of inclusion of the students			
with Hearing impairment into			
regular school setting			
			0.241*
Effective implementation of	27.20	2.95	
inclusive education programme			

\* Significant at .05, critical r = .062, df = 7398

The result of the analysis as presented in Table 5 revealed that the calculated r-value of 0.241 is higher than the critical r-value of .062 at .05 level of significance with 7398 degree of

freedom. With this result, the null hypothesis which stated that there is no significant positive relationship between Government commitment to the course of inclusion of the students with Hearing impairment into regular school setting and effective implementation of inclusive education programme was rejected. This result implied that, student's peer group has a significant relationship with effective implementation of inclusive education programme. The positive r indicated that the higher the Government commitment to the course of inclusion of the students with Hearing impairment into regular school setting the higher the effective implementation of inclusive education of the students with Hearing impairment into regular school setting the higher the lower the Government commitment to the course of inclusive education programme tend to be.

# 4.1.5 Hypothesis five

There is no significant relationship between the availability of supportive staffs in the regular school environment and effective implementation of inclusive education programme. The independent variable in this hypothesis is the availability of supportive staffs in the regular school environment; while the dependent variable is effective implementation of inclusive education programme. To test this hypothesis the availability of supportive staffs in the regular school environment was correlated with effective implementation of inclusive education programme using Pearson Product Moment Correlation Analysis. The result of the analysis is presented in Table 6.

# Table 6

Pearson Product Moment Correlation Analysis of the relationship between the availability of supportive staffs in the regular school environment and effective implementation of inclusive education programme (N=7400)

4.2 Variable	X—	SD	r-value
The availability of supportive staffs	25.59	3.24	
in the regular school environment			
			0.218*

Effective implementation of27.202.95inclusive education programme

\* Significant at .05, critical r = .062, df = 7398

The result of the analysis as presented in Table 6 revealed that the calculated r-value of 0.218 is higher than the critical r-value of .062 at .05 level of significance with 7398 degree of freedom. With this result, the null hypothesis which stated that there is no significant relationship between student's interest in Religious Studies and effective implementation of inclusive education programme was rejected. This result implies that, the availability of supportive staffs in the regular school environment has a significant positive relationship with effective implementation of inclusive education programme. The positive r implied that the higher the the availability of supportive staffs in the regular school environment, the higher effective implementation of inclusive education programme tends to be. On the other hand the lower their the availability of supportive staffs in the regular school environment the lower effective implementation of inclusive education programme tends to be.

# 4.2.1 Hypothesis six

There is no significant difference in the provision of educational service resources between the Northern and Southern geo-political zones of Nigeria and effective implementation of inclusive education in Nigeria.

The independent variables involve in this hypothesis is the provision of educational service resources between the Northern and Southern geo-political zones of Nigeria and effective implementation of inclusive education in Nigeria, while the dependent variable is effective implementation of inclusive education programme. Independent t-test analysis was employed to test this hypothesis. The result of the analysis is presented in Table 7.

# Table 7

Independent t-test analysis of the difference in the provision of educational service resources between the Northern and Southern geo-political zones of Nigeria and effective implementation of inclusive education programme. (N=7400)

Variables	Ν	X	SD	t-value
the provision of educational service	4358	27.18	3.14	
resources in the Northern geo- political zones				
-				
the provision of educational service	3042	27.23	2.67	695
resources in the Southern geo-				
political zones				

Not Significant at .05 level, critical t = 1.96, df = 7398

The result in Table 7 reveals that the calculated t-value of -.695 is less than the critical t-value of 1.96 at .05 level of significance with 7398 degrees of freedom. With this result the null hypothesis was retained. This result therefore means there is no significant difference in the provision of educational service resources between the Northern and Southern geopolitical zones of Nigeria and effective implementation of inclusive education in Nigeria

# **4.3 Discussion of the findings**

This section is devoted to the discussion of findings of the hypotheses formulated to direct the study. This discussion was done hypothesis by hypothesis.

# 4.3.1 Positive/negative attitudes toward students with hearing impairment in the regular secondary schools environment and effective implementation of inclusive education programme in Nigeria.

The result of the first hypothesis revealed that there is a significant relationship between positive/negative attitudes toward students with hearing impairment in the regular secondary schools environment and effective implementation of inclusive education programme in Nigeria. The finding of this hypothesis is in line with the view of Ozoji (2003) who sees attitudes generally as predispositions to responding in a particular way towards a person or object, be it a perceptual orientation or response readiness. As attitudes are predispositions, they are not directly observable or measurable but are inferred from the way a person reacts to particular stimuli. Though there are divergent definitions of attitude but all the existing definitions agree upon common characteristics that an attitude entails "an existing predisposition variable which guides and directs the overt behaviour of an individual". The nature and the development of attitudes is not clear, nevertheless, the available evidence demonstrate that attitudes are formed alongside the socialization process. As a result of the qualitative nature of the relationship between attitudes and behaviour, this tends to be heavily influence by stereotyped behaviour and may be regarded as the socialization process, since attitudes serve as mediating construct in behaviour as they play a prominent role in the treatment of any category of people.

Shindi (1991) in Ewa, (2000) also posited that in active living, a person with a disability is handicapped in two ways: First he is handicapped simply because he does not physically possess the capabilities others have, the cumulative effects of which are social, emotional and financial deprivation. Secondly, because of the social doctrines that to have a

disability is to be impoverished, he is perceived by others as handicapped. While it is possible to alleviate the first kind of handicap by taking appropriate physical measures, the second that is more damaging is more difficult to deal with because it is culturally entrenched. The prevailing attitudes toward persons with disabilities are reflected in the vocabularies often used. The vocabularies used to refer to this category of persons/individuals are often socially demeaning. It is most unfortunate, stereotyped and degrading as it categorizes as homogeneous, a diverse group of people with no behavioural commonalities on which is not sensible or proper to generalized.

Okuoyibo (1990, 2006) also identified limited information, religion, social distance, physical appearance, sex/gender, age, ethnicity, beliefs, degree of the disability, as well as nearness to the handicapped person as factors that influenced attitudes formation toward persons with disabilities. It is worthy to note that since attitudes serve as a mediating construct in behaviour, they play an important role in the successful implementation of inclusive education programme for the students with hearing impairment in the regular school setting. Hence, for positive results to be achieved, it is necessary that the planners of the inclusive education programme must take into account the teachers and students with intact hearing as well as other stakeholders' attitudes toward the handicapped in general and students with impaired hearing in particular in the inclusive education setting.

Ozoji (2003) also observed that proper management of attitudes may mean happiness for the students with hearing impairment in the inclusive school environment. Ajavon (2006) also asserted that many Nigerians' negative attitudes toward students with Hearing impairment cannot be overemphasized. The negative attitude is often as a consequence of ignorance and lack of understanding of the special needs conditions of the individuals with hearing impairment. Some persons in Nigeria are still holding the erroneous beliefs that deafness and other handicapping conditions are come by as a result of a divine punishment or as a mark of evil.

The finding is also in line with the views of Okuoyibo (2006) who maintained that the general attitude of the society towards persons with disabilities, particularly the Deaf is negative. This reaction can be attributed to many factors: Among which are superstitious beliefs which alludes that deafness is a punishment from God for the wickedness of the parents of the Deaf/hearing impaired child or student, the power of evil spirit's manipulation or as a result of disobedience by the expectant mother by venturing into the sacred grooves.

Additionally, deafness is often erroneously thought to be contagious as a result of close contact. Okeke (2010) on the other hand shed light that individuals who are hearing impaired are perceived as second rated individuals among the Igbo folks in Nigeria. Hence it is considered a taboo as having an individual with hearing impairment ascends the throne as an 'igwe' (king) over his kinsmen.

Although societal attitudes toward persons with disabilities vary from one handicapping condition to the other, it is possible to make certain generalizations about attitudes of certain category of persons toward the individuals with hearing impairment. Specifically if we consider the individual who is hearing impaired in his/her family and the attitude of the family members, attitudes of helping professional(s)/agencies and finally the community or society at large, there is ample evidence that all families are subjected to stress which they meet with varying degrees of success depending upon such factors as the personal qualities of the parents, the strength of the marriage, their social status and marital circumstances, educational status and degree of knowledge/information about the hearing impairment condition. Undoubtedly, the competing demand of each member of the family increases the strains in all these respects and imposes new ones which may radically alter the pattern of family life. The family may relinquish not only their hopes and aspirations for their members but also establish new routines.

Okeke (2010) also noted that parents' attitudes toward their children/students who are hearing impaired are either normalization, that is making light of the hearing impaired condition and/ or denying its social significance or by disassociation, that is by isolating the child with hearing impairment from any social contact that will force acceptance that the child was/is different in the family. They found that some parents in general tend to minimize the effect of the hearing handicap on the family despite the considerable changes it may have actually made. While some other ones found, display attitudes of outright rejection, open hostility, indifference and /or frustrations.

Okuoyibo (2006) further alluded that the arrival of a child who is hearing impaired into the family/home at birth or news of a normal child becoming handicapped/hearing impaired, is a crisis that most parents find difficult to accept. Parents are generally disillusioned/dismay and at loss of what to do. Being humane, parents show a wide range of feelings when they are first made aware that one or all of their child/children is/are born with or developing hearing handicap. Some parents feel confused, overwhelmed and hopeless, while some others react by

being angry. The impact of Hearing impairment on the family is never negligible, usually demanding and sometimes catastrophic. A few families may be bound more firmly together by experience, but in most of the cases the stress imposed far outweighs any benefit. Research evidence abounds to the fact that negative attitudes particularly of parents and others who matters in the life of the individual who is hearing impaired may create in him/her fear, anxiety and guilt feelings, some of the consequences which are difficult to develop proper social and emotional wellbeing in the child. There is therefore tremendous and urgent need for the parents to pay attention to these feelings and attitudes experienced by the children who are hearing impaired by showing acceptance if the services offered in the inclusive education setting are to yield positive results. The review captured that to some extent there has been improvement in attitudes from the mainstream society, which has transformed from being negative to becoming positive

Since negative attitudes has been identified to be one of the greatest problems that squarely confronts the students with hearing impairment in the society in general and inclusive educational setting in particular, parents and a significant others dealing directly and/or indirectly with them should try as much as possible to develop positive attitudes toward them as this will facilitate proper adjustment in the inclusive education environment. In line with this assertion that Okeke (2010), observes that in families where parents demonstrated acceptance of their children with hearing impairment, siblings follow similarly. The same applies to the school setting. If the students with hearing impairment are accepted by the normal/non hearing impaired persons around, adjustment can easily be made by all concern in the inclusive educational setting.

Furthermore, it is important to note that openness of communication tends to influence positive adjustment of the students with hearing impairment in the inclusive school environment. Therefore in addition to the many ingredients for a successful inclusive education practices, reduction in class sizes, individualization of instruction, accessibility of school buildings, the use of assistive technology devices by group or individual Hearing impaired students to perform to his/her maximum potentials in the society, inclusive education programme can serve as a booster to the academic progress of the students with hearing impairment, but where the essential supportive services are lacking, inclusive education may serves as a platform to the students with hearing impairment failure in life (Gbegbin, 1991).

Attitudes toward the students with impaired hearing could be said to be changing from hostile, prejudiced and outright hatred in form to a more refined, accepting, understandable and loving one from the society. The early period of darkness witnessed a very negative attitude towards the Handicapped persons in general and individuals with hearing impairment in particular, where disability of any type disqualified the individual from integration into the mainstream society. On other hand be that as it maybe the more information and education one receives about a person, an object and/or culture or vice versa, the better a shift of stance. Hence many people are now becoming better informed and educated about hearing impairment; the former prejudiced and negative attitudes earlier held are now generally becoming positive and acceptable for the wellbeing of the individuals with Hearing impairment in the society (Okuoyibo, 1996, 2006, Ewa, 2000, Obi, 2004).

In the same vein, the respondents in the executive interview conducted on the major key players in the inclusive education agenda with reference to the question on attitudes, the respondents agreed that the general attitudes of the public toward individuals with disabilities in general and students with hearing impairment in particular has greatly improves and is quite acceptable. To demonstrate the level of acceptance, the respondents indicated that they would not be perturbed should the students with hearing impairment be placed in the same class with their children with intact hearing.

And in terms of creating separate classes/schools for students with hearing impairment, the respondents rebuffed the idea that it is a measure meant to encourage discrimination, exclusion and segregation.

Consequent upon the above premise, if our purpose of education is to provide students with hearing impairment with equal educational opportunities to reach their maximum potentials and becoming contributing members of the society, we must provide them with equal educational opportunities and appropriate facilities that would enable them be educated with their non hearing impaired peers/students in the least restrictive inclusive education environment. When this is possible and educationally appropriate, it is the best way to prepare them to live as successful adults in an integrated society.

### **4.3.2** The students with hearing impairment use of Assistive Technology (AT) devices in the inclusive secondary schools and effective implementation of inclusive education programme

The result of the second hypothesis revealed that there is a significant positive relationship between the students with hearing impairment use of Assistive Technology (AT) devices in the inclusive secondary schools and effective implementation of inclusive education programme. The finding of this hypothesis is in line with the views of Gargiulo (2009) who opined that modern technology is a very important component in the lives of all individuals with disabilities. He pointed out that in no field else are the effects of today's technological advances more evident in working with special needs students than in the area of hearing impairment. This ranges from sophisticated hearing aids, computers, alerting devices, cochlear implants, captioned media and adaptive devices/equipment are only a few of the items which use has revolutionized the field of education of the students with hearing impairment. Assistive technology (AT) devices are said to be any item, piece of equipment or product system, whether acquired commercially at the shelf, modifies and/or customized that is used to increase, maintain and improve the functional capabilities of the individuals with hearing impairment in order to bring out the best in them. These also could be said to be devices which aid in teaching and facilitating understanding in the students with hearing impairment.

Robitaille (2010) also observed that assistive technology (AT) devices are so important to individuals with hearing impairment because these devices can help improve the physical and mental functioning, alleviate a disorder/impaired hearing, prevents the worsening of the condition, improves the capacity of the individuals who are hearing impaired to learn or even replaces a missing link.

Raskind (2008) also pointed out that Assistive technology devices are classified into low and high tech. Low tech assistive technology devices are simple tools that make life's daily activities easier or in some cases possible. These devices are non electronic and relatively in expensive. They may be as simple as pencil grips to help students who are hearing impaired with motor problem to grip pencils firmly, maps, models, cut outs and so forth. Low tech devices are simple to be used. High tech assistive technology devices on the other hand are generally electronic devices which are usually tied to power supply and typically required a careful planning so that they are not intrusive. A cost factor must usually be considered. Some good examples of high tech AT devices for the students with hearing impairment in the inclusive classroom include: hearing aids, computers, talking clocks, alerting devices, electronic wheel chairs that climb stairs, laser canes for the visually impaired individuals etc. It is important to note that all or some students with disabilities must have high tech devices in order to be successful learners in the inclusive education environment.

It is important to note that within each main category, there may be sub categories based on different purposes or intended audience when utilizing the technology devices. The overall goal of these devices is to assist students with hearing impairment gain improved accessibility to information that their hearing counterparts gain through intact hearing. These devices/tools are intended to provide readers/learners who are hearing impaired with a better understanding of their purposes, how and when they might be utilized. So depending on their needs in specific situations, Deaf/hard of hearing individuals may require assistive technology devices to function optimally. At times these assistive technology devices may be used singularly or simultaneously. Moreover, many of these devices developed for use by the Hearing impaired students/individuals may be found beneficial also to those without hearing impairment.

Suffice to state here that the use of assistive technology devices by the students with hearing impairment in an inclusive educational environment cannot be over emphasized. Depending on the devices chosen, there may be to purchase or loaned for such things as alerting and telecommunication devices. However, many other such as personal amplification or captioning services required specialized equipment/software and/or support personnel including audiologist, trained captionist, or interpreters. Therefore to determine the benefit of a particular device or service should be implemented through a trial period to make sure that what is chosen is meeting the educational needs of the Hearing impaired students. Moreover, inputs regarding improved accessibility should be obtained from the Hearing impaired students themselves, parents and multidisciplinary team to ensure an all round development and functional lives of the Hearing impaired students in the inclusive education setting in particular.

On the benefit of the use of assistive technology (AT)) devices by the students with hearing impairment in an inclusive school environment, the result is in line with research carried out by Liu & Hung (2007) on providing students with hearing impairment with learning care after

classes through Smart phones and the GPRS network. The study was to examine the effectiveness of providing after class learning care through wireless technology to ascertain the motivational level of th students with impaired hearing by applying experimental design.

The study developed a learning care system that utilizes smart phones and the General Packet Radio Service (GPRS) network. The study considered the following variables:

- D. After class interaction system
- E. Interactive strategies for improving after class learning participation
- F. Students and parents' reactions.

The after class interaction system was aimed to implement a learning system that will help a teacher to create opportunities for communicating with the students who are hearing impaired through the GPRS network. This is because in class students learning participation may affect after class learning motivation. Hence, the proposed learning care system allows the teacher avenues to asses and reports students in class participation level including confidence, interest, efforts and report system. The system then generates a report for students participation status which is displayed in the after class interaction system. The after class interaction system was designed to assist the teacher in providing students with after class learning support through the use of various technology devices.

The interactive strategies for improving after-class learning participation of the study applies strategies to maintain students learning motivation and improve learning activities when students are off campus, reminding students of the course work to do, encouraging, rewarding, praise, assisting and peers awareness. Also in considering the students and parents reactions, the study administered an exploration trial to confirm the effectiveness of the proposed learning care system in improving after-class activities.

The result of the investigation revealed that the use of wireless network and hand held devices can positively improve the learning of the students with hearing impairment. The students and parents reactions support the use of the GPRS and Smart phones to provide after-class learning support and enhance after-class learning. Most students and parents considered the after-class student-teacher interactional strategies effective in improving students learning at home. Finally, Hearing impaired students achieved a better home work completion rate when the teacher used smart phones and the GPRS Ubiquitous to network to provide learning support.

On the other hand, in a survey carried out by Agba, Olayi & Ewa (2010) on the current opinions on the availability and use of assistive technology devices among special needs persons in Nigeria, the result revealed the assistive technology devices commonly used by the students with hearing impairment in the inclusive education setting in Nigeria are the hearing aids and conventional cell phones. The survey summarized among the problems affecting the effective use of assistive technology devices by this category of students in Nigeria to include:

- Absence of legislation compelling Government and other stake holders in the education of the Hearing impaired students on the mandatory provision of assistive technology devices for these students in school at all levels.
- Poor/inaccessibility to internet facilities in the country.
- Inconsistent/poor electric power supply to schools and the public.
- Inadequate/absence of technical knowledge on the use of the assistive technology devices.
- Poor/lack of maintenance culture on the parts of the students, parents and school authority.
- Overcrowded classrooms in the inclusive school setting.
- All assistive technology devices are foreign based manufactured; hence the high cost of importation and maintenance when the need arises.
- In comparison on the availability of Assistive technology devices and other educational resources in schools between the North and Southern Nigeria, the schools in the northern Nigeria seemed better equipped than the ones in the southern part of the country.

Similarly, the result also corroborated with the work of Kuna (2005), who posited that the problem of funding has affected every aspect of Nigerian education system. The author decried that the issue of poor funding has led to the lack/inadequate provision of Information and Communication Technology/Assistive Technology Devices/facilities which help the students with hearing impairment to improve in their academic performance and somewhat compensate for the lack due to impaired hearing among students with hearing impairment.

In the educational system, such facilities, materials and equipment according to Maduagwu (2008) are diverse set of technological tools and resources which are used to communicate, to create, disseminate, stored and manage information. These technological devices include:

computers, the internet, broadcasting technologies, telephones etc. In recent years, there has been a ground swell of interest on how computers and internet can best be harnessed to improve education of the deaf and hard of hearing students at all levels in the inclusive education settings/classrooms where they are to compete favourably with their non hearing impaired individuals.

Ekanem (2009), on the other hand holdsway that Assistive technology devices/ICT facilities have also proven to increase the performance over and above what used to be and the maximization of the potentials of the special needs children in general and students who are hearing impaired in particular. ICT/AT devices have now become essential components of the Special needs education system which attempt to increase access and provide quality education to all learners despite the degree/severity of the disability.

But Hasting (2006) bemoaned that despite the significance of the AT devices/ICT facilities in the education of the individuals/students with hearing impairment in the inclusive school environment, obtaining appropriate equipment ranging from hearing and visual aids to electronically adapted mobility devices, to walk frames for the physically challenged and so on, to better the lots of these students in an inclusive education setting has continue to be a mirage due to poor funding education in Nigeria.

## **4.3.3** Teachers' training in the regular school setting and effective implementation of inclusive education programme in Nigeria.

The result of the third hypothesis revealed that there is a significant positive relationship between teachers' training in the regular school setting and effective implementation of inclusive education programme. The finding of this hypothesis is in line with view of Ewa (2013) who opined that appropriate preparation of educational personnel especially teachers stand out as a key factor in promoting progress towards inclusive education of the students with hearing impairment. Good and effective teaching is the key to effective learning in the inclusive classroom learning environment. No doubt good teaching normally emanate from good teachers who are trained and equipped with appropriate skills. It involves skills and the ingenuity of the teachers to restructure the curriculum, redesigned the environment and changes one's behaviour so that the learners with impaired hearing would have experiences, resources and support they need to develop their sensibility, compassion and intelligence. Moreover, the teacher is the initiator of the learning process, the facilitator of

the learning skills and is regarded as the single most important factor of fostering the frontiers of knowledge in the inclusive education setting.

Winter and O'Raw (2010) also corroborated that, central to successful inclusion of the students with hearing impairment in particular and the Disabled generally is the role of the mainstream teachers who take the ownership of inclusion and belief in their own competence to educate students with special educational needs. This may present a challenge since the underlying assumption has been that students identified as having special needs belong to a different place as well as different pedagogical category, and thus could not be taught successfully by ordinary teachers. Avramidis & Norwich (2002) also stated that teachers' effective practices are central to inclusion and a number of studies have explored this theme. Among elements of practices identified as supporting effective inclusion of students with special educational needs are: A: Scaffolding, B: Modeling, C: Contingency management and other effective instructional methods, such as feed backs. Collaboration and team work are also essential aspects of inclusive practice, according to recent research.

In line with the findings, Hunts (2003) also noted that the role of the specialist educator needs to be re-examined and redefined if inclusion is to be successful. Apart from providing individualized instruction, potential roles include adapting curriculum, co-teaching, supporting the mainstream class teacher through team work, training, support staff such as classroom assistants and selecting and adapting materials to suit the visually impaired and other groups in the classroom. In general, International research evidence suggests that the success of inclusion stand or falls on the availability of in-class support.

Furthermore, with respect to the current trend on inclusion, it is required that children with handicapping conditions are educated in the inclusive education environment. In that wise many children with special educational needs would be found in the regular classrooms. Hence the regular teachers will be faced with the responsibility of teaching them. This does not mean wholesale abandonment of the students with hearing impairment and other category of special needs learners from the special resources available to them in the past. It does means that such children will be spending more of their school time in the regular classes. Here, they will continue in most cases to receive direct assistance from specially trained persons/teachers on part time basis or indirect assistance via the classroom teacher who in turn would receive instruction and help from the special education teacher(s) serving as a

resource person. In any case, the regular class teacher would have an increased responsibility in the education of the special needs children/students with hearing impairment.

Likewise Ladbrook (2009) also posited that inclusive education demands new competency in teaching methodology which requires recognition of multiple intelligences and learning styles and also welcomes differences. Furthermore, new perspective in the dynamic pedagogy in the inclusive education setting no longer allows the teacher to teach as if all learners learn the same way or at the same pace. Outcome education based education is meant to empower teachers to achieve success in their newly defined roles in the inclusive classroom. Therefore, teachers as the principal implementers of inclusive education, hold the key to its successful implementation. It is the teachers who have to educate each and every learner under their care. Their challenges are multifaceted in dealing with the students with hearing impairment in the inclusive education classrooms and are expected to live above board.

Today some children have a shaky schedule of values; lack positive and ideal role models and as well some come from divorced or single parent homes. Therefore apart from their roles as educators; teachers play duplicated roles of mother and psychologist, social worker, nurse and a minister or spiritual guide, counsellor and friend to the special needs students with hearing impairment in the inclusive education environment.

Teachers at times feel ill equipped to face these challenges of broken homes, child headed families, child abuse, rape, incest, drug abuse, violent crimes among others which are on the increase in the society and serve as threat posers to the inclusive education chagrin. Teachers therefore, as part of the dynamic and multilevel ecosystem in the inclusive education programme need to be versatile and competent to have all areas of needs of the students with hearing impairment addressed as to enable them (Hearing impaired students) successfully faced the challenges found in the inclusive classroom environment.

As noted earlier, no single acceptable definition and the practice of inclusion has been fully articulated by the teachers. Some groups, especially in the US, differentiate between inclusion and full inclusion. Advocates of full inclusion support the notion that the presence of all students with disabilities in general and students with hearing impairment in particular in regular classes will force an end to the type of traditional instructional practices they oppose. Sapon-Shevin (20001) noted that while placement options such as special classes or schools

exist, educators (teachers) will not have to address the restructuring of the system to meet the needs of all children. Where alternate placements are maintained, students who pose challenges to the existing system or who do not 'fit in' are simply removed from the mainstream, placed elsewhere, and the system does not have to change'. She suggested further that the belief that some students cannot be included is based on the false assumption of a lock-step curriculum. A lock-step curriculum is one in which all students complete the same lessons at the same time. The world is an inclusive community; since the school is a macrocosm of the community, therefore, it is very important for the children/students with hearing impairment to grow within the school communities that represent the kind of world in which they will live when they finish school.

# 4.3.4 Government commitment to the course of inclusion of the students with hearing impairment into regular school setting and effective implementation of inclusive education programme in Nigeria.

The result of the fourth hypothesis indicated that there is a significant positive relationship between Government commitment to the course of inclusion of the students with Hearing impairment into regular school setting and effective implementation of inclusive education programme in Nigeria. The finding of this hypothesis is in agreement with the view of Najjingo (2004) and Ewa (2013) who observed that serious Government involvement in and commitment to the development of special education in Africa began in Nigeria, Kenyia and Zimbabue in 1976, 1977 & 1980 respectively, when the Universal Primary Education (UPE) was introduced in those countries. Even though the UPE is a global education programme, it has nonetheless engineered an all inclusive education development. Several policy statements were enacted by the different countries; for instance the Nigerian National Policy on Education 1977, revised in 1981, 2000, 2004, the Blue Print on Education of the Handicapped Persons in Nigeria, 1993. Kenyia started all inclusive education programmes by establishing education administration and inspectorate in 1977 while Zimbabue serious concern began with the adoption of the universal primary education programme in 1980. All these states accepted the responsibility of training teachers in special needs education through their Policy statements in relation to having special needs education hazy and often embodied in global policy pronouncements.

Olayi & Ewa (2013) also stated that special education services in Nigeria remained under the control of the missionaries and voluntary agencies until 1975, when the various Governments of the federation decided to embrace meaningfully the provision of special education services to Nigerians with disabilities. This noble position of the Government to get involved in building on the foundations laid by the missionaries and voluntary agencies was a worthwhile venture. As can be seen, for the first time, Government through the Federal Executive Council approved rehabilitation programme for Nigerians with Disabilities is propelled across the states of the Federation. This action was in line with the United Nations Resolution and the declaration of the Decade for the Disabled Persons (1983-1993), as well as the International Year for the Disabled Persons (IYP). This Government commitment served as renewed hope for the Disabled Nigerians (Ogohojafor, 1995). Thus apart from the various Governments working to better the lives of Nigerians living with disabilities, some of the achievements/gains recorded by Mba 1982 include:

- Awarding of scholarship to interested Nigerians in the field of special education, both able and disabled to study special education abroad.
- The establishment of special education units at the Federal and various states Ministries of Education.
- The establishment of Institutions/Departments of Special Education for teacher preparation.
- The involvement of the Nigerian Education Research and Development Council (NERDC), in the research into the field of special educational services in Nigeria.
- The evolution of many more states own Special Schools in the federation.
- The inclusion for the first time special education issue in the National Policy on Education in 1977.

The inclusion and recognition of special education practices also reappeared in the 1981, 1998, 2000 & 2004 versions of the NPE. Another document worthy of note which demonstrated the Nigerian Government commitment to her citizens with special needs was the design of the Blue Print on the education of Handicapped persons in Nigeria. Also, by 1993, the Federal Government promulgated a decree providing for the legal protection of the Rights of the Disabled Nigerians to education, vocational training, and means of livelihood for independent living, housing and so forth. However, the provisions when compared with those of other developed and developing countries fall short of expectations of the

professional and beneficiaries. The provisions are scanty and too general for effective and successful implementation.

Again, the establishment of Special Schools was legitimatelized and the curriculum designed for different conditions of disability, this yet was another flaw because not all stakeholders including Special Education professionals made any input in the document. Next were the efforts of the Nigerian Government in the year 2000 was yet to legislate on the integration of the Disabled which unfortunately could not scale through. Hence, the Bill was only concern with social integration and falls short of comprehensiveness. Silverstein (2000) observed that the Disability Policy Framework (the Nigerian Bill) should have provided a professional guidance for developing and executing integration.

Adelowo (2006) also observed that the caption itself by inserting the word 'discrimination' was not encouraging. Furthermore, the content of section 2(6), 2(3) appeared contradictory and seems to support discrimination and segregation which is another feature of too many uncoordinated efforts aimed at solving a single problem. This document would have augur well if it had cognizance of the contributions of the advocacy groups, Disabled persons Organizations(DPOs) themselves and professionals in the field of Special Education and then synchronized with the earlier ones rather than focusing on the opinions and viewpoints of politicians.

Ozoji (2006) also pointed out that the contemporary educational programming for the students with hearing impairment, that is inclusion, came into effect in 1994 following its adoption at the Salamanca conference in Spain. Nigeria was in attendance of the conference and also a signatory to the new policy. The author observed that other countries have made significant progress in trying to implement inclusive education in their countries. But Nigeria on the other hand since its world adoption, is still raising awareness about what it is. This suggests that how to get it implemented is yet to be addressed very seriously. Instance of this can be seen as the National Policy on Education (NPE) (2004) only gave a tacit acknowledgement of inclusive education without any strong policy statement or directive to back it up as "Inclusive education or integration of special classes/units into ordinary or public schools under the UBE pg 49".

Despite all robust efforts put forth by the government on the course of inclusive education in Nigeria, the finding of this hypothesis is in avarice with the works of Nwazuoke (2010) &

Obi, (2013). Nwazuoke (2010) maintained that inclusive education programme for the students with hearing impairment in Nigeria cannot succeed under the present circumstances beret with poor infrastructural facilities, poor funding of special needs education, inadequate preparation of personnel for the programme including the absence of all necessary training equipment/materials for our teachers in training in our various higher institutions offering courses in special education as well as the absence of proper legislation and technological devices in our schools to be used by teachers and the students with hearing impairment respectively.

He observe further that inclusive education programme for this category of students in Nigeria has a far reaching implications and is bedeviled in the areas of personnel preparation, pedagogy, curriculum, learning environment, funding, conditions of service, school management structure, monitoring and evaluation. If the goals of inclusive education for students with hearing impairment are to be achieved in Nigeria, he calls for adequate attention to be paid to areas concern with personnel preparation for it is a very critical factor. Therefore capacity building in support of inclusive education for all categories of individuals living with disabilities should apart from training and turning out graduate specialists in managing the special needs children, should also focused in the training of regular classroom teachers so as to be able to respond appropriately to the challenges posed by the students with hearing impairment in the inclusive education classroom environment.

In the same vein, Obi (2013) sounded a warning that special education services provision for students with hearing impairment in the inclusive education setting in Nigeria is never synonymous with the Government building more special schools, nor merely placing students with hearing impairment in the regular schools and classrooms. Services provision for the special needs hearing impaired students in the inclusive educational setting entails a total rethink, careful planning, adequate and appropriate funding, legislation, the provision of basic infrastructure and materials, removal of all forms of barriers, attitudes refinement, an accessible library/classrooms, access to appropriate use of assistive technology (AT) devices and a competitive curriculum that will eventually earned the students with hearing impairment a place and recognition in the mainstream society of Nigeria in particular and other parts of the world in general.

## 4.3.5 The availability of supportive staffs in the regular school environment and effective implementation of inclusive education programme in Nigeria.

The result of the fifth hypothesis revealed that there is a significant positive relationship between the availability of supportive staffs in the regular school environment and effective implementation of inclusive education programme. The finding of this hypothesis is in agreement with the findings of Aiyeleso (2007) who observed that multidisciplinary approach is very essential in the provision of comprehensive services to any group of the special needs children in general and those who are hearing impaired in particular in the inclusive education environments. Multidisciplinary team approach is essential as it facilitates initial assessment of the clients (students with hearing impairment), to determined the degree of hearing loss, create room for appropriate educational placement options, recommendation of the use of appropriate assistive technology devices where necessary, providing medical services and treatment and as well rendering vocational training and counselling services to ensure proper adjustment of the students with hearing impairment for optimal benefits and to reduce the psychological effect of the hearing impairment on the individual student.

The supportive staffs provide ancillary services and work in pari -passau the teachers and other stakeholders in the bandwagon of inclusive education to ensure effective implementation of the inclusive education programme. Among this group are included: Educational interpreters; Nurses/medical personnel; audiologist; social workers; psychologist; guidance counsellor and a host of others.

Ewa (2006) also observed that educational /sign language interpreters are qualified specialists/professionals that serve as a link between a teacher and the Hearing impaired student in the classroom or between the students with hearing impairment and other hearing members of the society. The role of the educational sign language interpreter is to facilitate communication for the students who are hearing impaired with other members of the hearing world. A sign language interpreter serves as link between the students with hearing impairment and their hearing counterparts in many ways:

It may be as an educational link between the individual student who is hearing impaired and a learning process or it may be a communication link between the students with hearing impairment and the peer with intact hearing. Most of the students with hearing impairment stand not to benefit much from oral communication/language as a result of the degree of their hearing loss. This is possible because most of the spoken words are not visible on the lips thereby marring the ability to lip reads. The sign language interpreter therefore helps to bridge the communication gap by mediating between the two parties. So also in some situations, the sign language interpreter role complements the students with hearing impairment use of assistive technology devices in the inclusive educational setting. The oral sign language interpreter mouths speech to the students with hearing impairment using facial and other bodily expressions while signing. The cued speech sign language interpreter on the other hand mouths the words to the students with hearing impairment and as well uses the hand signs.

In cognizance with the finding of the hypothesis, Obani (2006) echoed that for effective inclusive education programme to hold sway for the students with hearing impairment in Nigeria, some special arrangements and adjustments need to be made in the school practices. Also, some specialized attention and handlings will be needed. The special and peculiar arrangements will include the provision and use of special teaching/learning equipment and materials to facilitate learning for the students with impaired hearing. Some specially trained staff will be recruited to provide specialized teaching and services not provided/given or expected in the regular classes/schools. Such specially trained staff would include: special education teachers and supportive staff such as sign language interpreters, audiologists; class attendants; counsellors and so forth for optimal functioning of the students with hearing impairment in the inclusive education setting.

Likewise Ozoji (2006) also pointed out that classroom teaching is just one aspect of the many services the special needs children need in the inclusive education setting. Undue emphasis on the instruction to the neglect of other equally important services may not yield the expected results. Hence the education is neither appropriate nor balanced. Other services needed in the inclusive education setting include: counselling services; interpretation services; assistive and adaptive technology services; information and communication technology (ICT); recreational services; nurses/medical services; transition training for the children to equip them adequately for the challenges outside the school and the Individualized Education Plan (IEP).

Re-echoing on the significance of the sign language interpreters, the president of the Nigerian National Association for the Deaf (NNAD), Mallam Sulleiman Dagbo on the 11<sup>th</sup> October, 2011 at Abuja-Nigeria, expressed concern over the low number of skilled sign language

interpreters in the country. This according to the president is incapacitating the involvement of hearing impaired individuals in national activities. He pointed out that sign language interpreters would bridged the current information gap which placed the persons with hearing impairment in Nigeria at a disadvantage in accessing information especially that involving oral communication.

According to Mallam Dagbo, Deaf/hard of hearing individuals are being marginalized in the scheme of affaires in the country due to the public misconception of deafness and the ability of the Deaf community to speak out at the appropriate time. He emphasized that having sign language interpreters was part of the fundamental Rights of members of the Association and urged the Government to assist in this regards.

The NNAD president equally urged Nigerians to encourage the individuals with hearing impairment to achieve their full potentials without discrimination in the inclusive schools or outside school environment. He further pointed out that the home and school environments of the child with hearing impairment must continuously provide appropriate motivating and progressive ingredients such as parental love and care, discipline, communication, interaction and adequate exposure to social function and realities of life.

Also speaking on the special education schools for the Deaf, President Dagbo said that there was need for Federal, State and Local government to restructure the existing schools for the Deaf in the country to meet international standards. Moreover, the inclusive education school environment should make provisions for qualified and skilful sign language teachers and a rich learning environment for the persons with hearing impairment in Nigeria.

### 4.3.6 The provision of educational service resources between the Northern and Southern geo-political zones and effective implementation of inclusive education programme in Nigeria.

The result of the sixth hypothesis revealed that there is no significant difference in the provision of educational service resources between the Northern and Southern geo-political zones of Nigeria and effective implementation of inclusive education in Nigeria. The finding of this hypothesis is in agreement with the findings of Ohiaeri (2006), who identified the educational resources needed for proper education of students with hearing impairment in an inclusive education setting in Nigeria to include: Audiometers, group and individual hearing

aids, bone conductor telephone receiver (optional), slides, overhead projectors, film projector and film scripts, television sets, tunning forks, drums, rattles, traditional manual alphabet charts, refractors, mirrors, sound magnifiers etc.

In the same vein however, the Federal Government of Nigeria in her desire to purse the course of successful implementation of inclusive education of students with hearing impairment, posited in the country's National Policy on Education (2008) that: All necessary facilities, equipment, materials and other assistive technology devices that will ensure easy access to quality education of persons with special needs in general and students with hearing impairment in particular shall be provided for in all inclusive schools, eg ramps, wider doors, Perkins Braille, brailled text books, white/mobility canes, abacus, talking watche, talking calculators. hearing aids. audiometers. speech trainers. ear mould machines, educational/psychological toys, callipers, prostheses, crutches, wheel chairs, standard library, audiovisual equipment, internet facilities etc. But the reality of this big dream is yet to be come by (Ewa, 2013).

The result of the hypothesis further agreed with the works of Adima (2000) Ayadu (2008), Okeke & Navan (2005), Agba, Olayi & Ewa, (2010), uphold that the availability of educational resources and facilities in the regular school setting is very important for effective inclusion of persons with disabilities in general and individuals with hearing impairment in particular.

The authors contended that good classroom and facilities are capable of attracting more learners with hearing impairment in the regular school setting thereby embracing literacy education for optimal development.

The authors therefore advocated for the provision of specious classrooms with good seating arrangement and proper lighting to illuminate the teacher and interpreter during teaching and learning process in the inclusive classroom environment. Hence with the provision of all learning resources, learing will become real for the students with hearing impairment thereby facilitating successful implementation of inclusive education for this category of students.

Ofre (2015) puts it that generally; poor funding in the Nigerian system of education has characteristically given birth to inadequacy in the provision of facilities, books and other educational resources in the regular school setting.

Speaking further in comparison on the provision and availability of the assistive technology devices and other educational resources in schools located in the northern and southern parts of the country, the author upholds that most schools in the southern part of Nigeria lack basic facilities and other educational resources that will facilitate effective implementation of inclusive education of the students with hearing impairment in comparison with their counterpart schools in the northern part of the country.

Moreover the result of the hypothesis is in line with the research carried out by Agba, Olayi & Ewa (2010), on the deployment and availability of educational resources in tertiary institutions in Nigeria, where the researchers' submitted that the schools located in the northern geo political zone of Nigeria are better equipped that those found in the southern part of Nigeria.

Similarly the findings of this hypothesis is further corroborated by the works of Goni & Nkwoagba (2013),in their research on the availability and use of AT devices and other educational resources in schools located in the northern parts and southern parts of the country respectively, the result indicated that the schools in the northern geo political zones in the country are better equipped that those located in the southern geo political zones. This feat may be possible as a result of the public outcry of the ravage and wanton destruction of lives and property occasioned by terrorist acts in the northern axis of the country.

It is necessary to submit that irrespective of what is obtainable in the northern parts as a result of the spate of Boko Haram and other terrorist groups, the distribution of educational resources should be even as this is the main tenet of the country's National Policy on Education.

# 4.3.7 Summary of the executive interview responses from the Commissioners of Education, Heads of Ministries and Departments and other service providers as major key players in the implementation of inclusive education in Nigeria.

On the subject matter of knowledge and awareness about inclusion, the respondents accepted that they all have full knowledge about inclusion since Nigeria is a signatory to the inclusive education pack at the Salamance Freamework for Action in 1994. The awareneness is very high in all the six geopolitical zones.

In terms of practicing inclusive education in Nigeria, the respondents made it known that inclusive education is yet to be fully implemented in the Nigerian school system even though it is captured in the Nation's National Policy on Education.

In terms of creating awareness about the inclusive education programme in the country, the respondents accepted that it has been on going and it done through the organization conferences, seminars, workshops for both regular and special education teachers, print and non print media.

As for the idea of including the students with hearing impairment into the regular school programme, the respondents accepted that it is a worthwhile venture since the students with hearing impairment constitute a micro some unit of the general population. Hence their inclusion in the schoolsystem will go a long way at improving their living condition and degree of social interaction with the generality of the population.

The respondents across the six geopolitical zones made it categorically clear that inclusive education has not fully taken off in all the schools in the Federation. It is rather still being pilot tested in some of the states.

With reference to the question on attitudes, the respondents agreed that the general attitudes of the public toward individuals with disabilities in general and students with hearing impairment in particular has gratly improves and is quite acceptable. To demonstrate the level of acceptance, the respondents indicated that they would not be perturbed should the students with hearing impairment be placed in the same class with their children with intact hearing.

In terms of creating separate classes/schools for students with hearing impairment, the respondents rebuffed the idea that it is a measure meant to encourage discrimination, exclusion and segregation.

Government commitment: The respondents made it known the Government is really interested in the practice of inclusive education programme; hence it has been captured in the National Policy on Education and is doing everything possible to ensure that the programme is implemented.

With reference to funding, the respondents decried that funding has been a general problem in the education sector and that with the migre resources available, Government is doing its best to make sure that inclusive education programme comes to stay.

In terms of legislation, the respondents made it known that many Bills on Disability Acts have been formulated but are yet to be passed into law for the benefit of persons with disabilities. The respondents further gave assurance that the government has put machinery in place to ensure adequate monitoring and supervision of the inclusive education programme in order to facilitate its implementation.

With reference to the level of preparation, the respondents gave assurance that much has been put in place by both the Federal, States and Local government Educational Authorities to see to it that the inclusive education programme is a success in the country.

As for the facilities and educational resources, the respondents pointed out that though lack of adequate funding is grievously affecting this key issues but the government is not leaving any stone unturned. Accordingly, schools are being renovated taking into account the presence of persons with disabilities in the regular school environment.

In terms of the provision of Assistive Technology(AT) devices used by the students with hearing impairment in the inclusive schools, the respondents made it known that noa all the schools have been installed with such gargets but efforts is geared towards achieving the dream.

On the issue of maintenance of the AT devices, the respondents made it known that many staff have been sent on in service and on the job training both within and without the country to acquire the skills of maintaining the AT devices. The respondents out rightly rejected the idea that the provision of the AT devices and other educational materials is only the sole responsibility of the government, rather it a shared venture by both government, public spirited individual(s), NGOs and private sector.

The respondents made it known that teachers are recruited through advert placed by the government and those found qualified were interviewed and given job placement in the inclusive school setting. In terms of teacher training, most of the teachers sent on in service training programmes, while some other are trained through conferences, seminars, workshops etc. The respondents confirmed that the supportive staff are very essential if the inclusive

education programme must sour higher in the country. They equally corroborated that multidisciplinary approach is the most ideal approach to be adopted for the practice of inclusive education in Nigeria.

With reference to monitoring and evaluation, these key players in the inclusive education practice in Nigeria applauded that government was not taking things for granted. The various Ministries of Education both at the federal and state level of education have been saddled with the responsibilities to make sure the proceeds of the inclusive education programme are properly harnessed and delivered to the clients concern in the Nigerian education sector.

#### **CHAPTER FIVE**

#### SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter is specifically concerned with the summary and conclusion of the entire research work. The chapter is therefore presented under the following sub-headings:

- Summary of the study
- Conclusion
- Recommendations
- Suggestions for further studies

#### 5 Summary of the study

The main purpose of this study was to evaluate existing service provision for the students with hearing impairment and the conditions necessary for effective implementation of inclusive education programme in Nigeria. To achieve the purpose of this study the following five null and one alternate hypothesis were formulated to guide the study.

#### **5.1 Research Hypotheses**

For the research work to be worthwhile and serve the purpose for which it was conceived, the researcher formulated five null and one alternate research hypotheses to guide the study:

- 1. There is significant relationship between positive/negative attitudes toward students with hearing impairment in the regular secondary schools environment and effective implementation of inclusive education programme in Nigeria.
- 2. There is no significant relationship between the students with hearing impairement use of Assistive Technology (AT) devices in the inclusive secondary schools and effective implementation of inclusive education programme in Nigeria.
- 3. Teachers' training in the regular school setting does not significantly have a relationship with effective implementation of inclusive education programme for the students with Hearing impairment in Nigeria.
- 4. There is no significant relationship between Government commitment to the course of inclusion of the students with hearing impairment into regular school setting and effective implementation of inclusive education programme in Nigeria.
- 5. The availability of supportive staffs in the regular school environment does not significantly influence effective implementation of inclusive education programme for the students with impaired hearing in Nigeria.
- 6. There is no significant difference in the provision of educational service resources between the Northern and Southern geo-political zones of Nigeria and effective implementation of inclusive education in Nigeria.

Literature was reviewed according to the variables under study. Survey research design was adopted for the study. This design was considered appropriate because it allows the researcher to make inference and generalization of the population by selecting and studying the sample for the study. Samples of seven thousand four hundred respondents were randomly selected for the study. The selection was done through the simple random sampling technique. This was to give equal and independent opportunity to all the members of the population to be selected for the study.

The questionnaire and executive interview were the main instruments used for data collection. The instruments were subjected to both face and content validation by the supervisor and experts in measurement and evaluation in the Faculty of Education, University of Calabar. The reliability estimate of the instruments was established through split-half reliability method. The reliability co-efficient from the split-half was corrected with Spearman Brown Prophesy Formular. Pearson Product Moment Correlation Analysis and independent t-test were the statistical analysis techniques adopted to test the hypotheses under study to

ascertain whether to reject or retain them. These statistical tools were used because of the nature of the variables involved in the study. All hypotheses were subjected to testing at .05 level of significance with relative degrees of freedom. The results of the analysis revealed that, positive/negative attitudes toward students with hearing impairment in the regular secondary schools environment is not significantly related to effective implementation of inclusive education, while the students with hearing impairment use of Assistive Technology (AT) devices in the inclusive secondary schools, teachers' training in the regular school setting, Government commitment to the course of inclusion of the students with hearing impairment into regular school setting and the availability of supportive staffs in the regular school environment have significant relationship with effective implementation of inclusive education programme in Nigeria. The study also revealed that there is no significant difference in the provision of educational service resources between the Northern and Southern geo-political zones of Nigeria and effective implementation of inclusive education in Nigeria. Based on the findings of the study, recommendation and suggestions for further studies were made.

#### **5.2** Conclusion

Based on the results and findings of the study, the following conclusions were reached.

- 1. There is no significant relationship between positive/negative attitudes toward students with hearing impairment in the regular secondary schools environment and effective implementation of inclusive education programme in Nigeria.
- 2. There is a significant relationship between the students with hearing impairement use of Assistive Technology (AT) devices in the inclusive secondary schools and effective implementation of inclusive education programme in Nigeria.
- 3. Teachers' training in the regular school setting significantly has a relationship with effective implementation of inclusive education programme for the students with hearing impairment in Nigeria.
- 4. There is a significant relationship between Government commitment to the course of inclusion of the students with hearing impairment into regular school setting and effective implementation of inclusive education programme in Nigeria.

- 5. The availability of supportive staffs in the regular school environment significantly influences effective implementation of inclusive education programme for the students with impaired hearing in Nigeria.
- 6. There is no significant difference in the provision of educational service resources between the Northern and Southern geo-political zones of Nigeria and effective implementation of inclusive education in Nigeria.

#### **5.3 Recommendations**

Based on the findings of the study, the following recommendations were made:

- 1. A shift from negative to positive attitudes should continue to be encouraged in the inclusive education setting. This can be achieved through proper education about disability and its myriad causes. Moreover, parents, teachers, students with intact hearing and other stakeholders in the education of the students with hearing impairment in the inclusive school environment should be made to be aware that hearing impairment is not a contagious disease or impairment. The enlightenment campaign can be carried out both through print and non print media in order to reduce stigmatization, labeling, exclusion and misconceptions about students with hearing impairment but rather see the ability in disability in this category of persons.
- 2. In tact hearing plays a major role in the socialization process of any human in the society. The absence of complete or partial hearing in students with hearing impairment poses a threat to their process of socializing. Therefore the need for the provision of assistive technology (AT) devices in the inclusive school environment cannot be overemphasize. All forms of assistive devices needed by the students with hearing impairment for optimal functioning in the inclusive school environment and the society at large should be provided by both parents, government and other stakeholders in the education of the special needs children in general and students with hearing impairment in particular in the inclusive education setting.
- 3. Teachers have been identified as the major catalyst in the inclusive education sailing boat. Hence for the inclusive education sailing boat to land safely on the shore, there must be continuous training and re-training of the teachers to meet the present global trend in service provision to the students with hearing impairment. Teachers in the inclusive education setting in Nigeria need to be acquainted with new innovations in

technology and other instructional strategies in service delivery to match with global best practices in special needs education. Divergent approaches needed be put in place to invigorate the teachers in the discharge of their duties in the inclusive education setting through on the job man power development, in service training, seminars, workshops, conferences and personal innovations.

- 4. Government has been identified as the major key player among other stakeholders in the inclusive education practice in Nigeria. Though much has been done by the government to some extent to make the dream envisaged at the Salamance Framework for Action comes true, but it needed not rest on its oars, concerted efforts of providing all the necessary infrastructures and resources should be put in place through adequate budgetary allocation for proper funding, proper legislation to avoid infrastructural decay, adequate personnel provision, continuous monitoring and evaluation of the inclusive education programme. Moreover, a clarion call is made to all stakeholders in the provision of educational and rehabilitation services to students with hearing impairment not to shy away but work hand in hand with government for the utmost development of the students with hearing impairment in the inclusive education setting in Nigeria.
- 5. Multi-disciplinary approach should be adopted in service delivery to students with hearing impairment in the inclusive education environment. Supportive staff should work as a team with other personnel for the successful implementation of the inclusive education programme in Nigeria.
- 6. Adequate educational facilities and resources should be provides in all nooks and cranes of the society in Nigeria, without concentration in a particular geo political zone as the students with hearing impairment cut across the length and breadth of the country, Nigeria.
- 7. The practice of inclusive education under the Universal Basic Education (UBE) programme in Nigeria should not only be in theory but should translates into practical where all the necessary facilities and resources are put in place for the utmost development of the special needs students in general and students with hearing impairment in particular to contribute his or her quota to the full development of a just and egalitarian society in Nigeria.

- 8 Inclusive education programme should be reviewed regularly to ensure that it continues to meet the needs of the students with hearing impairment in particular and other category of special needs persons in general.
- 9 Diverse and specialize professional development options must be provided that will allow for teachers/supportive staff gain experiences which can help meet the needs of the students with impaired hearing appropriately in the inclusive education setting.
- 10 The education of learners with special needs especially students who are hearing impaired requires experts working together. This is because collaboration is beneficial to individual teachers, learners and the school system as a whole, for it ultimately leads to improvement in appropriate service delivery in the education of the special needs persons in the inclusive education package.
- 11 In service training should be on going for it promotes lifelong professional development for teachers in the inclusive education environment. This is consequent upon the fact that teachers stand to benefit profoundly from comprehensive in service training/retraining so as to facilitate individual learning.
- 12 Urgent consideration should be given to addressing the apparent poor social images of learners with special needs who are included in regular classroom setting through refinement of attitudes.
- 13 Effective collaboration should be ensured in the inclusive education system as this has the potentials to promote greater confidence, competence and professional relationship and communication as well as enhances the planning and delivery of inclusive education services to all Nigerian with disabilities and the world at large.
- 14 Government should as a matter of urgency pass the Disability law backing the delivery of services to the special needs persons in Nigeria.
- 15 Government should show commitment in inclusive education through adequate budget and funding of the programme.
- 16 For the inclusive education programme to positively impact the special needs persons in Nigeria, adequate and appropriate assistive technology devices, supportive staff, teachers (special/regular), school re-engineering, infrastructure and facilities should be put in place by all stakeholders of education in the country.
- 17 For personal and societal development, all the students/individuals with hearing impairment who have benefited from the inclusive education programme should be given appropriate job placement to enable them transfer what they have acquired in

the learning environment into practice to ensure/boost self worth of being a contributing member to the development of the society.

#### **5.4 Suggestions for further studies**

Based on the limitations of the study, the following suggestions were made for further studies:

- i. A replication of the study should be carried out again covering the six geo political zones under study to ascertain the validity and reliability of the present study.
- ii. A similar study should be carried out on the variables that are not incorporated in the present study.
- iii. A study on the challenges of effective implementation of inclusive education practices in Nigeria in view global best practices should be carried out.

#### REFERENCES

- Abang, T. (2005), the exceptional child: Handbook on Special Education. Jos-Nigeria: Fab Anieh (Nig) Ltd.
- Abosi, O. C. & Ozoji, E. D. (1985), Educating the Blind. Ibadan: Spectrum Books Limited.
- Adebowale, A.A., & Makinde, A.O. (2012), Inclusive education programme for children with Hearing impairment in primary school setting. In E.D. Ozoji Ph.D, I.A. Kolo Ph.D & T.A. Ajobiewe Ph.D (Eds) Contemporary issues in Guidance, Counselling and Special Needs Education. Ibadan-Nigeria: Glory-land publishing Company. 154-168.
- Adelowo, T.O. (2006), Education and human development of the special needs child: A global view. In T.C. Obani (Ed) Teaching pupils with special educational needs in the regular UBE classroom. Ibadan-Nigeria: Book-Builders. 1-36.
- Agba, J.U., Olayi, J.E, & Ewa, J.A. (2010), Deployment and use of assistive technology devices among special needs persons in Nigeria. The Special Educator, journal publication of Nigeria Association of Special Education Teachers (NASET) 8 (2).80-94.
- Agwu, A.O. (1980), Helping the Blind within the Nigerian society. A project submitted to the Department of Special Education. Ibadan: University of Ibadan.
- American Speech Hearing Language Association, <u>www.asha.org</u> retrieved on the 22<sup>nd</sup> July, 2014.
- Ainscow, M. (1994), Special needs in the classroom: A teacher education guide. Paris: UNESCO.
- Ainscow, M. (2005), Developing inclusive education system: what are the levels for change? Journal for Educational change 6, 109-124.
- Ainscow, M., Booth, T., Farrel, P. & Smith, C.M.M. (2006), Improving schools developing inclusion.London: Routledge.
- Ainscow, M., Farrell, P. & Tweddle, D. (2003), Developing policies for inclusive education: A study of the role of local education authorities. International Journal of Inclusive education 28 (1), 24-29.

- Ajavon, P.A. (2006), An overview of Deaf Education in Nigeria. Retrieved @ International Deaf children's society Resource Library, <u>www.idcs.info</u> on the 22<sup>nd</sup> July, 2014.
- Ajuwon, P.M. (2008), Inclusive education for students with disabilities: Benefits, challenges and policy. International Journal of special education 23 (3).
- Ajuwon, P.M. (2012), Accommodations in National Examinations in Nigeria: Analysis of the experiences of candidates with Disabilities. In E.D. Ozoji, Ph.D, I.A. Kolo Ph.D & T.A. Ajobiewe Ph.D (Eds) Contemporary issues in Guidance, Counselling and Special Needs Education. Ibadan-Nigeria: Glory-land publishing Company.
- Akinpelu, G. (2000), integrating the special needs children in the regular school. Abuja: Federal Ministry of Education.
- Ali, M.M., & Jelas, Z.M. (2006), An empirical study on teachers' perception toward inclusive education in Malaysia. International Journal of Special Education, 21 (3), 36-44.
- Antonak, R. (1988), Methods to measure attitudes towards people who are disabled. In N.Yuker (Ed) Attitudes toward persons with disabilities. New York, the USA: Springer publishing company. 109-126.
- Aiyeleso, M.M. (2007), Programmes and services development for persons with Hearing impairment. Journal of Exceptional Children (NCEC). 6 (2) 42-49.
- Anderson, G. & Arsenault, N. (2010), Fundamentals of Educational Research (2<sup>nd</sup> ed). Pennsylvania USA: The Falmer Press.
- Avoke, M. (2005), Inclusive education for persons with disabilities: General overview. African Journal of Special Education Needs IV (1).
- Awotunde, P. O. & Ugodulunwa, C.A. (2002), An introduction to statistical methods in education (new edition). Jos: Fab Anieh (Nig.) Ltd.
- Ayoku, F.A. (1996), Employment opportunities for the visually handicapped in Nigeria: A perspective. In T.A. Adedoja, T. Ajobiewe & M.A. Alabi (Eds), Family, school, community and Government involment in Rehabilitation of the Handicapped. Oyo-Nigeria: Sped publications.

- Babalola, O. (1980), A surveyof the employment opportunities of Deaf primary school leavers in Oyo state of Nigeria. Oyo: NCEC publications.
- Barton, L. (1999), Market ideologies: Education and the challenges of inclusion. In H. Daniels & P. Gartner (Eds) Inclusive education: supporting inclusive education system. London: Kogan. 54-62.
- Beard, L.A., Carpenter, L.B. & Johnson, L.B. (2011), Assistive technology: Access for all students (2<sup>nd</sup> ed) Boston: PEARSON.
- Better Hearing Institute (2005), your guide on hearing. Alexandra, <u>www.BETTER</u> HEARING.org retrived on the 20<sup>th</sup> July, 2014.
- Bishop, M.B. (1972), Mainstreaming practical ideas for educating the Hearing impaired students. Rochester: New York.
- Bonder-Johnson, B.A. (1985), Families that work for the Hearing impaired child. The Volta Review, 87 (3), 131-137.
- Booth, T., Ainscow, M. (1998), Index for Inclusion: Developing learning and participation in schools. Bristol: Centre for studies on Inclusive Education.
- Booth, T. & Ainscow, M. (2002), Index for inclusion: Developing learning and participation in schools. Bristol: Centre for studies on Inclusive Education.
- Booth, T., Ainscow, M., Black-Hawkin, K, Vaughan, M. & Shaw, L. (2000), Index for inclusion. Bristol: Centre for studies on inclusive education.
- Campbell, J. & Oliver, M. (1996), Disability politics: understanding our past, changing our future. London: Rout ledge.
- Dagnew, A. (2013), Factors affecting the implementation of inclusive education in Primary Schools in Bahir Dar Town Administration, Ethiopia. International Research Journal, retrieved from the Internet @ <u>http://www.resjournal.com/ERJ ISSN 2026\_6332</u> @ 2013 on the 10<sup>th</sup> July, 2014.
- Davis, F. (1963), Passage through crisis: victims and their families. India: Polis Books.

- Department for Education and Skills (2004), Removing barriers to achievements: The Government's strategy for SEN. London: Author.
- Department of Education (1995), White paper on Education and training in Democratic South Africa. Pretoria: Department of Education.
- Department of Education (1997), Quality education for all: Report of the National Commission for Special Needs in Education and training (NCSNET) and the National Committee on Education support services (NCESS). Pretoria: Department of Education.
- Donaldson, D. (1980), Public attitudes toward the handicapped children. The Journal of Special Education. New York: Guinea and Stratton Inc. 10 (1) 536-540.
- Dyson, A. (1999), Inclusive and inclusion: Theories and discourses in inclusive education. InH. Daniel & P. Gartner (Eds) World Year book of education: Inclusive education.London: Kogan. 36-53.
- Dyson, A. (2001), Special needs in the twenty first century: where have we been and where we 're going (The Ron Gulliford lecture) British Journal of Special Education of Special education, 28 (1), 24-49.
- Easterbrooks, S. R. (2006), Deaf education: Encyclopaedia of educational leadership and administration. Boston: SAGE publication.
- Ekanem, M. (2009), The effects of teachers attitudes on inclusion: The practice and successlevel of children with and without diasabilities in physical education. Internaltional Journal of Special Education 23(3)48-55.
- Enabling Education Network (2004), Enabling Education, retrieved @ <u>http://www.eenet.org.uk</u> on the 15<sup>th</sup> July, 2014.
- Engelbrecht, P. (1999), A theoretical framework for inclusive education. In P. Engelbrecht, L. Green, S. Naicker & L. Engelbrecht (Eds) Inclusive education in action in South Africa. Pretoria: Van Schaik. 3-12.
- Eleweke, S..(2008), The self concept of people with disabilities. A Journal of Developmenta Medical and Child Psychology. Oxford: Blackwell Scientific Publisher.

- Etenesh, A. (2000), the role of teachers in the implementation of inclusive education. University of Addis Ababa: Unpublished Master's thesis.
- European Agency for Development in Special Needs Education Report (2004), Inclusive education and classroom practices in secondary education: Literature Review, retrieved @ <u>http://www.europeanagency.org</u> on the 20<sup>th</sup> July, 2014.
- Ewa, J.A. (2000), Regular students' attitudes toward the integration of the handicapped persons in some selected secondary schools in Calabar. Un-published B. Ed Research project submitted to the Department of Vocational & Special Education, Faculty of Education, University of Calabar, Calabar-Nigeria.
- Ewa, J.A. (2006), the effects of teachers' use of Total communication on English language achievement of Hearing impaired students in Special Education Centre, Calabar. University of Jos-Nigeria: Unpublished M. Ed. Thesis.
- Ewa, J. A. (2013), Understanding the myth of inclusion: Teachers preparation. Olomouc: Journal of exceptional people 2 (3) 95-100.
- Federal Department of Education (1999), Universal Basic Education Act. Abuja FCT-Nigeria: Federal Ministry of Education.
- Federal Government of Nigeria (2004), National policy on Education. Lagos: NERDC.
- Federal Government of Nigeria (2008), National policy on Education. Lagos: NERDC.
- Federal Ministry of Education (1996), The Blue print on the Education of the Handicapped in Nigeria. Lagos: NERDC

File:///C:/USERS/Document/Reading.paTTAN.html, retrieved on the 3rd August, 2014.

- Florin, C. (2013), Inclusive education in the developing countries: Transforming lives. Being a paper delivered at Cyrilmetodejsca Fakulta, Univerzeta Palackeho V Olomouci. Unpublished.
- Florin, C. (2004), Promoting inclusivity in Western Australian schools. International Journal of inclusive education, 8 (2), 185-202.

- Florin, C. (2004), Diversity and inclusivity: Paper presentation at the SAALED conference, Johannesburg, South Africa.
- Florin, C. (2005), Sustaining inclusive practices in primary school communities. In C. Newel (Ed), Disability in education: context, curriculum and culture. Australia: Australia College of Educators. 13-21.
- Gallaudet Research Institute (2007), Literacy and Deaf students, retrieved @ <u>http://gri.gallaudet.edu/literacy</u> on 16th July, 2014.
- Gare. L.L. (2008), Fundamental of special education and vocational rehabilitation: Towards self reliance. Being a seminar paper presented at Post Graduate School, University of Ibadan, Nigeria.
- Garguilo, R.M. (2009), Special Education in the contemporary society: An introduction to exceptionality. Los Angeles: SAGE.
- Gbegbin, J.A. (1991), Mainstreaming the exceptional children: problems and prospects. In I.K. Nwazuoke & E.D. Ozoji (Eds) Contemporary issues in mainstreaming the exceptional children in Nigeria. Jos: NCEC publications.
- Geers, A. (2006), Spoken language in children with cochlea implants. In P. Spencer & M. Marschark (Eds) Advances in spoken language development of Deaf and hard of hearing children. New York: Oxford University Press. 244-270
- Gerschel, L. (2003), Connected the disconnected: Exploring issues of Gender, Race and SNE within inclusive context. London: David Fulton Publishers.
- Green, L. (2001), Theoretical and contextual background. In P. Engelbrecht & L. Green (Eds) Promoting learner development: preventing and working with barriers to learning. Pretoria: Van Schaik. 3-16.
- Green, L. & Engelbrecht, P. (2007), An introduction to inclusive education. In P. Engelbrecht & L. Green (Eds) Responding to the challenges of inclusive education in Southern Africa. Pretoria: Van Schail. 2-9.

- Gregory, J.F., Shanahan, T. & Walberg, H.J. (1984), Mainstreamed Hearing impaired High school seniors: A re-analysis of a National survey. American Annals of Deaf, 129 (1), 11-16.
- Goni, A.B. & Nkwoagba, S.O. (2013), The need for educational technology for special needs in Nigeria. The Special Educator, journal publication of Nigeria Association of Special Education Teachers (NASET) 12 (1) 135-144.
- Hammerman, S. (1981), Priority needs of developing countries. Rehabilitation International: New York.
- Hasting, O. (2008), Exceptional children: introduction tospecial education. New Jersey: Prentice Hail Inc.
- Hegarty, I. (1993), Theplace of people with disabilities in Nigeria. Enugu: Fenton Press.
- Heller, K.W., Alberto, P.A, Forney, P.E. & Schwartzman, M.N. (1996), Understanding physical, sensory and health impairments: Characteristics and educational implications. Pacific Groves; CA: Brooks/Cole.
- Heward, W.L. (2009), Exceptional children: An introduction to Special Education (9<sup>th</sup> ed). Upper Saddle River, NJ: Merrill/Pearson Education.
- Hornby, G. (1999), Inclusion or declusion: can one size fit all? Support for learning, 14 (4). 152-157.
- Hornby, G. (2010), Inclusion: Theory and practice for ex-students of special education in the 21<sup>st</sup> century. Hauppange NY: Nova science publishers. 119-135.
- Hughes, B. & Paterson, K. (1997), The social model og Disability and the disappearing body: towards a sociology of impairment. Disability and Society 12 (3) 325-340.
- http://www.educationcounts.govt.nz/publications/special...education. Retrieved on the 20,<sup>th</sup> July, 2014.
- Individuals with Disabilities Education Improvement Acts 2004

- Idaka, III9. I. & German, A. (2012) Research design. In Abang J. Isagadighi, (2012) (Ed) Essentials of research & Statistics in Education and Social sciences. Calabar-Nigeria: Eti-Nwa Associates Researchers and publishers press.
- Ihenacho, M. (2005), Foundementals ofspecial education and vocational rehabilitation (2<sup>nd</sup> ed). Ibadan: Coclat Publications.
- Ikpaya, B.O. (2004), Exceptional children and youths: introduction to special education. Calabar: James last print specialties.
- Isangedighi, A.J. (2012), Overview of Research Methods. In Abang J. Isangedighi (Ed) Essentials of Research and Statistics in Education and Social Sciences. Calabar: Eti-Nwa Book Series
- Jaffe, J. (1968), Attitude of adolescents' towrd persons with disabilities. Dissertation: University of Columbia, un-published.
- Johnson, R. (2003), High stakes testing conference held @ Gallaudet. Research @ Gallaudet, 1-12.
- Johnstone, C.J. (2007), Inclusive education in Lesotho. In P. Engelbrecht & L. Green (Eds) Responding to the challenges of inclusive education in Southern Africa. Pretoria: Van Schaik. 25-36.
- Kelly, L. (1995), Processing of bottomup and topdown information by skilled and average Deaf readers and implications for whole language instruction. Exceptional children, 61 (4), 318-338
- Klinger, J.K. & Vaughn, S. (1999), Students perception of instruction in inclusion classrooms: implications for students with learning disabilities. Exceptional Children, 66 (1) 23-37.
- Kluwin, T.N. & Moores, D.F. (1985), The effect of integration on the Mathematics achievement of Hearing impaired adolescents. Exceptional Children, 129 (2), 152-160.
- Kristensen (1997), Special needs education in a school for all. African Journal of Special Education. 2 (2) 69172.

- Krosnick, J., Judd, C. & Witterbrink, B. (2005), The measurement of attitudes. In D. Albarracin, B. Johnson & M. Zanna (Eds) The handbook of attitudes. New Jersey, USA: Lawrence Eribaum Associates.
- Kuna, I. (2013), New perspectives in special education. In R. U. Richards (Ed) Evolution in special education. Cairo: Lens Publications. Pp47-80.
- Kuntze, M. (1998) Literacy and Deaf children: The language question and topics in language Disorders, 18 (4) 1-15.
- Ladbrook, M.W. (2009), Challenges expirenced by educators in the implementation of inclusive education in primary schools in South Africa. M.Ed thesis submitted to University of South Africa.
- Ladipo, J.E.. (2003), Challenges to inclusive education of children with visual impairments in the 21<sup>st</sup> century in Nigeria. University of Ibadan: Un-published B. Ed research project.
- Lidsay, G. (2007), Educational psychology and the effectiveness of inclusive education/mainstreaming. British journal of Educational psychology. 50 (4) 482-502.
- Lipsky, D.K. & Gartner, A. (1999), Inclusive education: A requirement of a democratic society.In H. Daniels & P. Gartner (Eds) Supporting inclusion in education systems: Inclusive education. London: Rout ledge. 12-23.
- Liu, B.K. & Chi, P.H. (1992), A study on learning attitudes, academic achievement and motivation of prevocational Hearing impaired students. Taiwan Journal of Special Education (in Chinese), B, 17-32.
- Liu, C.C. & Hong, Y.C. (2007), providing Hearing impaired students with learning care after classes through Smart phones and the GPRS network. British Journal of Educational Technology, 38(4) 123-140.Retrieved @ File:///C:/USERS/EWA JAMES/Documents/providing hearing-impaired students with learning after classes through smart phones and the GPRS network/a.html on 12<sup>th</sup> July, 2014.
- Maduagwu, A. Fundamentals of special education and vocational rehabilitation (2<sup>nd</sup> ed). Ibadan: Codat Publications.

- Mba, P.O. (1982), Current and future trends in special education in Nigeria: A handbook on elements of special education. Lagos: NERDC.
- Mba, P.O. (1982), Priority needs of special education in developing countries: The case of Nigeria. Un- published presented at the 1<sup>st</sup> World congress on the future of special education. Scotland.
- Mba, P.O. (1995), Special education and vocational rehabilitation. Ibadan-Nigeria: Codat publications.
- Malakpa, W.G. (1992), Educational planning and special education. International Journal of special education 7 (2).
- Mani, M.N.G. (2002), Integrated education for Disabled children: Cost effective approach. InS. Hegarty & M. Alur (Eds) Education and children with special needs: from segregation to inclusion. New Delhi: SAGE.
- Maqelepo, N.M. (2008), Inclusive education: The way of the future, being a paper presented at an International conference on Education. Maseru, Lesotho.
- Mcmillan, J.H.(2000), Educational Research: Foundementals for the consumer (3<sup>rd</sup> ed). Virginia: Addison Wesley Longman.
- Mercer, K. (1970), developing inclusive schools. University of Cambridge, Institute of Education Monograph No 31 3-10.
- Mercer, C.D. & Mercer, A.R. (1989), teaching students with learning problems (3<sup>rd</sup> ed). London: Merrill publishing company.
- Michael, A. (2010), Curriculum design for the Hearing impaired and the Universal Basic Education Scheme: The Special Educator. Journal publication of the Nigeria Association of Special Education Teachers (NASET) vol 9 (1) ISSN 1597-1767 1-10.
- Mitchell, D. (Ed) (2005), Contexualing inclusive education: Evaluating old and new International Perspectives. Abingdon Oxfordshire: Rout ledge.
- Mitchell, D. (2010), Education that fits: Review of International trends in the education of students with special needs. Retrieved on the 20<sup>th</sup> July, 2014 @ <u>http://www.educationcounts.govt.nz/publications/special...education</u>.

Mittler, P. (2000), working towards inclusive education. London: David Fulton.

- Musselman, C. (2000), How do children who can't hear learn to read an alphabetic script? Areview of the literature on reading and Deafness. Journal of Deaf studies and Deaf education, 5 (1) 9-31.
- Mutale, M.C. (2008), Inclusive education: what it is all about. London: RNIV.
- Nagy, W. (1988), Teaching vocabulary to improve reading comprehension. Newwark, DE. International Reading Association.
- Najjingo, H. (2009), Challenges of accessing all inclusive education services by children with disabilities (CWD): A case of Mijwala sub-country Ssembabule District. University of Makerere: Unpublished M. A. Thesis.
- Nell, C.C.(2008), The prohibitive adaptive devices for the visually impaired children: Aclarion call to the government. A Journal of Educational Policies and Research 4 (6) 5-12.
- News Agency of Nigeria (NAN) retrieved from the Internet on the 5<sup>th</sup> June, 2014.
- Nkiru, A.D. & Bella, Z.A. (2009), The legal provision for people with disabilitie in Nigeria. Enugu: FentonPress.
- Nunes, T. & Moreno, C. (2002), An intervention programme for promoting Deaf pupils achievement in Mathematics. Journal of Deaf studies and Deaf Education, 7 (1) 120-133.
- Nwazuoke, I. A. (2010), Paradigms, perspectives and issues in special educational needs: An inaugural lecture. University of Ibadan-Nigeria: University of Ibadan Press.
- Obani, T.C. (2006), Special education and special educational needs. In T.C. Obani (Ed) teaching pupils with special educational needs in the regular UBE classroom. Ibadan-Nigeria: Book-Buildres. 37-68.
- Obi, F.B. (2004), Effective parenting of children with special needs: A handbook for parents, special educators, counsellors and related professionals. Accra-Ghana: Asante & Hittscher printing press Ltd.

- Obi, F.B. (2006), Essentials of special needs education: Introduction to special education. Calabar: KP Klinton Printers and publishers.
- Obi, F.B. (2013), Access and quality of special educational needs service delivery in Nigeria. In Theo Ajobiewe Ph.D & 'Kunle Adebiyi Ph.D (Eds) Access and Quality of Special Educational Needs service delivery in Nigeria. Ibadan-Nigeria: Glory-land publishing company. 1-24
- Obi, F.B., Mamah, V. & Mensah, T. (2005), Inclusive education in Ghana: The state of Teacher preparedness. African Journal of Special Educational Needs. 1 (2).
- Ofre, M.O. (2015) Challenges in the inclusion of the mildly handicapped pupils in Priimary schools in Obudu Local Government Area of Cross River State, Nigeria. Un-published B,Ed research project, Faculty of Education University of Calabar, Nigeria.
- Ogohojafor, A.L. (1995), Vocational education and rehabilitation of Disabled Nigerians: past and present. In P.O. Nwaogu & O.C. Okobiah (Eds) Vocational Education and Rehabilitation of Handicapped people in Nigeria. Benin City: Osasu publishers.
- Ojile, E. (2006), Challenges of educating Hearing impaired children. In E.D. Ozoji (Ed) Updates in educating Special needs children in Regular Schools. Jos-Nigeria: Deka publications.
- Ojogwu, P.N. (2013), Educational technology: A needs for promoting the teaching and learning of persons with Hearing impairment. The Special Educator, journal publication of Nigeria Association of Special Education Teachers (NASET) 12 (1) 127-134.
- Okeke, B.A. (2001), Essentials of special education. Nsukka: Afro-Obis publications Ltd.
- Okeke-Oti, B.A. (2010), 'they have dignity and worth and therefore need restoration: 52<sup>nd</sup> inaugural lecture. University of Nigeria Nsukka: University of Nigeria Nsukka press.
- Okeke, S. & Navan, C.A. (2005), Inclusive education in Nigeria: A myth or reality? Obanze-Nigeria: Chukwu Press.
- Okorosaye-orubite, A.K. & Abdulrahman, Y.M. (2009), Inclusive education in Nigeria: Lessons from the United States of America (USA) retrieved @

<u>File://C:/Documents/inclusive</u> education in Nigeria lessons from the United States of America. Html retrieved on the 20<sup>th</sup> July, 2014.

- Okuoyibo, J.M. (1990), Social psychology of the handicapped. Un-published lecture material FCE (SP) Oyo.
- Okuoyibo, J.M. (1996), Society attitudes toward the handicapped from dark to dawn: Exceptional children in the community. Ibadan: Gabasther publishers.
- OKuoyibo, J.M. (2006), The Hearing impaired child in the regular school. In T. C. Obani (Ed) teaching pupils with special educational needs in the regular UBE classroom. Ibadan-Nigeria: Book-Builders.
- Olayi, J.E. (2013), overcoming the challenges of inclusive education in Nigeria: A focus on the South-south geo-political zone. Journal of Exceptional people, 2 (3). 7-19.
- Olayi, J.E. & Ewa, J.A. (2013), Special education services in Nigeria: policy and practice. A seminar paper presented at Cyrilometodejska Teologicka Fakulta Katerdra Krestanske Vychovy, Univerzita Palackeho V Olomouc, unpublished.
- Osborne, M.D. 21<sup>st</sup> century special needs education. Lagos: Ruternburg Press.
- Ozoji, E.D. (2003), Special education for the non professional. Jos: Deka Publications.
- Ozoji, E.D. (2006), Contemporary programmes for educating special needs children in the 21<sup>st</sup> century. In E.D. Ozoji (Ed) Updates in educating special needs children in the regular school. Jos: Deka publications.
- Pagliaro, C.M. & Ansell, E. (2002) Story problems in the Deaf education, frequency and mode of presentation. Journal of Deaf studies and Deaf education 7, (1) 130-133.
- Paul, P.V. & Quigley, S.P. (1994), Language and Deafness (2<sup>nd</sup> ed). San Diego: Singular Publishing Group Inc.
- Paul, P. (1996), Reading vocabulary knowledge and deafness. Journal of Deaf studies and Deaf educatio 1(1) 3-15.
- Peters, S.J. (2004), Inclusive education: An education for all, strategy for all children, retrieved @ <u>http://www.worldbank.org</u> on the 18<sup>th</sup> July, 2014.

- Popping, K. & Mononey, S. (2005), The Rout ledge/Flamer reader in inclusive education. London: Rout ledge.
- Quigley, S., Wilbur, R., Power, D. & Steinkamp, M. (1976), Syntatic structures in the language of Deaf children (Final report). Ubana. IL: University of Illinois, Institute of Child Behaviour and Development. ERC Document Reproduction service No ED 119447, <u>www.edrs.co./webstore/Detail.CFM?Ednumber=ED119447</u> retrieved 3<sup>rd</sup> August, 2014.
- Raskind, M. (2008), Matching assistive technology tools to individual needs. In e-essential guide Assistive technology: A parent guide. Boston: Great Schools Inc.
- Renolds, M. & Ainscow, C. (1994), Education of children and youths with Special Needs: An international perspective (2<sup>nd</sup> ed). Oxford: Pergamum.
- Robitaille, S. (2010), The illustrated guide to Assistive technology and devices: Tools and gargets for living independently. New York: Demos Health.
- Sailor, W. (2009) Reflection. In T.M. Skrtic, E.M. Horn & G.M. Clark (Eds) Taking stock of special education policy and practice: A retrospective commentary. Denver: Love publishing, 467-468.
- Saland, S.J. & Duhanyey, L.M.G. (1999), The impact of inclusion on students with and without disabilities and their educators: Remedial and Special Education 20 (2) 114-126.
- Scruggs, T.E., & Mastropieri, M.A. (1996), Teacher perceptions of mainstreaming/inclusion: A research synthesis. Exceptional Children 63 (1) 59-74.
- Semi, W.A. (Barriers to inclusion of visually impaired children..British Journal of Education and Psychology 10 (12) 70-100.
- Sherlock, S. & Peterson, N.L. (2002), Barriers to inclusion of the mildly handicapped persons. British Journal of Education and Psychology 10 (12) 70-100.
- Shcnize, J.B. (1991), Mainstreaming exceptional students: A guide for classroom teachers. USA: ALLyn & Beacon.

Shindi, J.A. (1991), The public attitude toward people who are Disabled. Journal of Special Education and Rehabilitation. University of Jos 2 (1) 81-90.

Scholarworks.wmich.edu/cgi/viewcontent.cgi?article=2307/content=reading-horizon

- Silversten, R. (2000), the emerging disability policy framework: A guide. Iowa: Law Review. 85 (5).
- Simeonsson, R., & Rosenthal, S. (2001), Psychological and developmental assessment: Children with Disabilities and chronic conditions (Eds). New York: Guildford.
- Singai, N. (2005), Mapping the field of inclusive education: A review of the Indian literature. International Journal of Inclusive education, 9 (4), 331-350.
- Slee, R. (2001), Social justice and the changing directions in educational research: The case of inclusive education. International Journal of Inclusive Education. 5 (2/3), 167-177.
- Stainback, S.W., Stainback, K.E. & Sapan-shavin, M. (1994), A commentary on inclusion and development of positive self identity by people with disability. Exceptional children, 60. 86-90
- Stanorich & Jordan (1988) Teachers and principals beliefs about inclusion in Canada, reteieved @ <u>http://www.educationcounts.govt.nz/publications/special...education</u> on the 20th July, 2014.
- Stinson, M. (1978), Deafness and motivation for achievement: Research with implications for parents counselling. Volta Review, 80 (3), 140-148.
- Stofile, S.Y. (2008), Factors affecting the implementation of inclusive education policy: A case study in one province in South Africa. Faculty of Education, University of Western Cape Town-South Africa. Unpublished Ph.D Thesis.
- Swart, E. & Pettipher, R. (2007), Understanding and working with change. In P. Engelbrecht & L. Green (Eds) Responding to the challenges of inclusive education in Southern Africa. Pretoria: Van Schaik. 101-117.
- Thomas, G. (1997), Inclusive schools for un-inclusive society, British Journal of Special Education 24 (3) 103-107.

- Traxler, C. (2000), The Standford Achievement tests (9<sup>th</sup> ed): National norming and performance standards for Deaf and hard of hearing students. Journal of Deaf studies and Deaf education. 5 (4) 337-438
- Tungaraza, F.D. (1992), Mainstreaming: The logical choice for Tanzania. International Journal of Special Education, 7. 26-34.
- Ukeje, B.O. (2000), Universal Basic Education in Nigeria: Logistics and implementation strategies. Being A key note address presented on the occasion of an International conference on Universal Basic Education held at the University of Nigeria, Nsukka, 3-7, July.
- Umar, A.T. (2011), Inclusive education: Teachers preparation and its implications: The Special Educator, Journal publication of Nigeria Association of Special Education Teachers (NASET) 10 (2).
- UNESCO (2005), Guideline for inclusion: Ensuring access to education for all. Paris: Author.
- United Nations (1948), Universal declaration of Human Rights. Retrieved @ www.un.org/documents/ga/res on the 17<sup>th</sup> July, 2014.
- United Nations (1993) United Nations Standards rules on the equalization of opportunities for persons with disabilities. Retrieved on the 17<sup>th</sup> July, 2014 @ <u>http://www.org/documents/ga/res</u>
- United Nations (1975), Declaration on the Rights of Disabled Persons. New York: Author.
- United Nations Development Program (1989), Society and school improvement, Educational technology 27 (1) 15-25.
- United Nations Education Scientific Cultural Organization (1994), The Salamanca statement and framework for Action on Special Needs Education. Spain: UNESCO.
- United Nations Education Scientific Cultural Organization (1997), Salamanca 5 years on: A review of UNESCO activities in the light of the Salamanca Statement and Framework for Action on Special Needs Education, retrieved @ <u>http://www.unescodoc.unesco.org</u> on the 20<sup>th</sup> July, 2014.

- United Nations Education Scientific Cultural Organization (2005), Guidelines for inclusion: Ensuring access to education for all. Paris: UNESCO.
- Urua, M. (2011), A review of National Policy on Education. Journal of New Issues in Special Educational Needs 12 (13) 50-55.
- WI Department of public instruction <u>www.dpl.wi.gov</u> students who are deaf or hard of hearing: Eligibility Criteria guide 2003, Retrieved December, 2008 @ <u>http://www.dpl.wi.gov/sped/pdf/dhhguide.pdf</u>, retrieved on the 20<sup>th</sup> July, 2014.
- Williams, C & Finnegan, M. (2003), from myth to reality: sound information for teachers about students who are deaf. Teaching Exceptional children, 35 (3) 40-45.

www.factmonster.com/ipka/A0107847.html retrieved on the 18<sup>th</sup> July, 2014.

Zimba, R.F., Mowes, A.D. & Naada, A.N. (2007), Inclusive education in Namibia. In P Engelbrecht & L. Green (Eds) Responding to the challenges of inclusive education in Southern Africa. Pretoria: Van Schaik. 39-51.

# **APPENDIX I**

# **RESEARCH INSTRUMENTS**

Institute of Special Education studies,

Faculty of Education,

Palacky University,

Zizkovo Nam 5,

Olomouc, Czech Republic.

The Principal,

.....

Sir/Madam,

## **REQUEST TO CONDUCT RESEARCH IN YOUR SCHOOL**

I am a Doctoral student at the Palack University, Olomouc, Czech Republic, under the supervision of Prof Milon Potmesil (See Supervisor's letter of introduction attached).

The focus of my dissertation is on the condititions necessary for effective implementation of Inclusive Education in Nigeria. The aim of the research is to evaluate the different service provisions for students with hearing impairment and the conditions necessary for effective implementation of inclusive education in Nigeria. I have sampled many schools in the six geo-political zones in the country, which yours is one of the schools to participate in the research process.

The purpose of this letter is to seek permission to conduct the research in your school.

The following ethical issues will be considered:

- The place of attitudes and effective implementation of inclusive education in Nigeria.
- Hearing impaired students' use of Assistive technology (AT) devices and effective implementation of inclusive education in Nigeria.
- The place of teacher training and effective implementation of inclusive education in the country Nigeria.
- The role of supportive staffs and effective implementation of inclusive education in the country.
- The role of Government and effective implementation of inclusive education in Nigeria.
- A comparison of educational resource provision between the states in the Northern zones and the states in the Southern zones and effective implementation of inclusive education in Nigeria.

The research report will be made available to the Ministry of Education.

Yours sincerely,

## Ewa, James Abua

+420776196420, +2349036314435

# QUESTIONNAIR ON CONDITIONS NECESSARY FOR EFFECTIVE IMPLEMENTATION OF INCLUSIVE EDUCATION PROGRAMME FOR STUDENTS WITH HEARING IMPAIRMENT IN NIGERIA (CONEIIEPSWHIN)

Dear Respondant,

This questionnaire is desingned to illicit response on the conditions necessary for successful implementation of inclusive education programme for students with hearing impairment in Nigeria. You are quite at liberty to express yourself freely. Be rest assured whatever statement(s) or expression(s) made therein will be treated as confidential and for academic research purposes only.

The questionnaire is divided into sections and you are required to indicate your status and tick accordingly as the case may be.

## PART A: BIOGRAPHIC DATA.

Please tick ( $\sqrt{}$ ) where appropriate as it patterns to you.

Academic Qualification: FLSC......WASC/SSCE......ADV GCE......DIPLOMA......NCE.....B.Ed/B.Sc.....M.Ed/M.Sc.....Ph.D.....

## PART B:

Instruction: Please tick ( $\sqrt{}$ ) the option that best represents your opinion in the cell(s) provided. This is to indicate the extent to which you strongly agree, agree, disagree or strongly disagree with the statement.

#### KEY:

Strongly Agree.....(SA)

Agree	(A)
Disagree	(D)
Strongly Disagree	(SD)

# **INSTRUCTION:** To be filled by all (parents, students & teachers)

S/N	Items	SA	Α	D	SD
	Attitudes towards inclusive education				
1	The best school for the students with hearing impairment is				
	the Special school for the Deaf				
2	Students with hearing impairment can perform better in				
	special school than in the regular inclusive schools.				
3	Students with hearing impairment should not be allowed to be				
	in the same school with the non-hearing impaired students				
4	Students with hearing impairment are friendly with the				
	normal students in the inclusive regular classroom				
5	Normal students do not feel safe with the presence of the				
	students with hearing impairment in the class in an incusive				
	education setting				
6	Hearing impairment is a contagious disease, hence non				
	hearing impaired students will contract it if the hearing				
	impaired students are allowed to be in thesame class with				
	them in the inclusive education school				
7	Students with hearing impairment should be separated from				
	the normal students in the inclusive school environment				
8	I can be of help to the students with hearing impairment in an				
	inclusive education classroom setting				
9	Having students with hearing impairment in my class helps				
	me to understand their problems in an inclusive education				
	setting				
10	Students with Hearing impairments should never have				
	anything in common with the non hearing impaired students in				
	an inclusive education setting.				

	students		
	Hearing impaired students' use of assistive technology		
	devices.		
11	The use of Assistive technology (AT) devices will help the		
	students with hearing impairment function well in an inclusive		
	school environment in Nigeria		
12	AT devices are available and in use by the students with		
	hearing impairment in my school.		
13	The AT devices in my school are accessible and can easily be		
	operated by the students with hearing impairment in the		
	school		
14	The use of AT devices devalues the personality of the students		
	with hearing impairment in an inclusive education setting in		
	Nigeria.		
15	The AT devices in the inclusive schools are easily operated by		
	the students with hearing impairment in Nigeria		
16	AT devices are easily serviced and maintained for use in all		
	inclusive schools in Nigeria.		
17	Provision of AT devices for the students with hearing		
	impairment in the inclusive schools should be the sole		
	responbility of the government.		
18	The non availability and constant supply of electric light in the		
	inclusive school environment affect effective implementation		
	of inclusive education programme of the students with hearing		
	impairment in Nigeria.		
19	All teachers and students should have a good knowledge on		
	how to operate the AT devices of the students with hearing		
	impairment in an inclusive school environment in Nigeria.		
20	Wearing of hearing aid differentiates the students with		
	hearing impairment from the non hearing impaired students in		
	an inclusive education setting		

	INSTRUCTION: To be filled by teachers only.		
	Teacher training/recruitment for inclusive education.		
21	I can not meet the educational needs of the students with		
	hearing impairment in my class because I am not well trained.		
22	I lack appropriate skills to communicate with the students		
	with hearing impairment in my class.		
23	If given the necessary training/orientation, I can cope with the		
	demands of the students with hearing impairment in my class.		
24	I believe with the assistance of the Special Education teacher,		
	I can cope with the needs of the students with impaired		
	hearing in my class.		
25	I am quite aware that teaching students with impaired hearing		
	in an inclusive classroom environment is tedoius.		
26	I can be better equipped with appropriate skills to handle the		
	students with hearing impairment in inclusive classes through		
	attendance of Conferences, Seminars & Workshops.		
27	Government should always organize in service training		
	programme for regular teachers in the inclusive education		
	setting for update of knowledge on Deaf education in Nigeria.		
28	Appropriate training can enhance quality service delivery by		
	the teachers to the students with impaired hearing in an		
	inclusive school environment.		
	INSTRUCTION: To be filled by supportive staff and		
	students. INSTRUCTION: To be filled by supportive staff		
	and students.		
	The role of supportive staffs in inclusive education.		٢
29	Sign language interpreters complement the role of Assistive		
	Technology devices in an inclusive education classroom		
	setting in Nigeria.		
30	Sign language interpreters play a significant role in the		
	teaching and learning process of the students with hearing		

	· · · · · · · · · · · · · · · · · · ·		 
	impaiment in an inclusive education setting.		
31	Sign language interpreters are adequate to meet the needs of		
	the students with hearing impairment in an inclusive education		
	setting in Nigeria.		
32	Students with hearing impairment are exposed to audiological		
	assessments before placement in an inclusive education setting		
	in Nigeria.		
33	Students with hearing impairment have access to counselling		
	services in all inclusive schools in Nigeria		
34	Apart from educational services, students with hearing		
	impairment are given community rehabilitation services in		
	Nigeria		
35	Multi-disciplinary approach to service delivery to the students		
	with hearing impairment is the best option employed in		
	Nigeria.		
36	Counselling services help the students with Hearing		
	Impairment to adjust faster in an inclusive education setting.		
	<b>INSTRUCTION:</b> To be filled by Government officials in		
	the ministry of Education, School		
	principals/administrators only		
	Government commitment to the course of inclusion.		
37	Government officials in the Ministry of Education have		
	adequate knowledge about inclusive education programme.		
38	Government is working very hard to provide all the necessary		
38			
38	Government is working very hard to provide all the necessary		
38 39	Government is working very hard to provide all the necessary facilities to ensure successful implementation of inclusive		
	Government is working very hard to provide all the necessary facilities to ensure successful implementation of inclusive education of the students with hearing impairment in Nigeria.		
	Government is working very hard to provide all the necessaryfacilities to ensure successful implementation of inclusiveeducation of the students with hearing impairment in Nigeria.The practice of inclusive education of the students with		
	Government is working very hard to provide all the necessary facilities to ensure successful implementation of inclusive education of the students with hearing impairment in Nigeria.The practice of inclusive education of the students with hearing impairment does not require any legislation in		
39	Government is working very hard to provide all the necessary facilities to ensure successful implementation of inclusive education of the students with hearing impairment in Nigeria. The practice of inclusive education of the students with hearing impairment does not require any legislation in Nigeria.		
39	Government is working very hard to provide all the necessary facilities to ensure successful implementation of inclusive education of the students with hearing impairment in Nigeria.The practice of inclusive education of the students with hearing impairment does not require any legislation in Nigeria.The issue of inclusive education for Deaf children is not		

	inclusive education for the students with impaired hearing in		
	Nigeria.		
42	Inadequate funding of inclusive education programme for the		
	students with impaired hearing does not pose a threat to the		
	successful implementation of inclusive education of students		
	with hearing impairment in Nigeria.		
43	The practice of inclusive education in Nigeria should only be		
	the sole responsibility of the Government.		
44	Students with hearing impairment have no part to play in		
	national development, so there is no need for the Government		
	to invest in their education in Nigeria.		
	INSTRUCTION: To be filled by Teachers/Government		
	officials in the Ministery of Education .		
	Provision of educational resources/services between the		
	North and South		
45	All inclusive education schools in the North have the required		
	educational resources to cater for the students with hearing		
	impairment in an inclusive education setting.		
46	Assistive technology devices are better provides for the		
	students with hearing impairment in the north than in the south		
	of Nigeria.		
47	Government officials in the north are committed to the		
	practice of inclusive education for the students with hearing		
	impairment than their counterparts in the south of Nigeria.		
48	The students with hearing impairment in the North axis of		
	Nigeria have access to AT devices that their counterparts in		
	the south.		
49	All teachers in inclusive schools in the north have better		
	knowledge and can manipulate the AT devices for the students		
	with hearing impairment than those in the south		
50	There is no difference in government provision of educational		
	resources/services in inclusive education setting for the		

	students with hearing impairment between the north and south		
	in Nigeria.		
51	Educational resources are provided more in the northern part		
	of the country than in the South based on religion.		
52	Schools located in the north are more enlighthened about the		
	practice of inclusive education than those in the southern		
	Nigeria.		
	INSTRUCTION: To be filled by all respondants.		
	Implmentation of inclusive education of the hearing		
	impaired students in Nigeria.		
53	Inclusive education is functional in Nigeria		
54	Government has implemented inclusion education policy in		
	the country		
55	Inclusive education is practiced in few states in Nigeria		
56	The practice of inclusive education incurred more cost for the		
	government than the segregated system.		
57	Inclusive education can only be successful in Nigeria if there		
	there is a legislation to back it up.		
58	Inclusive education can become practicable in Nigeria with		
	adequate funding of the educational sector.		
59	Inclusive education practice in Nigeria is only in theory and		
	not in practice.		
60	All necessary facilities are yet to be put in place for the		
	successful implementation of inclusive education in Nigeria		

# **REQUEST FOR INTERVIEW**

Institute of Special Education studies,

Faculty of Education,

Palacky University,

Zizkovo NAM 5,

# Olomouc, Czech Republic.

.....

.....

Dear Sir/Madam,

## **Request for interview for research purposes:**

I am a Doctoral student at Palacky University, Olomouc, Czech Republic, under the supervision of Prof Milon Potmesil Ph.D, see letter of introduction from the supervisor attached.

The focus of my research is to evaluate service provision and the conditions necessary for effective implementation of inclusive education in Nigeria. The aim of the research is to ascertain to which the conditions necessary for effective implementation of inclusive education have been put in place to ensure fruitful implementation of the inclusive education programme in Nigeria.

The purpose of this letter is to seek permission to interview you as a major key player in the implementation of inclusive education policy in Nigeria. I will strive to conduct the interview with minimal disruption to your worh/other engagements.

The following is very important:

- You should volunteer to participate
- You can withdraw at any stage from the research without having to furnish the researcher with reasons.
- If you wish not to permit the researcher to record the interview, this will be respected.
- Your privacy and autonomy will be secured at all time.
- All relevant research information regarding the researchwill be made available to you if you wish.

Please could you complete the consent form at the end of the letter and return to me.

Yours sincerely,

## Ewa, James Abua.

+420776196420, +2349036314435

## **CONSENT FORM**

I, the undersigned gave witten consent to participate in the research undertaken by Ewa, James Abua, a Ph.D student at the Palacky University, Oomouc, Czech Republic. I understand every thing that is stipulated in the covering letter. I have not been coerced to participate in the research.

 Full Name of participant:

 Signature of the participant.

Signed on this day......0f......0f.

## **Interview Questions:**

**Instruction**: The intervivew is categorized into different topics. Please feel free to answer the questions:

## **Knowledge and Awareness:**

In your capacity as,....

- 1. What knowledge do you have about inclusion
- 2. Is inclusion really in practise in Nigeria
- 3. If inclusion is not in practise, what can be done to create awareness about inclusion
- 4. Do you support the idea of inclusive education programme for the hearing impaired students in Nigeria
- 5. Do you have designated schools for the inclusion of hearing impaired students?

## Attitudes

- 1. Do you think Hearing impaired students can fit in the inclusive education programme.
- 2. What do you think is the general attitudes of the society toward the Hearing impaired students?
- 3. How will you feel if the Hearing impaired students should be placed in the same school with your children?
- 4. Do you support the idea of creating separate classes for the hearing impaired students in an inclusive school environment?

## **Government commitment:**

- 1. What can you say in terms of Government commitment to the course of inclusive education in Nigeria?
- 2. What can you say in respect of funding education generally in Nigeria?
- 3. Judging from the funding of education in Nigeria, do you think the inclusive education programme can be successfully implemented.
- 4. What measures has the government taken in terms of legislation to ensure successful implementation of inclusive education in the country?
- 5. Is there any machinery put in place by the government to ensure adequate monitoring and supervision of the inclusive education programme in the country?

## **Preparation:**

- 1. What is the level of preparation put in place to ensure effective implementation of inclusive education programme in Nigerian schools?
- 2. In terms of facilities and educational resources, how are they provided for to schools in Nigeria?
- 3. Are Assistive technology devices used by the students with hearing impairment provided in all inclusive schools in your state?
- 4. What steps is the government taking in providing and maintaing the Assistive technology deviices used by the students with hearing impairment.
- 5. Is the provision Assistive technology devices and other educational resources only the responsibility of the government?

## **Recruitment of teachers and training of staff**

- 1. How are the teachers and other supportive staff recruited for the inclusive education programme in Nigeria?
- 2. How the teachers recruited trained?
- 3. Do you think the supportive staffs are necessary for effective implementation of inclusive education programme in the country?
- 4. Do you think there is the need for teachers and supportive staff to work in collaboration for effective implementation of inclusive education in Nigeria?

## Supervision:

1. What measures have been put in place to facilitate effective monitoring and evaluation of the inclusive education programme in the country?

Thank You.

# APPENDIX II SSPS OUTPUT GENDER

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	1.00	4332	58.5	58.5	58.5
	2.00	3068	41.5	41.5	100.0
	Total	7400	100.0	100.0	

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	1.00	2442	33.0	33.0	33.0
	2.00	2526	34.1	34.1	67.1
	3.00	2432	32.9	32.9	100.0
	Total	7400	100.0	100.0	

A	G	E
	_	

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	1.00	2459	33.2	33.2	33.2
	2.00	2493	33.7	33.7	66.9
	3.00	2448	33.1	33.1	100.0
	Total	7400	100.0	100.0	

# QUALIFICATION

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	1.00	2465	33.3	33.3	33.3
	2.00	3945	53.3	53.3	86.6
	3.00	990	13.4	13.4	100.0
	Total	7400	100.0	100.0	

					Std.
	Ν	Minimum	Maximum	Mean	Deviation
ATTITUDE	7400	34.00	40.00	36.3350	2.08686
ASSERTIVEDEVICE	7400	25.00	40.00	33.3312	4.06707
TRAINING	7400	24.00	32.00	28.2000	2.31853
GOVERNMENT	7400	26.00	32.00	29.0015	2.06212
SUPPORTSTAFF	7400	20.00	30.00	25.5916	3.24113
EDUCATIONALPRO VISION	7400	26.00	32.00	29.2701	1.80234
IMPLEMENTATION	7400	21.00	32.00	27.1989	2.95328
Valid N (listwise)	7400				

# **Descriptive Statistics**

# Correlations

		ASSISTIVE TECHNOLOG Y DEVICES	TRAINING	GOVERNMEN T	SUPPORTIVE STAFF	IMPLEMENT ATION
ASSISTIVEDEVICES	Pearson Correlation	1	.603(**)	.238(**)	.193(**)	.997(**)
	Sig. (2-tailed)		.000	.000	.000	.000
	Ν	7400	7400	7400	7400	7400
TRAINING	Pearson Correlation	.603(**)	1	.296(**)	.464(**)	.649(**)
	Sig. (2-tailed)	.000		.000	.000	.000
	Ν	7400	7400	7400	7400	7400
GOVERNMENT	Pearson Correlation	.238(**)	.296(**)	1	.074(**)	.241(**)
	Sig. (2-tailed)	.000	.000		.000	.000
	Ν	7400	7400	7400	7400	7400
SUPPORTSTAFF	Pearson Correlation	.193(**)	.464(**)	.074(**)	1	.218(**)
	Sig. (2-tailed)	.000	.000	.000		.000
	Ν	7400	7400	7400	7400	7400
IMPLEMENTATION	Pearson Correlation	.997(**)	.649(**)	.241(**)	.218(**)	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	Ν	7400	7400	7400	7400	7400

\*\* Correlation is significant at the 0.01 level (2-tailed).

	EDUCATIONAL				Std. Error
	SERVICES	Ν	Mean	Std. Deviation	Mean
IMPLEMENTA TION	1.00	4358	27.1790	3.13518	.04749
	2.00	3042	27.2275	2.739845	.04844

# **Group Statistics**

# **Independent Samples Test**

		Levene	's Test								
		for Equa	ality of								
		Varia	nces		t-test for Equality of Means						
								Std.			
								Erro			
								r			
						Sig.	Mean	Diff	95% Con	fidence	
				(2- Differen eren Interva		Interval	of the				
		F	Sig.	Т	Df	tailed)	ce	ce	Difference		
									Lower	Upper	
IMPL EME NTAT ION	Equal variances assumed	271.96 1	.000	- .695	7398	.487	04850	.069 78	18528	.08828	
	Equal variances not assumed			.715	7111.34 7	.475	04850	.067 83	18148	.08447	

					Std.
				Std.	Error
	ATTITUDE	Ν	Mean	Deviation	Mean
IMPLEMENTATION	1.00	4954	27.1835	3.08505	.04383
	2.00	2446	27.2302	2.66688	.05392

# **Group Statistics**

# **Independent Samples Test**

		Levene's Equal Varia	ity of			t_test fo	or Equality	of Mean	2	
		Sig.		F	T Df Sig. (2-tailed) Mean Difference Std. Error Difference			95% Confidence Interval of the Difference		
									Lower	Upper
IMPLEMENTATION	Equal variances assumed	191.876	.000	640	7398	.522	04668	.07298	18975	.09639
	Equal variances not assumed			672	5547.753	.502	04668	.06949	18291	.08954

# **APPENDIX III**

List of Schools used for the research:

### NORTH WEST GEO-POLITICAL ZONE:

### KADUNA STATE:

- 1. Government Secondary School, Doka, Kaduna.
- 2. Rimi College Kaduna
- 3. Government College Tundu wada Kaduna
- 4. Government Secondary School Independence way Kaduna
- 5. Government Secondary School, Kawo Kaduna.
- 6. Government Secondary School, Ungwan Sarki, Kaduna
- 7. Government Secondary School, Ungwan Rimi, Kaduna.
- 8. Government Secondary School Tafawa Balewa way, Kaduna
- 9. Government Secondary School Kari, Kaduna
- 10. Government Secondary School, Kaduna

## **KEBBI STATE:**

- 1. Bahago Day Secondary School Zuru, Kebbi
- 2. Government Secondary School, Birnin Kebbi.
- 3. Government Science school, Yauri, Kebbi.
- 4. Government Science school, Zuru, Kebbi
- 5. Government Secondary School, Dirin-Daji, Kebbi
- 6. Ibrahim, Sakoba Day Secondary School, Dabari, Kebbi
- 7. Joda college Birnin Kebbi
- 8. Kanta College Arungungu, Kebbi
- 9. Nagari Colledge Birnin Kebbi
- 10. Government Technical Science Colledge, Bunza, Kebbi.

## KANO STATE

- 1. Government Secondary Commercial School, Airport road, Kano
- 2. Government Secondary Commercial School, Wudil, Kano
- 3. Government secondary School, Karaye, Kano.

- 4. Government Secondary School, Dala, Kano.
- 5. Government secondary school, Dambatta, Kano
- 6. Government Secondary school Gwammaja 11, Kano.
- 7. Government Secondary school, Gwauron Dutse, Kano.
- 8. Government Secondary School, Kurna asabe, Kano
- 9. Government Secondary School, Rurum Katanga, Kano.
- 10. Government Technical College, Rano-Kano.

## NORTH CENTRAL GEO-POLITICAL ZONE:

## **BENUE STATE:**

- 1. Government College, Makurdi
- 2. Government Modelschool. Makurdi.
- 3. Government Secondary School, North Bank, Makurdi
- 4. Government Girls College, Makurdi.
- 5. Government Technical college, Makurdi
- 6. Community Secondary School, Wadata, Makurdi.
- 7. Tily Gado Model secondary School, North Bank, Makurdi.
- 8. Padopas Secondary School, High Level, Makurdi
- 9. Community Secondary School, Vandykia, Benue state.
- 10. Community secondarySchool, Ushongo, Benue state.

## NASARAWA STATE:

- 1. Government secondary School, Nasarawa Eggon, Nasarawa State
- 2. Government secondary School, Akurba, Nasarawa State
- 3. Government Secondary School, Shabu, Nasarawa State.
- 4. GovernmentSecondary School, Bukan Sidi, Nasarawa state
- 5. Government secondary School, Ombi, Nasarawa State
- 6. Government Secondary School, Maina, Nasarawa State.
- 7. Government secondary School, Lafia, Nasarawa state.
- 8. Government Science school, Lafia, Nasarawa State.
- 9. Government College, Lafia, Nasarawa state.
- 10. Taal Model Secondary School, Lafia, Nasarawa State.

## PLATEAU STATE:

- 1. Government secondary School, Kabon, Plateau State
- 2. Government secondary school, Chunyan Chunyang, Plateau state.
- 3. Government secondary school, Dung, Plateau state
- 4. Government Secondary School, Kwali, Plateau state
- 5. Government Secondary school, Miango Jos, Plateau state.
- 6. Government Secondary School, Buyo Jos Plateau state.
- 7. Government secondary School, Jengre, Jos, Plateau State.
- 8. Government Secondary School, Mista Ali, Plateau State
- 9. Government secondary School, Barkin Ladi, Plateau State.
- 10. Government Secondary School, Jebu Miango-Jos, Plateau State.

## NORTH EAST GEO-POLITICAL ZONE

### ADAMAWA STATE:

- 1. Government Secondary School, Hong, Adamawa State.
- 2. Government Science school, Uba, Adamawa State.
- 3. Government Secondary School, Muyo Belowa, Adamawa State.
- 4. Government Secondary School, Shuwa, Adamawa State.
- 5. General Murtala Mohammed College, Yola, Adamawa State
- 6. Federal Govrnment Girls College, Yola, Adamawa State.
- 7. Federal Government College, Ganye, Adamawa State.
- 8. Federal Science & Technical College, Michika, Adamawa State.
- 9. Government Arabic Science School, Song, Adamawa State
- 10. Government Day Secondary School, Army Barracks, Adamawa State.

### **BAUCHI STATE:**

- 1. Bauchi Teachers College, Bauchi.
- 2. Federal Government College, Bauchi
- 3. Federal Government College, Azare, Bauchi
- 4. Government Secondary School, Tafawa Balewa, Bauchi
- 5. Government Day Secodary School, Toro, Bauchi
- 6. Government Girls secondary School, Misau, Bauchi

- 7. Shira Bauchi Secondary School, Bauchi
- 8. Government Secondary School, Darazo, Bauchi
- 9. Gagidba Secondary School, Bauchi
- 10. Government Secondary School, Damban, Bauchi.

## TARABA STATE:

- 1. Marmarra Government Girls Secondary School, Wukari, Taraba State
- 2. Government Science School, Donga, Taraba State
- 3. Government Day Secondary School, Gindin Waya, Taraba State
- 4. Government Science Secondary School, Jalingo, Taraba State.
- 5. Government Secondary School, Takum, Taraba State.
- 6. Government Day Secondary School, Mutum Biyu, Taraba State.
- 7. Government Secondary School, Ibi, Taraba State.
- 8. Government Day secondary School, Talla, Taraba State.
- 9. Government Secondary School, Wukari, Taraba State.
- 10. Government Day Secondary School, Bali, Taraba State.

## SOUTH WEST GEO-POLITICAL ZONE:

## LAGOS STATE:

- 1. Ajara Grammar School, Badagry, Lagos State
- 2. Eko Boys High School, Lagos State.
- 3. Igbobi College, Yaba, Lagos State.
- 4. Yaba Model College, Mairana, Lagos State.
- 5. Lagos National College, Gbagada, Lagos State.
- 6. Royal Comprehensive College, Alimosho Ipaja, Lagos State.
- 7. Lagoon Secondary School, Lagos state.
- 8. Government College, Ikorodu, Lagos State.
- 9. Government College Victoria Island, Lagos State.
- 10. Community High School, Surulere, Lagos State.

## **EKITI STATE:**

- 1. All Souls Angelican Grammer School, Ado Ekiti
- 2. Alsegba Community Grammer School, Alsegba, Ekiti State.

- 3. Ile Owuro Community High School, Algbsdo Ekiti.
- 4. Ilu Omooba Community High School, Ilu Omooba, Ekiti
- 5. Ijanmodu High School, Ijan-Ekiti
- 6. Ijaloke High Secondary Emure, Ekiti
- 7. Eyemote Community High School, Iyin Ekiti
- 8. Iworoko Community High School, Iworoko, Ekiti.
- 9. St Augustine Community High School, Oye- Ekiti.
- 10. Christ's School, Ado Ekiti.

## **OYO STATE:**

- 1. Aperin Omyere Grammer School, Ibadan South, Oyo State.
- 2. Apode High School Erunwa, Ibadan East, Oyo State.
- 3. Moniya High School, Akinyele, Oyo State.
- 4. Army Barracks Secondary School, Ibadan East, Oyo State.
- 5. Aseyin High School, Iseyin, Oyo State
- 6. AUD Comprehensive High School, Kajola, Oyo State
- 7. Awe High School, Afijo, Oyo State.
- 8. Olivet High School, Oyo, Oyo State.
- 9. Baptist Grammer School, Idi Ishin, Ibadan South.
- 10. Ojoo High School, Basorun Ibadan North, Oyo State.

## SOUTH EAST GEO-POLITICAL ZONE:

## **ABIA STATE:**

- 1. Ibeku High School, Umuahia, Abia State.
- 2. Ngwa High School, Aba, Abia State.
- 3. Ovom Girls Secondary School, Ovom Aba, Abia State.
- 4. Uzuakoli Secondary School, Uzuakoli, Abia State.
- 5. Ndume Otuka Secondary School, Umuahia, Abia State.
- 6. Afara Technical School, Afara, Umuahia, Abia State.
- 7. Omuhu Secondary School, Ohuhu Umuahia, Abia State.
- 8. Okaiuga Secondary School, Okaiuga Nkwoegwu, Umuahia, Abia State.
- 9. Williams Memorial Secondary School, Afugiri, Umuahia, Abia state.
- 10. Amuzukwu Girls Secondary School, Umuahia, Abia State.

## **IMO STATE:**

- 1. Akwa-Akuma Girls Secondary School, Akwa Akuma, Imo State.
- 2. Girls Secondary School, Owerri, Imo State.
- 3. Amakohia Comprehensive Secondary School, Amkohia Owerri, Imo State
- 4. Ikenegbu Girls Secondary School, Owerri, Imo State.
- 5. Ubonmiri Girls Secondary School, Ubonmiri, Imo state.
- 6. Imo State Secondary School, Owerri, Imo State.
- 7. Holy Ghost Secondary School, Owerri, Imo Stat.
- 8. Orodo secondary Technical School, Owerri, Imo State.
- 9. Ofekata Comprehensive Secondary School, Orodo-Owerri, Imo State.
- 10. Umume-Oha Girls Secondary School, Umume Ohia Mbaito, Imo state.

## **ENUGU STATE:**

- 1. Army Day Secondary School, Awkunanu Enugu, Enugu state
- 2. Command Day Secondary School, 82 Division Enugu, Enugu State.
- 3. Union Boys Secondary School, Awkunanu, Enugu state.
- 4. Girls Grammer School, Awkunanu Enugu, Enugu State.
- 5. Queens' secondary School, New Layout Enugu, Enugu state.
- 6. New Haven
- 7. Secondary School, Oguiyi New Haven, Enugu state.
- 8. Uwani secondary School, Uwani, Enugu State.
- 9. City Girls Comprehensive Secondary School, Oguiyi Enugu, Enugu state.
- 10. New Layout Secondary School, Oguiyi Enugu, Enugu State:

### SOUTH SOUTH GEO-POLITICAL ZONE:

#### **CROSS RIVER STATE:**

- 1. Comprehensive secondary School, Akim Calabar, Cross Rivr State.
- 2. Government Secondary School, Atu Calabar South, Cross River State.
- 3. Government Secondary School, Uwanse Calabar South, Cross River State.
- 4. Government secondary School, Akamkp, Cross River state.
- 5. Community Secondary school, Ugep Yakurr, Cross River State.
- 6. Government Secondary School, Nko Yakurr, Cross River State.

- 7. Government Secondary School, Ikom, Cross River state.
- 8. Boki Comprehensive Secondary school, Okondi Boki, Cross River State.
- 9. Government Secondary School, Obudu, Cross River state.
- 10. Community Secondary School Ugboro Abochiche, Ogoja, Cross River State.

## **AKWA IBOM STATE:**

- 1. Etoi Grammer Secondary School, Uyo, Akwa Ibom State.
- 2. Community Commercial Secondary School, Ikot Ataku, Akwa Ibom State.
- 3. Asuna Community Secondary School Asuna Uyo, Akwa Ibom State.
- 4. Government secondary School, Efa-Uyo, Akwa Ibom State.
- 5. Etinan Institute, aaaaaaetinan, Akwa Ibom State.
- 6. 4town Secondaru School, Uyo, Akwa Ibom State.
- 7. Community Secondary School, NdiyaUyo, Akwa Ibom State.
- 8. 5towns Community Secondary School, Afaha Nsit, Akwa Ibom State.
- 9. Community Secondary School, Ikot Nya Uyo, Akwa Ibom state.
- 10. Lutheran High School Obot Idem, Akwa Ibom State.

#### **RIVERS STATE:**

- 1. Government Secondary School Rumolumeni, Rivers State.
- 2. Community Secondary school, Amadi Ama, Rivers state.
- 3. Community Secondary School, Abuloma, Rivers State.
- 4. Government Secondary School, Remuene, Rivers State.
- 5. Government Secondary School, Oromenike, Rivers State.
- 6. Enitona High School, Borokiri Port Harcourt, Rivers State.
- 7. Government Comprehensive Secondary School, Port Harcourt, Rivers state.
- 8. Government Secondary School, Ejekahia Port Harcourt, Rivers State.
- 9. Government Secondary School, Rumukwurishi, Rivers State.
- 10. Government Secondary School, Borokiri, Rivers State.