INDICATORS OF SUCCESSFUL INCLUSION OF A LEARNER WHO IS DEAF IN A MAINSTREAM CLASS

LYNETTE COLLAIR

A Study Project in partial fulfilment of the
requirements for the degree of

Master of Education

(Educational Psychology)

University of Stellenbosch

Supervisor: Professor P. Engelbrecht

March 2001

DECLARATION

I, the undersigned, hereby declare that this study project is my own original work, and that I have not previously in its entirety or in part submitted it at any university in order to obtain a degree.

SUMMARY

Internationally, the right of people with disabilities to participate as full members of society presently receives high priority and inclusive education is one way of facilitating participation. With South Africa firmly committed to a rights culture, it is a matter of time before inclusive education is implemented as policy. Since the education of the deaf presents its own challenges, questions abound around the inclusion of learners who are deaf in mainstream classes. This study seeks to explore the implications of the education of a learner who is deaf in a mainstream class and to explore the factors that facilitate learning in such a setting.

An eco-systemic approach underpins the study. Both intrinsic and extrinsic factors in reciprocal interaction influence the learning of the deaf in mainstream classes. Several of these factors are explored in the international literature. Against this background, this study sets out to examine some of the factors mentioned in the literature as well as additional factors within the context of a rural South African school.

A single learner who is deaf within the context of the family and education system was chosen as the focus of a qualitative, case study. Data were gathered through semi-structured interviews, field notes and a review of personal records. Interviews were held with educators, the principal, a support educator, the learner and the learner's mother.

The data were analysed using aspects of content analysis and five patterns emerged. These were child related factors, family factors, school factors, support and factors pertaining to the education department. The findings indicated that the parameters of deafness which facilitated the learner's success in the mainstream were a mixed hearing loss which benefited from hearing aids to the extent that the learner was able to access the curriculum by means of verbal communication with some compensatory behaviours and learning support. A positive attitude on the part of the school and a willingness to support him as well as good social integration were school-related factors that facilitated inclusion. Achievement enhancing factors despite poor socio-economic conditions were family-related factors that facilitated learning. Intensive early intervention formed a good foundation and continued to be of benefit.

Several factors which could be improved were identified and recommendations were made.

Since the impact of deafness differs from learner to learner, each learner's needs has to be considered individually and placement decisions in one of a range of supportive settings be matched against this need.

OPSOMMING

Dowe onderrig bied eie uitdagings. Internasionaal ontvang die reg van persone met gestremdhede om as volwaardige lede in die gemeenskap opgeneem te word, hoë prioriteit. Inklusiewe onderwys is een manier waarop insluiting en deelname in die gemeenskap vergemaklik kan word. Met die beoogde implementering van 'n beleid van inklusiewe onderwys in Suid-Afrika ontstaan daar vrae rondom die insluiting van leerders wat doof is in hoofstroom klasse. Hierdie studie poog om die implikasies wat onderrig van 'n leerder wat doof is in 'n hoofstroom klas inhou, te ondersoek. Die faktore wat leer in so 'n omgewing vergemaklik, is ook ondersoek.

'n Eko-sistemiese benadering is in die studie gebruik. 'n Enkele leerder wat doof is, is binne die konteks van sy familie en die onderwyssisteem gekies as onderwerp van 'n kwalitatiewe gevallestudie. Beide intrinsieke en ekstrinsieke faktore in wedersydse kommunikasie, beïnvloed die leer van dowe persone. In internasionale literatuur het faktore soos die aard van die doofheid, persoonlikheid, intellektuele funksionering, sosiale integrasie en skool- en familie verwante faktore aandag geniet en daar is bevind dat dit 'n impak op die leerder se sukses binne 'n inklusiewe leeromgewing het. Teen hierdie agtergrond is hierdie studie geloods om bogenoemde faktore en faktore uniek aan die situasie binne die konteks van 'n landelike Suid-Afrikaanse skool te ondersoek.

Semi-gestruktureerde onderhoude is gevoer met opvoeders, die skoolhoof, 'n leerondersteuningsopvoeder, die leerder en sy ouers. Veldnotas en 'n oorsig van persoonlike verslae is ook gebruik om inligting oor die leerder en die onderrig en leerproses te bekom.

Die data is geanaliseer deur gebruik te maak van aspekte van inhoud analisering. Vyf patrone het na vore gekom, naamlik intrinsieke kindverwante faktore, familiefaktore, skoolverwante faktore, faktore rakende ondersteuning en faktore rakende die onderwysdepartement. Die bevindinge dui daarop dat 'n leerder met 'n gehoorverlies wat deur 'n gehoorapparaat in staat gestel word om verbale kommunikasie te volg binne 'n leeromgewing waar daar die nodige ondersteuning is, groter sukses behaal. 'n Positiewe houding teenoor die leerder, 'n bereidwilligheid van opvoeders om die leerder te ondersteun en goeie sosiale integrasie is skoolverwante faktore wat insluiting vergemaklik. Familieverwante faktore wat leer aanmoeding lei tot verhoogde prestasies ten spyte van lae sosio-ekonomiese omstandighede. Intensiewe vroeë intervensies lê 'n goeie grondslag en lei tot langtermyn positiewe gevolge.

Verskeie faktore waar daar ruimte vir verbeteringe is, is geïdentifiseer en aanbevelings is gemaak. Terwyl sekere faktore in hierdie ondersoek geïdentifiseer is as kritiek in die fasilitering van leer in 'n inklusiewe omgewing, moet daarmee rekening gehou word dat die unieke interaksie van 'n ander stel intrinsieke veranderlikes en ekstrinsieke veranderlikes 'n ander stel kritieke faktore kan produseer. Die behoeftes van elke leerder wat doof is, sal dus op 'n individuele basis in ag geneem moet word sodat plasing binne die ondersteunende omgewing wat die beste in sy behoeftes voorsien, gedoen kan word.

ACKNOWLEDGMENTS

I would like to express my heartfelt thanks to the following people for helping to make this project possible:

- My husband for the love, support and for keeping the home fires burning throughout the duration of this study. Thank you, I appreciate the sacrifice.

- Kyle and Wesley for enduring the time of having a present but unavailable mum. I know it wasn't easy.

- My study leader, Professor Petra Engelbrecht for her professional guidance, support and encouragement.

- Doctor Riana Hall for her guidance, support and willingness to help.

- Lucinda Rutters for those many hours of discussions on deaf education, for sharing the enthusiasm, the interest and for being my sounding board.

- Clive, my friend who walked this path with me. Thanks for the encouragement, the interest, the caring and sharing.

- Debbie, Marcia, Sanet, Carina and June for the empathy and encouragement.

- Chris for transporting my work and saving me extra journeys to Stellenbosch.

- The principal and educators at the schools for their friendliness and willingness to participate.

- The Lord above for giving me the strength to cope and the wonderful family and friends to help see me through.

TABLE OF CONTENTS

CHAPTER ONE

CHAPTER THREE

CHAPTER 1

CONTEXTUALISATION AND RELEVANCE OF THE PROBLEM

1.1 INTRODUCTION

As a reaction to a history of injustice and flagrant disregard for human rights based on an ideology of separatism, South Africa has emerged a country with a strong rights culture entrenched in the Constitution and a determination to redress the inequalities of the past by paying attention to the development of ALL its citizens. A previously fragmented system of education, characterised by mainstream and specialised education in one of several racially divided education departments is in the process of being transformed into a unified system whose responsibility would be to realise the rights of ALL learners. These rights are entrenched in the Constitution and the S. A. Schools Act, and serve as the context for the recommendations of the National Commission on Special Needs in Education and Training (NCSNET) and the National Committee on Education Support Services (NCESS) (Department of National Education (DNE), 1997; R.S.A. Constitution, Act 108 of 1996; R.S.A Schools Act, Act 84 of 1996). The transformation process has presented educators, parents and others concerned with a barrage of changes leaving some excited and challenged by the new demands and others confused, insecure and overwhelmed.

It is evident that the traditional service delivery model, used to address the education needs of learners with disabilities and other special educational needs, is set to change. This model was based on the medical discourse which linked disability to impairment and intrinsic deficits. On the basis of this persons with disabilities were excluded from mainstream schools and full participation in the social and economic life of the community. Learners for whom specialised education was not provided, remained outside the education system altogether (e.g. older learners from rural areas who are deaf and had never been to school) or were mainstreamed without the necessary learning or psycho-social support needed to progress. They often straggled behind their peers and became socially marginalised. They also became marginalised from economic participation in the community. Special education was provided in special schools which were classified according to disability. This was provided from the view of seeing learners with disabilities as dependent, in need of help, pity and benevolence from others. The isolation of persons with disabilities in turn led to prejudice, fear and paternalistic attitudes on the part of persons without disabilities (Naicker, 1999:14).

This situation is set to change under the influence of the rights discourse which has gained momentum both internationally and nationally and emphasises the basic human rights of all persons, including those with disabilities, to full citizenship, independence and basic education (Naicker,

1

1999:14; D.N.E.,1998; R.S.A. White Paper on an Integrated National Disability Strategy, 1997; R.S.A. Act 108 of 1996; United Nations Standard Rules on Equalisation of Opportunity, 1994).

Policy initiatives, such as the S.A. Schools Act (1996) and the recommendations of the National Commission on Special Needs in Education and Training (NCSNET) and the National Committee on Education Support Services (NCESS) and the resultant Draft White Paper (2000), clearly support a move towards a single inclusive system of education which recognises the rights to full participation of all citizens and plans over time to include the majority of learners who experience barriers to learning in one of a range of educational settings in the general stream of education. The availability of the necessary support to facilitate access and learning is a crucial element of an inclusive system of education (D.N.E., 2000; D.N.E.,1997; D.N.E.,1996). The education of learners who are deaf will inevitably be subject to the same policies. This leads to questions as to how South African learners who are deaf could be accommodated under the policy of inclusive education.

While it is certainly desired that as many learners as possible who experiencing barriers to learning be fully included in the mainstream classroom on the one end of the continuum of possible educational placement options, it is also recognised that a small percentage of learners will still need to be educated in specialised settings on the other end of the continuum. Which factors should be taken into account when compiling a profile that would predict the most successful placement in the educational setting that would best facilitate learning and holistic development of learners who are deaf? This has far-reaching implications for educational psychologists, educators, parents and others who are involved in assessment and the planning of support in a range of possible education settings. Which learners are most likely to do as well in supported mainstream classes, and which are not? What characteristics do schools need to develop to support such learners? Which learners presently occupying places in specialised settings would cope as well in a supported mainstream?

1.1.1 Personal Motivation for the Study

This study emanates from the researcher's work as an educational psychologist at a school which serves mainly profoundly deaf, black learners from impoverished communities. As a member of the assessment team, she has to make far-reaching recommendations regarding support and placement. Presently placement decisions are based on a less than adequate medical model. With the imminence of a policy of inclusion in a unified education system, the researcher is keen to improve her own practice and to provide guidelines for those faced with similar challenges.

1.2 RESEARCH PROBLEM

The education of learners who are deaf presents its own challenges. Deafness is not a homogenous entity (Easterbrooks, 1999:537; Cohen, 1998:351) in a single system equal for all learners who are deaf. Given the range of intrinsic and systemic factors which interact in a complex way and thereby contribute to each learner's unique experience of barriers to learning, it is impossible to have a rigid formula for the recommendations regarding placement of all learners who are deaf. This study recognises the importance of the consideration of the complexity of each individual learner, but seeks to understand which intrinsic criteria as well as which extrinsic criteria contribute significantly to a learner who is deaf learning successfully in a mainstream class.

1.3 RESEARCH AIMS

This study will seek to explore and understand the implications of inclusion for learners who are deaf as well as explore some of the factors that facilitate a successful learning experience for the learner who is deaf in a mainstream classroom. This exploratory investigation will be conducted through a case study where the education of a learner who is deaf and in a mainstream class will be investigated and indicators for successful inclusion described.

1.4 THE THEORETICAL APPROACH OF THIS STUDY

On a macro level policy- formulation takes place within a particular context; so too on both a meso and micro level the implementation of inclusive education policy also takes place within a particular context. "The values and understanding of learners, educators, schools, parents and communities shape and are shaped by the social contexts in which they find themselves" (Engelbrecht, 1999:4). Since this study aims to gain understanding of the influences of both intrinsic and extrinsic factors on the education of learners who are deaf in mainstream classes, it seems appropriate that the eco-systemic approach be used as the theoretical basis.

1.4.1 The Eco- Systemic Approach

The eco-systemic approach is an adaptation of general systems theory and ecological theory. The basic tenet of general systems theory, as applied to social contexts, is that individuals are micro-systems which form part of a larger system or meso-system which in turn forms part of an even larger macro-system while the basic tenet of ecological theory addresses the reciprocal interaction and resulting influences of subsystems on each other (Donald, Lazarus & Lolwana, 1997; Engelbrecht, Kriegler & Booysen, 1996; Kriegler, 1989; Montgomery & Paul, 1982). In the context of this study the learner will be considered as being part of the broader systems of family, class,

3

school, education system, local community, broader community and social context (Engelbrecht,1999). Each subsystem could further be broken up into mini-subsystems with its own dynamics, e.g. the school into the management, educators, learners and parents. Each subsystem interacts in a reciprocal way, both influencing and being influenced by the other subsystems. The eco-systemic approach is in contrast with the medical model which perceives disability as a deficit in the learner, which has to be remedied in order for the learner to live his life.

1.4.2 Applying the eco-systemic approach as to why learners fail to learn effectively

As a unique individual, each learner finds his/her learning influenced by the unique reciprocal interaction of individual as well as environmental factors. This results in learners experiencing diverse learning needs. Individual or intrinsic factors, such as sensory, physical, mental, neurological, cognitive and developmental differences, interact with extrinsic, psycho-social factors such as socio-economic deprivation, psycho-social disturbances and particular life experiences, to impact on the particular learning needs of a learner. Poorly managed schools, inadequately trained education managers and educators, inflexible curricula, uninvolved parents, inappropriate languages or medium of learning, negative attitudes and stereotyping of disability, inappropriate education policies, political ideologies and inaccessible or unsafe built environments are further extrinsic factors that combine with individual and psycho-social factors and exponentially increase a learner's experience of barriers to learning (D.N.E.,1997). This view inevitably takes into account the role of several systemic factors in creating or exacerbating a learner's experience of barriers to learning.

1.5   RESEARCH DESIGN

1.5.1 Introduction

Since the objective of this study is to investigate and understand the implications of inclusive education for learners who are deaf and the roles of certain variables in facilitating inclusion in a mainstream classroom, a literature review as well as a qualitative, interpretive research method seemed most appropriate.

"In interpretive research, education is considered to be a process and school a lived experience. Understanding the meaning of the process or experience constitutes the knowledge to be gained from an inductive...mode of enquiry" (Merriam, 1998:4).

This mode of enquiry falls within the social constructivist philosophy which holds that multiple realities are constructed socially by individuals (Merriam, 1998:4; Mertens, 1998: 11).

As mentioned in 2.1, the aim of this study is to explore and understand the implications of including a learner who is deaf in a mainstream class. According to Sherman and Webb (in Merriam, 1998:6) "Qualitative research implies a direct concern with the experience as it is 'lived' or 'felt' or 'undergone'". The qualitative method of enquiry was also chosen as it is well-suited to the eco-systemic approach under which the investigation will be conducted and "can reveal how all parts work together to form a whole" (Merriam, 1998:6).

1.5.2 The Case study

The investigation will be conducted through a case study. The case under investigation will be the phenomenon of a learner who is deaf being educated in a mainstream class. Yin (in Merriam, 1998:27) describes the case study as "an empirical enquiry that investigates a contemporary phenomenon within its real-life context...". Miles and Huberman is cited in Merriam (1998: 27) as referring to a case as *a phenomenon in a bounded context*. The case is also seen as *an integrated system* (Stake in Merriam, 1998:28). The phenomenon of educating a learner who is deaf will be studied in the context of the school system.

In this case study the main focus will be on a twelve-year-old boy who is deaf and who is placed in a mainstream class in a rural school situated fifty kilometres from Cape Town in the Western Cape. The school serves mainly black children from poor socio-economic backgrounds.

1.5.3 Data Collection

Data will be collected by means of a literature review, unstructured interviews, a review of personal records and observation.

1.5.3.1 *Literature Review*

The literature review will form an important part of the research process. Merriam (1998:49) defines the literature in this context as " the theoretical or conceptual writing in an area and the data-based research studies...."

"The purpose of the literature review is to provide the researcher with an overall framework for where this piece of work fits in the 'big picture' of what is known about a topic from previous research" (Mertens, 1998:34).

The literature review provides the foundation on which contributions to the knowledge base can be made. In this study, in addition to the above, the literature review will help to inform the choice of criteria used for the sample selection as well as the formulation of the problem. The review will take cognisance of factors considered in previous studies to be critical to the inclusion of learners who are deaf in the mainstream. The literature review will form the frame of reference throughout the study whilst data is collected, processed and interpreted.

1.5.3.2 *Semi-structured interviews*

This type of interview was chosen as it allows for greater flexibility in pursuing new information as it emerges. Questions around several themes will serve as guidelines for the interviews. Interviews will be conducted with several members in the system.

1.5.3.3 *Observation*

The researcher will spend time in the classroom and at the school to observe the learner in the natural learning environment so as to get first hand information.

1.5.3.4 *Review of personal records*

Personal records relating to the learner's scholastic and medical history will be reviewed to obtain case history information.

1.5.4 Data Analysis

As Merriam points out, qualitative research does not follow a linear process. Data collection and data analysis will therefore be a simultaneous, ongoing process (Merriam, 1998:151; Mertens, 1998:348). Data analysis will be done through the following processes: reflection on the part of the researcher during and after data collection as well as content analysis of the data collected through the interviews, observation and review of the records.

1.6   DEFINITION OF TERMS

The key concepts used in the study will be defined. Some important terms used in the field of deaf education and which would frequently be referred to in this report, will also be defined.

1.6.1 Indicators

These are variables or aspects of the individual and the system which play an important role in determining the successful placement of a learner who is deaf in an inclusive education setting. For the purpose of this study, a number of intrinsic or within-child factors as well as extrinsic or systemic factors were chosen for consideration. These factors will be informed by the literature review as well as data that emerges as the research progresses.

1.6.2 Learners with special educational needs

Formerly the emphasis of need was placed within the learner and the term commonly used was "Learners with Special Educational Needs (LSEN)." According to the NCSNET & NCESS in the Public Discussion Document: Education for All (D.N.E.,1997:v,12-19), the emphasis is shifted to the recognition of the learners needs not being met because of the system's inability or lack of response to the learner's diversity, thereby limiting the learner's access to effective learning.

> "For effective learning to be provided and sustained the education system must be able to accommodate a diverse range of needs among the learner population. Sometimes problems in the centre of learning, the education system as a whole, within the wider society or within the learner him/herself which prevent both the learner and systems needs form being met...These factors which limit or prevent access to education provision are seen as barriers to learning" (NCSNET & NCESS, 1997: v).

However, since the term *learners who experience barriers to learning* is not yet in general use in South Africa, it will be used interchangeably with the term *learners with special educational needs* (LSEN).

1.6.3 Inclusion

Inclusion means the full participation of all persons, regardless of difference, in the daily activities - at school, at work and at home of their communities (D.N.E., 1997:53; Federal Council on Disability, 1995). *Inclusive education* therefore means the promotion of equal participation of and non-discrimination against <u>all learners</u> in the learning process, irrespective of their disabilities, within a single, seamless education system. It presupposes the provision of support to enable participation where access would otherwise be difficult (D.N.E., 1999:9; D.N.E., 1997:58). The site of inclusive education ranges from a non-negotiable placement in the mainstream for proponents of full inclusion (Bunch, 1994: 151) to a continuum of learning contexts and resources according to need (D.N.E., 2000).

1.6.4 Learners who are deaf

A learner who is deaf is a learner whose, " hearing is impaired to the degree that it has affected his or her processing of linguistic information through hearing with or without amplification, which adversely affects educational performance" (Easterbrooks, 1999:537). Assistive devices and/or educational strategies are needed to access the curriculum (Western Cape Deaf Interest Group, unpublished pamphlet). Learners who are deaf are classified according to their degree of hearing loss for audiological and medical reference. Those whose hearing impairment exceeds 70dB ISO (Power, 1994:400) are classified as deaf.

1.7 STRUCTURE OF PRESENTATION

Following is a brief outline of the research report:

Chapter One provides an orientation of the study.

Chapter Two deals with the literature review. The education of learners who are deaf, inclusive education and its implications for deaf education will be discussed.

Chapter Three covers the research design and the research methodology.

Chapter Four deals with the data collection procedure, the data analysis, the findings, the discussion and the recommendations.

1.8 SUMMARY OF CHAPTER 1

The introduction contextualised the research questions in the reform that is sweeping the face of South African education. The research questions were formulated and the research method explained. The relevant terms were defined and lastly a structure of the ensuing report was provided.

CHAPTER 2

EDUCATION OF LEARNERS WHO ARE DEAF AND INCLUSIVE EDUCATION

2.1   INTRODUCTION

The chapter will begin with a discussion of learners who are deaf, aspects of deafness and the educational needs of learners who are deaf. Thereafter, an international perspective will be presented with a specific focus on patterns of placement in order to contextualise the issue of placement. This will be followed by a South Africa perspective on deaf education. The move towards inclusive education will then be discussed as well as some of the main features of the inclusion of learners who are deaf. The chapter will be concluded with the listing of the indicators identified in the literature as being important for the inclusion of learners who are deaf in mainstream classes.

2.2   LEARNERS WHO ARE DEAF

2.2.1 The profile of a learner who is deaf

A learner who is deaf is foremost a child, with the full range of diversity in terms of personality, temperament, intellectual abilities and disabilities, learning problems, physical well-being, other disabilities, etc. applicable to all children. The only distinctive factor of this group of children is their varying degrees of hearing loss and the ensuing effect on communication. There is no typical profile applicable to all children who are deaf (Watson, Gregory and Powers, 1999). However, their hearing loss intensifies the impact of difficulties experienced in any aspect of diversity. Deafness combined with any other disability exponentially increases the impact of the already high impact of deafness. The barriers to learning become more complicated and difficult to overcome. Environmental factors also differ and impact on the child who is deaf. The implication for education is that the educational needs of learners who are deaf will differ from child to child based on the unique computation of diversity in each child. It is critical that this be taken into account when planning for education (Ojile, 1998:115). There are several parameters of deafness which impact on any particular child's experience of deafness. Some of the terms most commonly referred to that have not been defined in chapter one, will be defined, in the following section.

2.2.2 Parameters of deafness

2.2.2.1   *Hearing Impairment*

Hearing impairment is a general term which is used to describe varying degrees of hearing loss. The varying degrees of hearing loss are categorised according to the lowest intensity at which sound is perceived and is measured in decibels. Persons with a mild hearing loss fall within the 20-40 dB

range; those in the moderate category between 40-65dB; severe, between 65 and 95dB; and profound, greater than 95 dB. Persons in the *mild* to *moderate* category of hearing loss are referred to as *hard of hearing*. These people use mainly spoken language and cope socially with people who are hearing. Persons in the *severe* to *profound* category are described as being *deaf*. They mostly do not develop intelligible speech naturally. Hearing impairment therefore refers to the entire range of auditory impairment and includes both the persons who are deaf as well as persons with a milder hearing loss (Smith, 1998:201 ; Ashman & Elkins, 1994:400; Moores, 1987: 8).

i. *Deafness*

According to Moores (1987:9) a person who is deaf is one "whose hearing is disabled to an extent (70dB ISO or greater) that precludes the understanding of speech through the ear alone, with or without a hearing aid". The definition of a learner referred to in 1.6.4 focuses on the effects of deafness on education and the learner's educational needs. This definition includes learners with a broader range of hearing losses.

ii. *Hard of Hearing*

A person who is hard of hearing is "one whose hearing is disabled to an extent (35-69dB) that makes difficult but does not preclude the understanding of speech through the ear alone." (Moores, 1987:10).

2.2.2.2 *Types of hearing losses*

i. *Conductive hearing loss*

A *conductive hearing loss* refers to a loss caused by a problem in transmission of the intensity of the sound to the auditory nerve. Wax or malformations may block the auditory canal, the eardrum may be broken or unable to vibrate or the bones in the middle ear may be obstructed. Repeated or chronic ear infections can result in conductive hearing losses. Conductive losses are often reversible and result in a moderate to mild loss. Conductive losses are sometimes temporary. The implications for learning is that a learner may miss critical periods of learning due to hearing losses caused by chronic ear infections. Learners with conductive losses often fall into the hard of hearing category, and learners who are hard of hearing are more readily mainstreamed and require less support than learners with severe to profound sensorineural losses (Watson, 1999).

ii. *Sensorineural loss*

Sensorineural losses are caused by defects in the inner ear or the transmission of sound impulses to the brain. Sensorineural losses may be complete or partial and may affect some frequencies more than others. The main causes of sensorineural losses are heredity, meningitis, maternal rubella, pre-maturity and mother-child blood incompatibility (Rh factor). Sensorineural losses result in moderate to severe to profound losses (Smith, 1998:204; Watson & Parsons, 1998:135; Power, 1994: 396).

2.2.2.3   *Age of onset*

i.   *Postlingual hearing loss*

This parameter of loss is very important. Children who become deaf postlingually or after having acquired normal speech and language, will most likely retain that speech and continue to develop speech and language, especially if the onset of deafness was late and if they have access to assistive devices and support from a speech therapist. This is largely because they rely on the skills learnt earlier to interpret fragmented auditory signals. These children have the language skills needed to access the curriculum and given that other variables are favourable and that the necessary support is provided, they could cope in the mainstream classroom (Watson, 1999).

ii.   *Prelingual hearing loss*

Children with a prelingual loss had been deaf before they developed spoken language. Most of these children were born deaf and do not develop spoken language naturally. Conrad (in Broesterhuizen, 1998:397) says prelingual profound deafness results in extreme difficulties in language development. Often these children use Sign Language as their natural language. These children need intensive specialist educational management and support to access the curriculum. They require special speech, hearing and language assistance as well curricular modifications (Smith, 1998:209 ; Power, 1994:422; Moores, 1987).

2.2.2.4   *Incidence of deafness*

Deafness is often referred to as the *low incidence, high impact* disability, because its prevalence is very low in the general population, but its effect on communication and education severe. In 1997 the U.S.A. Department of Education identified 0.11% of its learners as having a hearing loss (Easterbrooks,1999:539), whereas Ries (in Moores, 1990:116) reported the incidence of deafness in the U.S.A. to be one in one thousand. At the time of writing, statistics for the incidence of deafness in South Africa were not available.

2.2.2.5 *"deaf" and "Deaf"*

As in the heading above, *deaf* with the lower case refers to a persons hearing status whereas *Deaf* with the upper case refers to the Deaf culture. People who adopt a Deaf culture view being deaf as a difference and not a disability (Weisel, 1998 (a):11). They use Sign Language as their language of communication. They congregate and socialise with other Deaf people and have over the years come to be organised into Deaf groups which advocate for Deaf rights and provide specialist services for the Deaf (Deaf Federation of South Africa, 1997:4).

2.2.2.6 *Modes of communication*

The four modes of communication used by educators of the deaf are the manual method, the oral-aural method, the total communication method (Ashman & Elkins, 1994:417-418; Moores,1987; Smith, 1998:211) and sign bilingualism (Pickergill, 1998:88, Storbeck and Henning, 1998:53; Weisel, 1998 (a):20-22).

2.2.3 THE EDUCATIONAL NEEDS OF LEARNERS WHO ARE DEAF

2.2.3.1 *Communication needs*

The issue of communication and the barriers to learning caused by difficulties in language development forms the basis of the educational needs of learners who are deaf. An important educational concern for learners with hearing losses and their educators is the development of communication skills. If the hearing or receptive component of the communication process is dysfunctional, the whole system of communication is affected. Children with severe to profound hearing losses find it extremely difficult to cope with the language intensive demands of learning. The parameters of deafness in any particular individual, the listening environments, the educational and support opportunities and his/her personal characteristics combine to influence the extent to which that person is able to access language. Children with mild losses are less severely affected than those with severe losses, though as Jaffe (in Ashman and Elkins, 1994:413) points out, any form of hearing loss has a detrimental effect on the child's learning. Educators faced with these challenges have had to find specialised ways of communicating with these children as well as ways of circumventing the effects poor language development has on learning. An added challenge is teaching a different language for reading and writing to the language used for manual communication, as is the case of learners who use Sign Language. The four modes of communication used by educators of the deaf are the manual method, the oral-aural method, the total

communication method (Ashman and Elkins, 1994:413-420; Moores,1987; Smith, 1998:212) and sign bilingualism (Pickergill, 1998:88; Storbeck and Henning, 1998:59).

The appropriate choice is informed by the child's parameters of deafness, the success of aided hearing, cognitive factors and the choice of the parents.

i. *The manual method*

Some severely and profoundly deaf people find it extremely difficult to communicate through speech or to learn through speech reading (lipreading). Their preferred mode of communication is the National Sign Language of their country . Sign Language is a visual gestural language which uses the hands, facial expressions and the body in a systematic way to convey meaning. Sign Language has its own lexicon and syntax. It does not represent the spoken language word for word or in the same order. Sign Language differs from country to country (Powers, in Watson, Gregory & Powers (eds), 1999). Finger spelling, by means of the manual alphabet, serves to supplement the Sign Language used. Since there is no written form of Sign Language, instruction through this approach has to be supplemented with a written form of the native spoken language. Sign Language is the official language of people who adopt a Deaf culture. Sign Language interpreters are used to translate spoken language in various settings into Sign Language to assist people who use this form of communication to share access in what is being communicated (e.g. TV, parliament, meetings with people who are deaf). Sign Language has full language status in South Africa and is recognised as a language for education (NCSNET & NCESS, 1997:61; S A Constitution-articles 29&30 1996; SA White Paper on an integrated National Disability Strategy, 1997:34).

ii. *Oral-Aural approach*

In the oral-aural approach the residual hearing of the learner is developed. The learner receives input through amplification of sound and speech reading (lipreading) and they express themselves through speech that is developed with intensive speech therapy. Some oral programmes, such as the auditory-verbal programme, emphasise the use of residual hearing and others make greater use of the visual decoding of speech, while still others combine the two (Moores, 1987:). Some schools of thought adhere to a strict oral only policy, arguing that persons who rely on signing do so at the risk of being excluded from the mainstream of society. Learners in oral only programmes are actively discouraged from using Sign Language (Smith, 1998:213).

iii. *Total communication*

"The total communication method honours the right of every deaf child to use all forms of communication so that he may have the best opportunity to language competence at the earliest age possible" (Smith, 1998: 214).

According to Denton (in Baker and Knight, 1998: 77) total communication uses the full spectrum of communication modes: natural Sign Language, formal Sign Language, speech, speech reading, finger spelling, reading and writing . The advantage of this method is said to be its ability to develop whatever communication strength the child might have.

iv. **Bilingual approach**

Pickergill (1998:88) defines Sign Bilingualism as the approach to the education of deaf children, which uses both the Sign Language of the native Deaf Community and the spoken and written language of the hearing community. The medium of instruction is Sign Language, and the spoken language of the hearing community is introduced as a second language through Sign Language. The advantage of this method is said to be that people who are deaf can have the benefit of exposure to both Deaf culture and the culture of the hearing community.

2.2.3.2 *Other educational support needed*

Apart from an altered approach towards the method of communication, needs for other forms of educational support are also prevalent.

i. *Support via aided hearing*

Children with hearing losses often use *hearing aids*. A hearing aid is basically a system for amplifying sounds reaching the ear. There are several types of hearing aids and a suitable system is recommended and fitted by an audiologist after a thorough audiological assessment. The main categories of hearing aids are aids worn on or in the ear or on the body, radio hearing aids(FM systems) and vibrotactile aids (cochlear implants).

Modern hearing aids are usually behind-the-ear models. Smaller aids are built into frames of glasses or placed behind the ear so as to be as inconspicuous as possible. Technology has improved the range, quality and efficacy of hearing aids. Highly sophisticated aids which filters certain sounds are also available. Previously body aids which have the microphone, amplifier and battery worn in a case on the body were commonly used. While these aids are not widely used today because more

sophisticated equipment is available, they are still used in cases where the alternatives are out of reach because of costs.

It must be noted that aided hearing is not equivalent to normal hearing. With the exception of sophisticated and sometimes expensive aids, amplification of sounds results in all incoming sounds being amplified, including unwanted distractions. Special seating arrangements and minimising background noise may be needed to support learners in the classroom who use aided hearing.

The *frequency modulated* (FM) system is an amplification system where the educator wears a wireless that transmits her/his voice directly to the receiver worn by the child thereby eliminating background distractions. While this system is often preferred, its high cost make it unattainable for most learners.

"A *cochlear implant* is a device that is surgically implanted in the inner ear. Sounds picked up by an external microphone are transmitted directly to the electrode in the cochlea. The electrode stimulates impulses in the auditory nerve. The cochlear implant does not amplify sounds" (Smith 1998:209). The cochlear implant is a surgical procedure and requires a short period of hospitalisation. Intensive speech therapy and parental involvement is needed in order to maximises the benefits of this expensive procedure.

Even with aided hearing, learners who are deaf or hard of hearing usually need additional forms of educational support because deafness usually affects communication which is critical in all areas of learning.

ii. *Sign Language medium school*

Some learners who are deaf need the supportive environment of a school where the mode of communication is Sign Language. They learn best through Sign Language and develop socially in the company of fellow Deaf learners.

iii. *Sign Language interpreters*

Sign Language interpreters help learners who use Sign Language and are placed in mainstream classes, to access the spoken word of the educator. In a country like South Africa this has implications regarding cost and availability of suitably trained interpreters. The role of interpreters in education has been researched and will be discussed later in this chapter.

15

iv. *Adapting the level and complexity of language used*

The adaptation of the level of difficulty of language used is a strategy often used by educators of the deaf to assist learners. Educators often have to keep their language simple and short and continually need to check for comprehension.

v. *Alternate learning styles and cognitive strategies*

Alternate learning styles and cognitive strategies are recommended to supplement the cognitive implications of an under-stimulated left hemisphere in the brain (Ojile,1998). Strategies which rely on visual and experiential learning are useful as a bridge to language development.

vi. *Adaptations to the content and pace of the curriculum.*

Learners who are deaf may need a longer time to achieve education outcomes or they may have to follow an adapted curriculum.

vii. *Small group*

Small group learning where more attention can be given to the learner who is deaf is preferable. Presently in South Africa, the ratio of learners to educators is 8:1 in schools for the deaf. This enables the educator to work individually with the learners.

viii. *Visiting Educators (Support Educators)*

In some countries, learners who are deaf and are placed in regular classes are often supported on a visiting basis by an educator who has specialised in the education of learners who have hearing impairments (Byrnes, 1998:358; Domfors, 1998:363). Learners who are deaf benefit from the specialist input of trained, competent educators of the deaf. Unfortunately the low impact of deafness results in the provision of such educators being quite expensive. Secondly the availability of trained specialist educators of the deaf, competent in the different modes of communication is scarce, even in well resourced countries, like the U.S.A. (Easterbrooks, 1999) and even more so in developing countries, like South Africa. In South Africa, support educators were available to learners who found themselves in racially advantaged schools, but disadvantaged schools were neglected.

ix. *Specialist speech and language therapy*

Specialist speech and language therapy is important to help learners with language delays (Lynas, 1999:117; Smith, 1998; Watson, Gregory and Powers, 1999).

16

2.2.3.3   *Social needs*

All children need to feel welcome and part of the learning community . Learners who are deaf need to be in environments where they too can participate. A shared mode of communication is a critical factor in making learners who are deaf feel welcome and able to integrate. People who are deaf, feel isolated and left out in a world of people who speak and hear (Cohen, 1998:350; Stintson & Lang, 1994:158). This has far reaching implications for the placement of learners who use Sign Language in schools where the majority of learners use an alternate language for communication.

2.2.3.4   *Multi-disabled learners who are deaf*

Additional support is needed for multi-disabled learners. Specialised services are often required, and depending on the learner's need, may take the form of physical access, medication, psychological counselling, occupational therapy and/or physiotherapy, a specialised programme or an alternate education setting. As previously mentioned, the presence of deafness exacerbates the barriers to learning presented by any disability.

2.3   PERSPECTIVES ON THE EDUCATION OF LEARNERS WHO ARE DEAF

2.3.1 An international perspective on patterns of placement of learners who are deaf

Understanding the context of policy development in deaf education in other countries is a complex matter. As Phillips (1989:269) writes,

> "It is of course clear…that comparative research in education should take into account the historical, political, social and cultural settings of particular systems and aspects of them. It is only through analysis and understanding of the roots that feed education systems that we can arrive at a proper understanding of why things are as they are…Outcomes themselves should not be seen in isolation from the processes that have produced them".

2.3.1.1   *Early trends*

The special communication needs of the deaf formed the basis of the development of special education programmes with instruction through either the manual or oral mode of communication. In the early stages of education of the deaf, schools in the USA, Europe, Australia and Britain were separate from mainstream schools and mainly residential (Kumsang and Moore, 1998:236; Power, 1994:422; Moores, 1987:49). Developing countries such as Zimbabwe also implemented specialised education for the deaf in separate schools towards the end of the nineteenth and early twentieth centuries (Barcham, 1998:251).

Factors such as the general social milieu, the way the meaning of deafness was construed and changes in educational philosophies influenced the way and place in which learners were educated. Placement was further complicated by the highly specialised instructional needs of early childhood education of the deaf and limited provision because of the low incidence of profound early deafness.

i. *The development towards inclusive education in the USA*

Moores commenting on the placement patterns of disabled persons in the USA at the time, noticed how the theme of segregation and isolation evident in the broader society at the time was reflected in the segregation of disabled learners in education. Unlike attempts at integration in Europe, the USA maintained the segregated education system for disabled learners well into the nineteenth century. Alexander Graham Bell noticed that the separation of the deaf from the mainstream of society resulted in the formation of a Deaf culture with its own distinctive language and an increase in marriages of people who were deaf to each other. Bell was opposed to the idea from a genetic point of view, and lobbied unsuccessfully for integration (Moores, 1987:76). However, the roots of an organised Deaf culture were firmly set and grew from strength to strength. Despite Bell's efforts learners who were deaf continued to be educated in mainly residential schools with only a few day school programmes offered in metropolitan areas. A rubella epidemic in the early sixties resulted in an increased incidence of deafness in children born in the USA. The existing residential schools could not accommodate the increased numbers and it was decided not to build additional schools for what was considered to be a once-off problem. These children were accommodated in day school programmes in units close to their homes. At about the same time some educators questioned the efficacy of residential or special class placement and the term *mainstreaming* became popular. Several landmark court cases challenged the "separate but equal" approach to education. The decision by the Supreme Court of the United States in 1954 in the Brown v. Board of Education case that "this concept and policy were found to be unconstitutional" is seen as the first step in dismantling the philosophy of segregation in education in the USA. The Mills v. Board of Education of the District of Columbia (1972) and Pennsylvania Association for Retarded Citizens v. Commonwealth of Pennsylvania (1972) were two further cases where it was ruled that it was illegal to exclude retarded individuals from free public education. In both cases mainstream classroom placement was seen to be preferable to special class placement, which in turn was preferable to placement in residential schools or institutions (Smith, 1998). The foundation seemed to be set for a revision of the laws governing education in the USA with obvious implications for education of learners who were deaf. In 1975 U.S. Public Law (PL) 94-142 (142nd public law passed by the 94th Congress), the Education for All Handicapped Children Act was passed. This law enabled access to

thousands of children who were previously denied access because of physical, sensory or learning disabilities (Moores 1992:23). Appropriate public school education in the least restrictive environment was interpreted as placement not being restricted to one setting but to a range of possible alternatives including instruction in mainstream classrooms, resource rooms, self-contained classes and special schools and institutions. The law was amended in 1986 to mandate free appropriate education for children ages three to five with disabilities. In 1990 PL94-142 was further amended. Some of the modifications included the change in the name of the law to the *Individuals with Disabilities Education Act (IDEA)*. The IDEA was explicit in its call for including children with disabilities in regular school programmes. It emphasised that children with disabilities should be educated in settings where they would have been placed if they did not have the disability and underplayed the desire to have children educated in segregated settings (Smith,1998). The implications of the changes in education policy for learners who are deaf were that a range of placement options became available. These were residential schools, day schools, classes in ordinary schools, resource rooms and placement in the mainstream classroom with support from an itinerant educator of the deaf. In the nineties the inclusive movement gained momentum. The "low incidence, high impact " dimension of deafness and the required special management in education presented a real challenge to the inclusion of learners who were deaf (Smith, 1998:198). Smith reported that by 1992 - 1993 50% of learners with hearing losses were accommodated in separate classes, schools or residential facilities. The other 50% were being catered for in mainstream classes.

ii.   *The development of placement patterns in Great Britain*

The first special school for the deaf was Braidwood School, established by the distinguished educator, Braidwood in 1760 (Moores, 1987). For most of the twentieth century learners who were deaf were educated in special segregated settings. From 1947 learners with hearing losses were integrated in "partial hearing units" attached to ordinary schools. Lynas (in Kumsang and Moore, 1998:236) saw this as the start of the integration movement which developed rapidly in the 1950s and 1960s. The Civil Rights campaigns of the time also affected people who were deaf and a change from a dependency to a self advocacy movement was detected (Kumsang and Moore, 1998:236). The Education Act of 1970 gave impetus to the fact that all children, regardless of their degree of disability were deemed educable and the local education authorities were required to provide education for them. Changes in education provision for deaf children in Great Britain has been affected by general educational legislation or the legislation pertaining to Special Educational Needs (SEN) in particular. The Warnock Report published in 1978 greatly influenced the development of policy and practice of education of learners who were deaf by giving greater impetus to their

19

integration into mainstream schools and by promoting the integration of all learners with SEN (Kumsang and Moore, 1998:236-237; Hegarty, 1994:80). Subsequent policy changes were enacted through ensuing Education Acts of 1981, 1988, 1989, 1992, 1993 and 1996. Britain declared its support for the Salamanca Statement and in 1997 the UK government announced a policy of inclusion and wrote it into law in the DfEE,1997 (Dyson, 1999:37).

iii. *Patterns of placement of learners who are deaf in Australia and New Zealand.*

Australia and New Zealand in keeping with the trends in the rest of the western world, started education provision for learners who were deaf in separate schools. With the move towards decentralisation of education provision in a number of states in the 1950s and 1960s, a number of units (Speech and Hearing Centres in South Australia) were established on the premises of primary and to a lesser degree in secondary schools. The units functioned separately and Power (1994:422) described these units as "mini schools for deaf whose main rationale was that of having the learners educated in a setting as close to home as possible and not necessarily integration or mainstreaming. "Levels of integration were left to the discretion of the educators and often it was not more than it would have been had the children been in a separate special school" (Power, 1994: 422). From the 1950s to the 1970s the state of Victoria implemented integration of learners with mild to moderate losses and occasionally placing those with profound losses individually in mainstream classes and supported by Visiting Teacher Services. The frequency of visits varied, as did the role of the educators. The needs of learners who were deaf were determined by a central expert body, who recommended placement in state schools. Parents often had little say in the placement of their children. Since the 1970s and 1980s Australia and New Zealand special education theory and practice were influenced by the "notions of normalisation and mainstreaming coming into vogue from developments in Scandinavia, PL 94-142 and the Warnock Committee of Enquiry in Great Britain" (Power, 1992:424). Deaf learners were in a sense already in mainstream classes supported by itinerant educators. The developments in special education did however result in the closure of the big state schools for the deaf, the decentralisation of programmes into suburban or small town units and /or the changing of schools for the deaf into schools for severely multi-handicapped children. In both Australia and New Zealand the current provision for learners who are deaf and hard of hearing is mainly units in regular primary and high schools. Power (1992:428) reported that the benefits of establishing units for the hearing impaired at high schools were that educators have higher aspirations for these learners and that more learners who are deaf and hard of hearing were achieving high school diplomas and proceeding to higher learning.

iv. *The current trend in education of the deaf in Finland*

Finland has a population of 8000 deaf people of whom 5000 use Sign Language as their main means of communication. The trend in placement is for the majority of learners with severe or profound hearing losses to be educated in one of the eighteen schools for the deaf which offers them a bilingual education in Sign Language and Finnish. Those with a mild to moderate hearing loss generally attend mainstream schools. The Finnish government is very supportive in terms of providing paid Sign Language courses for parents of deaf children and promoting Finnish Sign Language (Barcham, 1998:250).

v. *Placement patterns in Zimbabwe*

Zimbabwe's provision of education for learners who were deaf was started by the churches. Since independence in 1980 the government's responsibility has extended to the development of a policy of integrated provision for most children with disabilities, including those who are deaf. By the mid-nineties, Zimbabwe had five special schools for the Deaf and around 40 resource units attached to primary and secondary schools catering for approximately 1000 deaf children (Perusuh and Barcham, in Press in Barcham, 1998:252).

2.3.2 A South African perspective

2.3.2.1 *A brief history of the education and patterns of placement of learners who are deaf in South Africa*

The development of specialised education in South Africa is linked to developments in specialised education in other parts of the world as well as the philosophies and politics of the time. Historically the vast disparities in services were linked to the philosophy of separatism based on race.

2.3.2.2 *Early provision*

Deaf children, like other disabled children, were at first not included in education. In 1863 the first Institute for the Deaf, Dominican Grimley, was started by six Irish sisters of the Roman Catholic Dominican Order (Du Toit, 1996:8). The school soon succumbed to the philosophy of separatism and split into two: Dominican Grimley for white children and Dominican School at Wittebome for coloured children. Soon afterwards the Dutch Reformed Church opened the Institute for the Deaf and Blind in Worcester (1881) followed by Dominican Schools for the Deaf in King Williams Town (1896) and St Vincent's School for the Deaf in Johannesburg. These were private schools with no financial aid from the state and the trend was to educate learners who were deaf in residential schools often far from their homes.

After 1900 the state became increasingly involved in specialised education for white children. The schools were recognised by the state and the state contributed to the educators' salaries. The state thus assumed increasing responsibility for the education of white children, but made no provision for blacks in formal education. The churches later influenced the private establishment of schools for black children who were deaf. These schools follow adapted curricula and offer mainly vocational training and basic literacy.

During the apartheid years the quality and quantity of education of both general and specialised education was enhanced for white children but systematically neglected for other groups. Education for black children fell under the administration of one or other racially-based state department (Engelbrecht, Naicker & Engelbrecht, 1998:97-98; D.N.E., 1997:22). Disparities in funding and development of staff in the different racially-based departments resulted in vast differences in quality and provision. There was inadequate or no specialised education for black children on the one end of the continuum to high quality individualised service for white children with other groups somewhere in between (Engelbrecht, Naicker, Engelbrecht, 1998:97). A lack of health services as well as poor socio-economic conditions exacerbated the incidence of disability in black communities resulting in greater need and fewer facilities.

"Learners who were 'non-speaking'…[like those who were deaf], particularly those in rural and disadvantaged areas, had virtually no access to education in the past due to a lack of skills in alternative communication… As a result they have experienced tremendous barriers to learning and development which frequently resulted in their total exclusion from formal learning and in some cases from life in the community as well (D.N.E., 1997:31).

2.3.2.3   *Education for the deaf under the democratic government.*

While there have been statutory changes regarding funding, staffing, governance and desegregation of all schools (S.A. Schools Act, 1996), the shift from policy to practice still remains a challenge. While there have been some changes such as increased self-governance of schools and the availability of limited education support in areas where there was none previously, the heritage of the apartheid era is still evident in education. The present government is faced with the task of implementing strategies that would change education and other structures so as to bring about meaningful change that would eventually result in the desired democratic order (Engelbrecht, Naicker & Engelbrecht 1998:98). As discussed in chapter one, the present government is strongly committed to the recognition of human rights and to the development of all its citizens.

At present, however, it is still largely the norm to educate learners who are deaf and hard of hearing in separate, special schools and only a minority is educated in mainstream classes.

The present reality in education for persons who are deaf is that those who previously enjoyed the benefits of well-resourced special schools still do and those who were disadvantaged either remain unsupported in the mainstream or have access to limited instead of no support services. In the Western Cape the backlog of learners who arrive from rural areas where service is lacking, bring new problems to the fore such as learners starting school for the first time at a very late age, for example fourteen years. These learners are past the critical early years of optimum language acquisition, resulting in learning problems that are extremely difficult to manage. Many learners from rural areas are sent to live with relatives who themselves experience accommodation problems and extreme poverty. The spirit of Ubuntu present in black communities results in relatives accepting these children despite severe hardship. Existing residential schools which were formerly only for advantaged groups have various gate-keeping criteria that make it very difficult for black learners who are deaf to gain access (e.g. no Xhosa). Many hard of hearing disadvantaged learners simply remain in an unsupported mainstream where their lack of progress demotivates them and frustrates their educators. Furthermore the lack of clear policy regarding the provisioning of assistive devices and the high costs of privately acquiring hearing aids and FM systems put the benefits of these devices still beyond the reach of the disadvantaged child. While a few students do manage to access schools formerly reserved for race groups other than their own, this is more the exception than the rule. There is also no sharing of resources between schools and it is the researcher's experience that the benefits of the new order still remain a mirage for many learners who were and still are disadvantaged.

2.4 THE MOVEMENT TOWARDS INCLUSIVE EDUCATION

"Inclusion is an attitude not a place"

(Stephen Powers, 1996a :35)

2.4.1 What is understood by inclusive education?

"Inclusive education is defined as providing to all students, including those with significant disabilities, equitable opportunities to receive effective educational services, with the needed supplemental aids and support services, in age appropriate classes in their neighbourhood schools, in order to prepare students for productive lives as full members of society".

(Lipsky and Gartner, 1999:13)

The Salamanca Statement and Framework for Action on Special Needs called on all governments to:

> "...adopt as a matter of law or policy the principle of inclusive education, enrolling all children in regular schools , unless there are compelling reasons for doing otherwise" (UNESCO, 1994: ix).

Implicit is the idea that all children can learn and that they should be granted the opportunity to enrol in mainstream classes. The desirability of all children to learn together is clearly stated. Lipsky and Gartner (1999:13) further describe the term *full membership* "as encapsulating the essence of inclusive education".

The Salamanca Statement highlights the principle of participation. It emphasises the rights of all children to full participation in the life of the community as well as the right of the child and their parents in the decision-making process regarding their education. Inclusive education is seen as being provided in schools that service all children. It is promoted for its educational reasons (...provides effective education for the majority...), for its social reasons (...means of combating discriminatory attitudes) as well as for financial reasons (...improves the...cost effectiveness) (UNESCO, 1994).

The term *full inclusion* has recently been used to imply the provision of quality education for all learners in their mainstream neighbourhood schools. This view holds that all children need to be included in the educational and social life of their neighbourhood schools and classrooms. It is based on the premise that learners have different needs and that the onus is on the education system "to arrange a mainstream that accommodates the [diverse] needs of all learners" (Ainscow, 1995; Stainback & Stainback, 1992:4). Proponents of full inclusion advocate for all learners to be granted the opportunity to take up their rightful place in mainstream classrooms with the provision of a range of support to address their learning needs (Bunch, 1994:151).

An alternate view to the full inclusive movement is the view that holds that the site of fully supported quality education should be one of a *range* of options in a single system of education. The term *least restrictive environment* is often used to refer to the environment which is most suited to the needs of the learner. Stephen Powers draws attention to the importance of embracing the *attitude of inclusion* and not the place and sums it up in the words, "inclusion is an attitude and not a place" (Powers, 1996:35).

The special needs of learners who are deaf warrant special attention and provision. These needs have been catered for in the Salamanca Statement, which specifies that learners who are deaf have special needs that may necessitate being educated in special units or special schools which cater for their language needs (UNESCO,1994) In South Africa inclusion as seen as from the perspective of the White Paper on the National Disability Strategy is a shift from an " 'individual change model' to a 'system change model' that emphasises that society has to change to accommodate diversity, that is to accommodate all people" (R.S.A, 1997:79). This echoes the notion by Powers (1996:35) that inclusion calls for a change in attitude towards diversity. It is not about the eradication of difference, but rather about the affirmation and normalisation of it.

Inclusive education as used in the South African context, means the promotion of the equal participation of and non-discrimination of all learners in the learning processes, irrespective of their disabilities, within a single, seamless system, along a continuum of learning contexts and resources according to need (D.N.E., 1999:9).

The rationale for inclusive education is to educate all learners in ordinary schools alongside the natural diverse representation of their communities so that they can learn to live and work together and gain understanding of each other as preparation for full participation as members in their communities. In so doing, diversity will be recognised as the norm and the active participation of all persons in the life of the community will be respected as a basic right. This way of thinking requires a change in attitude on the part of the communities, where disability is accepted as normal diversity and the rights of all to belong are respected.

2.5   INCLUSIVE EDUCATION FOR LEARNERS WHO ARE DEAF.

According to the literature there are two sets of variables that have a direct bearing on learners who are deaf in mainstream schools. These are within-child or intrinsic factors, and systemic or extrinsic factors. The intrinsic factors include degree of hearing loss, communication skills, academic ability, social skills and personality. The extrinsic factors include school and classroom factors, availability and degree of educational support, parent involvement, community involvement, social acceptance, and availability of assistive devices (Powers, 1999; Antia,1998:148; O' Donnell, Kluwin and Moores, 1992). Intrinsic and extrinsic factors do not function exclusively but interact with each other to impact on the learner's educational outcomes.

2.5.1 Intrinsic factors

2.5.1.1   *Linguistic competency*

The linguistic competence of a learner who is deaf is crucial to successful integration. A learner who arrives at a mainstream school without an established language (Oral or Sign) will not have a vehicle through which the curriculum can be mediated. The basic tool for communication and learning needs to be established (Antia, 1998:148). Interpreter services are only of benefit to those who are already competent signers. For learning to be successful, the educator also has to be competent in the mode of communication used by the learner (Easterbrooks, 1999:544).

It has been found that learners with a high level of oral linguistic proficiency interacted more frequently with their hearing peers resulting in good social integration (Gaustad & Kluwin, 1992:107).

2.5.1.2   *Intellectual ability*

While a learner's intellectual functioning is thought to play an important part in the ability to achieve success in inclusive settings (Powers, 1999:268), it is not easy to assess levels of intellectual functioning of learners who are deaf since standardised tests commonly available to psychologists are not standardised on populations of deaf and provide inaccurate results (Easterbrooks, 1999:546). A dynamic approach to assessment seems to offer a viable alternative when assessing the learner who is deaf (Blennerhasset in Moores and Meadow-Orlans, 1990:255-280).

2.5.1.3   *Additional disabilities*

As previously mentioned, additional disabilities, such as mental retardation or specific learning problems have a negative effect on a learner's success in a regular class (Powers, 1999:266).

2.5.1.4   *Parameters of deafness*

Learners who are hard of hearing as well as those who have become deaf postlingually cope well in mainstream classes where support is available. Ability to communicate rather than degree of hearing loss has been found to have an effect on academic achievement (Kluwin ,1992).

2.5.2 Extrinsic factors

2.5.2.1 *Educator attitudes*

Educators who have positive attitudes towards inclusion and accept the primary responsibility for teaching the learner (or ownership), contribute positively towards successful inclusion of learners who are deaf in regular classes (Antia, 1998:154). However, this is not always the case as indicated by the study done in Greece which showed that educators of the deaf have a higher degree of a negative attitude towards inclusion in contrast to the positive attitude of other educators (Lampropoulou & Padelladu, 1998:32).

2.5.2.2 *Social integration*

Several studies report problems in the social integration of learners who are deaf. These learners often feel isolated because of being cut off from the social exchanges that occur in a speaking environment (Watson, Gregory and Powers, 1999; Domfors, 1998:363; Stinson & Lang, 1994:157). Social integration in inclusive settings is linked to a learner's ability to communicate with other learners in a shared language. Learners who were the only or minority Sign Language users in a school experienced social isolation and negative patterns of communication (caretaker attitudes) from learners who could hear (Cohen, 1998:349). This supports the view that learners who are deaf and use Sign Language need to be exposed to other Sign Language users and the Deaf community for social development. A Sign Language medium school or a mainstream school with a critical number of learners who use Sign Language and the rest of the learners and staff engaged in learning Sign Language seems to best accommodate the signing child who is deaf. It has been reported that in instances where a significant number of learners who are deaf attend the same mainstream school, they tend to congregate, but seem better adjusted. This is attributed to the fact that they received the necessary social support from each other. Several models of integrating learners who are deaf into he mainstream have been reported. Kirtchner (1994) reported on the co-inhabiting of one campus of a school for the deaf and a mainstream school and Anderson (in Weisel,1998(c):392) considered inclusion through congregation of significant numbers of learners who are deaf in a mainstream school. The overall impression gained was that learners who were deaf and who used Sign Language were better adjusted when placed in settings where other Sign Language users were present.

Antia, (1998:155) noted in a study that examined classroom and school-related factors that facilitated inclusion, that efforts by the educator and all members of the class to learn Sign Language, by having weekly lessons, had a positive effect on all learners and facilitated social integration and natural communication with the learner who was deaf.

The age at the first inclusive placement plays an important role. Learners who were placed in integrated settings from the pre-school years had less problems with social integration (Bilir & Bal, 1998:368) than older learners.

Turner and Traxler (1997) looked at children's literature which could assist learners who are not deaf to gain insight and help dispel misunderstandings they may have about learners who are deaf. The books listed served as a useful reference list for educators in the field and is one way of facilitating improved social relations between deaf and hearing learners.

2.5.2.3   *School, educator and classroom-related factors.*

Donell, Kluwin and Moores (1992:194) commented that achievement in programmes for the deaf in mainstream school is linked to staff quality, administrative effectiveness, attitudes of the school towards inclusion and community support. Schools which include learners who are deaf have to provide welcoming communities with positive attitudes towards diversity and a valuing of all children for the unique contribution that they bring to the school (Smith, 1998).

A collaborative approach to planning of all staff involved with the education of the learner improved outcomes and benefited the learner (Antia, 1998:158).

2.5.2.4   *Family-related factors*

Since the contexts of learning are not independent of each other, the relationship between the school and the family is seen as important in the overall development of the child (Leichter in Kluwin and Gaustad, 1992:66). Deafness makes emotional, social and financial demands on families. The degree of a child's hearing loss and ability to communicate requires special efforts on the part of the family members to communicate with the child. The parents ability to communicate with their child in the mode of communication used by the child in the classroom is seen as the most enabling factor in enhancing learning. Parent achievement-supporting behaviours such as being interested in the child's learning, homework checking and assisting with reading have a positive effect on the learner's academic performance. Factors such as socio-economic status, family structure and family resources are factors that facilitate achievement-supporting behaviours (Kluwin and Gaustad, 1992:72).

2.5.2.5 *Curriculum-related matters*

Inclusive education calls for all learners to be granted the opportunity to access the curriculum. O'Donnell, Moores & Kluwin (1992:214) found that learners who were deaf benefited from being exposed to more curriculum content than was previously offered in adapted curricula offered at special schools.

2.5.2.6 *Educational support*

While educational support, such as assistive devices, special educator services and supportive therapeutic services are commonly available to learners in regular classes in many countries (e.g. U.S.A., Australia, Britain), they are not a given in most South African situations. The availability of these services was and still is linked to degree of advantage enjoyed under the previous government. The availability of support needed is therefore a critical factor in determining success of a learner who is deaf in an inclusive setting in South Africa.

2.5.2.7 *Interpreter Services*

Interpreter services are available in countries like Australia and the USA. Apart from daily classroom interpreting duties, the roles of interpreters differ in respect to the range of other activities in which they are involved. In some schools, the interpreter is seen as co-educator and is involved with planning and preparation (Antia, 1998:156; Hurwitz in Weisel, 1998(b):237) whereas in other cases duties vary and include Sign Language tutoring, helping learners who are deaf with homework and other supportive activities (Jones, Clark & Solz, 1997). The efficacy of an interpreted education has been questioned (Cohen, 1998:350; Shaw and Jamieson, 1997:42) and can be summed up in the following quote:

"While it is true that interpreting can provide access to much informational content, an interpreted education is second-hand education. No matter how skilled the interpreter…the interpreter always remains a kind of filter" (Cohen, 1998:350).

Interpreter services are also costly and the availability of interpreter services remains a problem. This is especially the case in South Africa where few interpreters are trained and their services very costly.

2.5.3 Advantages and concerns regarding the inclusion of learners who are deaf

Although the advantages of the inclusion of learners who are deaf are well documented, there is some reservation about learners who use Sign Language being placed in mainstream schools.

The advantage of improved academic achievement of learners who are deaf, is reported by Powers, (1999: 265); Afzali-Nomani , (1995:397) and Kluwin, Moores and Gaustad (1992). More learners who are deaf and in mainstream schools proceed to higher education levels than those in special schools (Power, 1999). Factors such as higher expectations on the part of mainstream teachers, classroom support and a positive attitudes towards inclusion are considered important in contributing towards improved achievement. There are mixed reports about the social integration of learners who are deaf in mainstream settings. Antia (1998:148) and Afzali-Nomani (1995:397) reported positive social integration in their studies while Cohen (1998: 347) attributed problems in communication to negative patterns of social integration. Antia (1998) and Afzali-Nomani (1995) noted that the social adaptations of both the deaf and hearing improved in inclusive classrooms. Antia (1998:152) also noted that efforts to enhance visual learning of the learner who was deaf benefited the whole class and resulted in improved achievement.

There is concern against the forced inclusion of learners with severe to profound losses into the mainstream e.g. in Australia, New Zealand and the U.S.A. (Commission on Education for the Deaf 1988 in Powers, 1992:424). The argument against the inclusion of this group of learners is based on the idea that they should be exposed to Sign Language and the emotional, social support of the Deaf Community (Cohen 1998; Tsvingstedt, 1998:406). It is felt that special schools for the Deaf encourage exposure to and participation in Deaf culture whereas placement in regular settings denies learners who are deaf this opportunity (Powers, 1992: 424). On the other hand this view is considered to be a way of ensuring separatism and as Bunch (1994: 152) points out, "language and cultural issues should not be played out on the educational arena".

Another concern of people who are deaf, educators of the deaf and parents of children who are deaf is that with the trend towards dispersal of the deaf, the specialist resources needed for the education of children who are deaf may be reduced and not made available to them (Powers, 1992:425).

2.6 SUMMARY

This chapter looked at the education of the learner who is deaf. Commonly used terminology was defined. Placement patterns throughout the history of deaf education was seen to be closely linked to the social milieu and beliefs about disability as well as education policy of the time. The emphasis on the rights of persons with disabilities, the questioning of the efficacy of specialised education, the influence of the post-modernist world view as well as the strides in technology have resulted in world-wide changes in the education of the deaf. The support for inclusive education has in many countries resulted in the inclusion of a significant percentage of learners who are deaf in regular classes in the mainstream (e.g. Australia and the USA). Alternatives in practice at present is to place learners who are deaf in special units attached to mainstream schools (e.g. Britain, Zimbabwe, USA and Australia) or Sign Language schools (e.g. Finland and Sweden). There is however, an international shift away from the special, segregated, residential schools for the deaf. Advocates of full inclusion or the placement of all learners in the mainstream have met with criticism from the majority of educators of learners who are deaf. Instead most educators favour a choice of a range of placement options informed by the needs of the individual learner (Byrnes, 1998; Afzali-Nomani, 1995). This view is held by educators who argue that full inclusion of learners who use Sign Language as their first language do not have their needs for academic and social development adequately met when placed in schools where Sign Language is not used by a significant number of staff and other learners. Learners who are deaf feel isolated when they are unable to communicate with others at school and this has been thought to be exclusive rather than inclusive (Stinson and Lang, 1994). However, Bunch (1994:152) advocates strongly that the right to choose a placement option be respected as a right of the consumers of deaf education.

As discussed in chapter one, the South African education system is in the process of transforming and policy indicates that South Africa is well on its way to implementing a single inclusive system of education. According to recent policy discussion documents, special schools for the deaf will continue to serve learners in need of intensive support and will serve as resource centres for educators in the mainstream. Learners with hearing losses who are able to cope in ordinary classes in the mainstream with support, will be educated there. Language rights of learners are recognised and will be respected. This seems to imply that learners whose language of communication is Sign Language, will be able to receive their education through that medium. Inter-sectoral collaboration is suggested as an answer to the provision of assistive devices (e.g. hearing aids) needed by learners to access the curriculum (D.N.E., 2000).

31

Inclusive education emerged in response to similar modern-day influences. The educational needs of learners who are deaf were discussed and the implication of inclusion considered. The advantages and concerns about including learners who are deaf were discussed followed by the factors which influence the success of learners placed in inclusive settings.

After a review of the literature, it was decided that the following factors should be included in the field study of the factors that contribute to a learner learning successfully in a mainstream class:

Intrinsic factors: parameters of deafness

additional disabilities

ability to communicate

Extrinsic factors: school-related factors

family-related factors

availability and type of support

social integration

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1   INTRODUCTION

In this chapter the research design and methodology of this study will be discussed. The research process with special attention to sampling, data collection methods, data processing techniques and methods of data interpretation will be discussed. Reliability and validity as well as ethical issues will also receive attention.

3.2   RESEARCH AIM

As discussed in Chapter one, the aim of this study is to explore and understand the implications of the inclusion of learners who are deaf in mainstream classrooms in order to formulate indicators for successful inclusion. The study also aims to understand against the background of the literature study which intrinsic and extrinsic factors contribute to the success of inclusive placement. A-twelve-year-old boy who is deaf and who is placed in a mainstream class in a rural school outside of Cape Town is the central focus of this study.

3.3   RESEARCH DESIGN

 Research design refers to the overall plan or blueprint according to which information (data) will be assembled, organised and integrated, which will result in a specific end product. The type of design used is informed by the world view of the researcher, the nature of the research problem, the questions it raises and the product desired (Merriam, 1988:6; Merriam, 1998:3). The nature of the research question as discussed in Chapter one, has resulted in a *qualitative, contextual, descriptive* research design being chosen. The research strategy used is that of a *case study*.

Qualitative research refers to research that is designed to provide an in-depth **description** of a specific phenomenon. It is research in which data in the form of words rather than numbers are gathered and it is used to convey what the researcher has learned about the phenomenon. Qualitative research is concerned with the study of phenomena in their natural settings as it is lived and experienced (Merriam, 1998:7; Mertens, 1998:160). The interest is therefore in the process rather than the outcomes.

According to Denzin and Lincoln (as quoted in Mertens, 1998:159) qualitative research is:

> "… multimethod in focus, involving an interpretive, naturalistic approach to its subject matter. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or interpret phenomena in terms of the meanings people bring to them..."

As previously quoted (Merriam, 1998:6), "…qualitative research can reveal how all the parts work together to form a whole" and it is therefore well-suited to the eco-systemic approach which underpins this study.

Some key aspects of qualitative research relevant to this study will be discussed:

- Since the primary aim of qualitative research is to understand, it was considered most suitable for the purpose of this study.
- Qualitative study takes place in the real world in which the phenomenon takes place (Merriam, 1998:7). This study was based at the site of learning, namely the school, so as to gain insight into the meanings given by the participants to their worlds as well as the structuring thereof. This was done by what Miles and Huberman (1994:10) refer to as "thick descriptions" of the education of a learner who is deaf in the real context of the system in which he finds himself.
- Data in the form of words rather than numbers seemed most appropriate to this study.
- Qualitative research is inductive in nature. Abstractions, concepts, hypotheses or theories are built rather than tested (Merriam, 1998:7; Mertens, 1998:160; Huysamen, 1994:172).
- The researcher is the primary instrument of data collection and analysis (Merriam, 1998:7; Mertens, 1998:175). Several methods of data collection are used in qualitative research. Interviewing, observation and document review were the methods employed in this study.

Within the eco-systemic approach it is understood that there is a reciprocal influence of the context in which the individual exists and the individual him/herself. This view takes cognisance of the fact that one cannot separate individual from context. Valle, King and Halling cited in Huysamen (1994:167) emphasised this relationship and say that:

> "In the truest sense, the person is viewed as having no existence apart from the world and the world as having no existence apart from persons. Each individual and his or her world are said to co-constitute one another".

34

According to Miles and Huberman (1994:10) human behaviour always occurs "in specific situations within a social and historical context, which deeply influences how they are interpreted by both insiders and the researcher as outsider".

This study is *contextually based* in a rural school in the Western Cape that has been disadvantaged in the apartheid era and still finds itself coping with minimum resources when compared to better off schools. The school serves black, Xhosa speaking children from the low socio-economic area in which it is situated. The homes of the learners range from small brick houses to shacks. Unemployment is a reality in the lives of many parents of learners served by the school.

The school is funded and administered by the regional education department. As previously mentioned, education in South Africa is in the process of transformation since the change to democracy. The school is influenced by the changes in policy implemented by the education department.

Descriptive research aims to examine events or phenomena in the way that they are lived. There is no manipulation or treatment of the subject and the researcher takes things as they are. As previously quoted, the aim is that the researcher gains insight through "thick descriptions...", which are accurate, detailed descriptions (Miles & Huberman, 1994:10; Merriam, 1998:29). This study is descriptive in that its aim is understanding through accurate and careful description of a learner who is deaf learning in the context of a mainstream school.

3.4 RESEARCH METHODOLOGY

3.4.1 Case study

Merriam (1998:34) says that the qualitative case study can be defined in terms of the unit of analysis (the bounded system), the process of carrying out the investigation and the end product.

3.4.1.1 *The unit of analysis*

The unit of analysis, namely the case, is thought to be the most defining characteristic of this method of research. The case is defined as a bounded system (Smith in Merriam, 1998:27), a single entity, a unit around which there are boundaries. Miles and Huberman (1994: 25) speak of a case as "a phenomenon of some sort occurring in a bounded context". The case study focuses on holistic description and explanation. The central focus in this study is a single learner who is deaf in the context of a mainstream school. Yin (in Merriam, 1998:29) notes that case study research is well suited to situations in which it is not easy to separate the phenomenon's variables from its context.

The phenomenon of a deaf learner learning in the mainstream is seen within the context of the broader systems in which he exists and learns. It is not possible to really understand the phenomenon separate from the context.

The school is a co-ed primary school that caters for learners between seven and fourteen. Classes consists of mixed ability groups of forty to forty five learners. The learner is taught by six teachers in a class of forty two. The school will be discussed in more detail in Chapter four.

3.4.1.2 *The process*

The case study is defined as a process "which tries to *describe* and *analyse* some entity in comprehensive terms..." (Wilson in Merriam, 1998:29). Other definitions emphasise the in-depth descriptive nature of a case study and a desire to capture the essence of a phenomenon in time and context (Merriam, 1998:33).

3.4.1.3 *End product*

The end product of a case study is a comprehensive understanding through thick descriptions of the of the phenomenon under study (Merriam, 1998:30). This is achieved "through the use of prose and literary techniques to describe, elicit images and analyse..." (Wilson in Merriam, 1998:30).

3.4.2 Sampling

Since the aim of this study was not to make generalisations in a statistical sense, a non-probabilistic, purposive method of sampling was used. *Purposive sampling* is based on the assumption that the researcher wants to explore and gain understanding and insight into a particular phenomenon and therefore must select an 'information rich' sample from which the most can be learned (Merriam, 1998:61).

In this study a literature review was done to identify the factors relevant to answering the research questions and the following criteria were identified and used to select the sample:

• hearing status of learner;

• the fact that the learner was placed in a regular mainstream class;

• the fact that the learner has made progress as indicated by him passing each grade. This was gauged by the fact that the learner was in the school for five years and had not repeated a grade.

The following was added on the basis of the researcher's own experience within the context of South Africa.

- the fact that the learner came from an black community in a typical low socio-economic township setting. The reason for this is that a large percentage of South African learners fall into this category. They were under-serviced in the apartheid era and are still under-serviced. As previously mentioned, the school is very basic, with a brick building, running water and electricity. However, despite their difficulties many learners seem to cope. The researcher was interested to investigate the factors that facilitate the learning of a learner who is deaf in such an environment. Since this is the reality for a number of South African learners and the context in which the researcher works, it was considered important to get this perspective and not the more privileged perspective.

3.4.3 Methods of Data Collection

The case study method does not prescribe specific methods of data collection. Data collection methods prevalent in qualitative research, such as interviews, surveys, questionnaires, documents and observation, are used. The methods of data collection are determined by the nature of the research problem, the purpose of the study and the nature of the sample selected. The methods of data collection used in this study are the *literature review, interviews, observation* and *reviewing of records*.

3.4.3.1   *Literature Review*

As discussed in Chapter one, a literature review formed the foundation on which this study was conducted. It remained a critical part of each stage of the research process.

3.4.3.2   *Interviews*

Individual semi-structured interviews were conducted with three educators, the mother, the school principal, the support educator, the learner who is deaf and a small group consisting of two educators.

Interviews, which are "conversations with a purpose", provide a valuable means of accessing information people have of their world and the way they experience it. Interviews are conducted to obtain information on things we cannot directly observe, such as feelings, attitudes, thoughts, intentions, past events and events that preclude the presence of the researcher. Interviewing allows the researcher to enter into the other person's perspective (Merriam, 1998:72).

37

i. *Semi-structured interviews*

This type of interview allows for more flexibility and adaptability as new data emerges. Questions were structured around specific themes indicated as important in the literature. The wording and the order were not strictly adhered to. A less structured approach was used to allow the researcher to access the unique experiences of the respondents and to prevent valuable emergent data from being overlooked (Hysamen, 1994:145).

A copy of the interview schedules are attached as Appendix A.

3.4.3.3   *Participant-Observation*

Observation was used as a data collection method in the classroom. The researcher spent time observing the learner and his educators in the natural learning environment of the mainstream class during lessons presented by two different educators. A passive participative approach was used during observation. This implies that the researcher was present, but did not interact with the participants (Mertens, 1998:317). Field notes were taken during the process.

Observation allows the researcher to access information first-hand in the context of the natural environment. It is deliberately planned and systematically recorded (Merriam, 1998:95). The researcher was particularly interested in the physical positioning of the learner as well as the educator in the class, the management of background noise in the classroom, the social interaction of the learner who is deaf and his peers, his participation during lessons, the type of educator support provided as well as unplanned themes that emerged.

3.4.3.4   *Review of previous records.*

Previous records on the learner's hearing status and early intervention were consulted to understand his parameters of deafness and early learning support provided. Case history material was gleaned from these records and triangulated with the interviews.

3.4.4 Data Analysis

Data analysis is the complex process of selection, sharpening, sorting, focusing, discarding and organising in order to make sense of the data, draw conclusions and verify the data. It is the process of making meaning (Merriam, 1998:155; Mertens, 1998:348; Berg, 1995:174). As mentioned in Chapter one, qualitative research is an ongoing process. Data analysis in this type of research is also ongoing and occurs in the process of the researcher engaging with emergent data. Miles and Huberman (1994: 249) define qualitative data analysis as a process consisting of three phases: data

reduction, data display and conclusion drawing/verification. These three processes are in constant interaction and are interwoven throughout the research process.

In this study the process of analysis was underway at the early stages during the literature review, upon reflection during and immediately after the data collection, during discussion with peers, during the transcription process, during analysis of the transcriptions, presentation of data and discussion of findings. Notes were made of observations and intuitive thoughts and ideas as the researcher became involved with the process.

The analysis of the data in this study was based on the content analysis method suggested by Berg (1995:174-192) and Merriam (1998:159-160). As the name suggests, it is concerned with the analysis of the content of data collected. Berg (1995:175) cites Holsti's definition of content analysis as:

"... any technique for making inferences by systematically and *objectively* identifying special characteristics of messages" (emphasis in original).

The data was analysed for both manifest and latent messages. This implies that both messages physically present and the researcher's interpretation of the underlying meanings were analysed. An independent coder was used to authenticate these messages.

The process is described as a method employed to "understand the phenomenon better by **grouping** and the **conceptualizing** objects that have similar patterns and characteristics"(Miles and Huberman, 1994:"249).

The process is conceptualised in Figure 3.1.

```
┌─────────────────────────────────────────────┐
│     Open coding identifying units of meaning │
└─────────────────────────────────────────────┘
                      ↓
┌─────────────────────────────────────────────┐
│      identifying common patterns in the data │
└─────────────────────────────────────────────┘
                      ↓
            ┌──────────────────────┐
            │  clustering patterns │
            └──────────────────────┘
                      ↓
            ┌──────────────────────┐
            │ category construction│
            └──────────────────────┘
                      ↓
┌───────────────────────────────────────────────────────┐
│ exploration of meaning of categories and clustering into patterns │
└───────────────────────────────────────────────────────┘
                      ↓
            ┌──────────────────────┐
            │  Integration of data │
            └──────────────────────┘
```
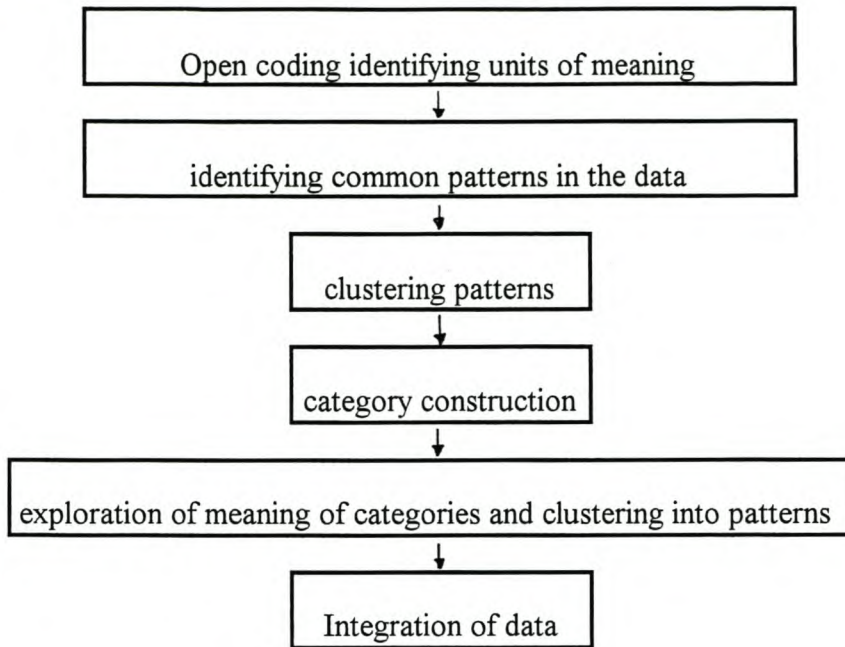
FIGURE 3.1 Process of data analysis

The following steps were implemented:

- The tape recorded data obtained from the interviews were transcribed verbatim.

- The transcriptions were read repeatedly in order to form a holistic understanding while keeping the research problems in mind.

- The process of open coding was applied whereby units of meaning (sentences or phrases that is understandable without additional information) were identified on the data source (See Appendix B). These units were listed. During this process themes started to emerged and tentative themes were considered.

The data were sorted according to themes (Appendix C). Data from the interviews, field notes and record review were continuously compared for consistency or differences. Once the categories were constructed they were named in accordance with the literature and where the category was not mentioned in the literature because of its specific relation to the South African context, a name was given by the researcher. An independent person was asked to verify the categories. The meaning of the data in the categories were interpreted by the researcher and presented in the form of an accurate description. These categories were clustered into the following patterns: child related factors, school-

40

related factors, family factors, external agencies and the Education Department's influence (Appendix D). Bearing the eco-systemic approach in mind it seemed a natural fit to cluster the categories in this way.

•Information gleaned from reviewing the learner's personal records were entered onto a case history form designed by the researcher.

3.4.5 Validity and reliability

Merriam (1998:198) refers to the importance of research being trustworthy to professionals in the applied field. Research is trustworthy to the extent that reliability and validity has been accounted for. Reliability and validity in qualitative research take on different forms to its counterparts in quantitative studies (Firestone in Merriam, 1998:199). The importance of conducting research in an ethical manner is part of ensuring validity and reliability.

"... regardless of the type of research, validity and reliability are concerns that can be approached through careful attention to a study's conceptualisation and the way the data were collected, analysed and interpreted..." (Merriam, 1998:199)

Various authors refer to the fact that there is no single commonly accepted standard for judging or ensuring validity and reliability of qualitative research (Merriam, 1998:167). Some even name the concepts differently and identify credibility, transferability and dependability as concepts that parallel internal validity, external validity and reliability in other forms of research (Lincoln and Guba, cited in Mertens, 1998:181). The methods that were used in this study will be briefly discussed. The terms preferred for qualitative research will be used.

3.4.5.1 *Credibility (parallels internal validity)*

Credibility asks the question whether "there is a correspondence in the way the respondents perceived the social constructs and the way the researcher portrays their viewpoints" (Mertens, 1998:181). In other words, it is important for the researcher to capture and portray the reality as it appears to the people in it. The following methods, suggested by Merriam (1998: 204-205) and Mertens (1998: 181-183) and which were used to ensure internal validity in this study, will be discussed:

- Triangulation

  "Triangulation involves checking information that has been collected from different sources or methods for consistency of evidence across sources" (Mertens, 1998: 183).

The triangulated data are assessed against each other to cross-check data and interpretation.

In this study triangulation was achieved through:

◊ the use of multiple methods of data collection namely interviews, observation and reviewing of reports;

◊ multiple data sources, namely the different interviewees. The learner, four educators, the learner's mother, the principal and the support educator were interviewed.

◊ multiple data analysts, namely the researcher and an independent coder. The researcher first transcribed the interviews, then identified semantic units of meaning and consequently patterns in the data collected by means of the content analysis method. The analysis was then checked by an independent analyst.

- Peer examination

The findings were discussed with a fellow educationist who works in the field of deaf education as well as a psychologist working for the education department. They were asked to comment on the researcher's findings as they emerged.

- Researcher biases

At the outset of this study the researcher's motivation for the study as well as her concerns around the placement of learners who are deaf in South Africa were discussed. Furthermore the reason for the particular sample selection was discussed previously.

- Member checks

Throughout and after the interviews, the participants were asked to verify the researchers understanding of their comments. This was necessary because of the fact that all the interviewees were interviewed in their second language, English and the researcher, being aware of potential problems, wanted to avoid misunderstanding.

3.4.5.2   *Transferability (parallels external validity)*

External validity means the degree to which one can generalise the results to other situations (Merriam, 1998:207; Mertens, 1998:183). The aim of qualitative research is not to provide generalised findings, but rather a unique detailed description of a phenomenon. In order for the reader to judge the transferability of the study, the researcher should provide "thick descriptions" which are extensive and careful description of time, context and culture.

The following strategies were employed in this study:

- careful, detailed descriptions were provided so that anyone interested in transferability has a base of information on which to build their judgement;

- a detailed description of the systemic context so that the readers could compare this to their own.

3.4.5.3   *Dependability (parallels reliability)*

In quantitative research reliability refers to "stability over time" (Mertens, 1998:184) or the extent to which research findings can be replicated (Merriam, 1998:204). Qualitative research does not aim to isolate laws of human behaviour which in any event are dynamic and subject to ongoing change. Since reliability as conceptualised for quantitative research is not appropriate for qualitative research, Guba and Lincoln (cited in Merriam, 1998:206) suggests that the "dependability" or "consistency" of the data receive consideration. Given a detailed description of the data collected, it is then required that the person interested in dependability examine whether the data makes sense. Dependability is closely linked to internal validity.

The strategies used to achieve dependability in this study are:

- A description of the investigator's position;

- Triangulation in terms of multiple methods of data collection.

- Audit trail: Independent judges in the form of the study leader and co-study leader were presented with every detail of the study and could therefore trail the researcher and authenticate the findings of the study (Guba and Lincoln in Merriam, 1998:207).

3.5   ETHICAL CONSIDERATIONS

Several authors highlight the importance of taking precautions to avoid ethical dilemmas in research (Merriam, 1998:212-218; Mertens, 1998:275; Berg, 1994:212-214; Huysamen, 1994:178-185). Merriam (1998:212) notes that, ethical dilemmas are likely to occur in qualitative research at two points, namely during the collection of data and in the dissemination of findings. Ethics also come into question regarding informed consent of participants.

In this study the researcher shares the view of Stake as quoted in Merriam (1998:214) that "qualitative researchers are guests in the private spaces of the world" and that this feeling of privilege underpins the respect and courtesy with which participants were treated in the study. The following methods were employed to control ethical concerns:

- Informed consent

Permission to conduct the research in a state school was sought from the Western Cape Education Department in the prescribed manner. The school principal and educators were informed of the purpose of the research and permission for interviews was sought from them. Permission was sought from the learner's mother, as his legal guardian, to access information from her son's medical and school records with the purpose stated to her. She was also asked whether her child could be interviewed. The purpose of the study was communicated as being to learn about how a child who is deaf is learning in an ordinary school. The participants were informed that participation was voluntary.

44

- Confidentiality and anonymity.

The participants were assured that neither their names nor the name of the school would be used in the report or documentation of the data. The researcher's position of respect was communicated to them. They were assured that the tape-recorded interviews would be destroyed once the research was completed.

- Feedback

The school principal, educators and support-educator were assured that the findings of the study would be made available to them.

3.6 SUMMARY

In this chapter the research design of the study was described. The specific aspects of qualitative research relevant to the study were discussed. The research methodology received attention and the method of sampling, data collection methods and method of analysis were described. Throughout the chapter reference was made to the relevance and application of the methodology to this study. The chapter concluded with the discussion of reliability and validity and ethical considerations and the measures used in this study to enhance these issues.

Chapter four will concentrate on the presentation, analysis and discussion of the data and findings of this study.

CHAPTER FOUR

RESEARCH FINDINGS, DISCUSSION OF FINDINGS AND RECOMMENDATIONS.

4.1 INTRODUCTION

This, the concluding chapter, will focus on a discussion of the data collection, the method of data analysis and the findings that emerge from this process. The interpretation and discussion of the findings will bring together the different threads of information presented in the data. Patterns and problem areas relevant to the research aims presented in chapter one will be discussed. The chapter will be concluded with recommendations and a discussion of the limitations of the study.

4.2 PROCESS OF DATA COLLECTION AND ANALYSIS

As mentioned in chapter three, data were collected through semi-structured interviews, observation, and a review of personal records. The data were collected at different times over the period September 2000 to October 2000. Given that the eco-systemic approach underpins this study, interviewees were selected from different strata in the system. This was done to get a cross-section of systemic factors that influence the learner as well as a range of data that would enhance the understanding of the phenomenon.

4.2.1 Interviews

Four interviews were audio-taped and notes were made during four short interviews which could not be taped for logistical reasons. Four educators, the principal, the support educator, the learner's mother and the learner were interviewed. The tape-recorded interviews were transcribed verbatim and the four short interviews were reconstructed from field notes as soon as possible after they took place.

The first two days were spent at the school where the learner is currently placed and a third day was spent at a special school for learners who are deaf where the learner had attended pre-school.

The principal (the code P was used to denote the interview with the principal) was interviewed and asked about the attitude of the school towards inclusion, the background of the school, the support available within the school for LSEN, the support available to the school in supporting LSEN and the nature and involvement of the parent body.

On arrival at the school on day one, it was discovered that the grade five learners were taught by different subject educators. Some educators taught more than one subject. It was then decided to interview the four educators who taught the learner.

The main themes in the educators' (E1, E2, E3, E4) semi-structured interviews centred around support in the classroom for the learner who is deaf, the use of hearing aids, the social integration of the learner, the attitudes of his peers, the involvement of the parent, the adjustments made to their teaching, the difficulties experienced, the support from other staff members, the amount and type of in-service training, the co-ordination of support, the behaviour of the learner, the progress of the learner, their experience of having the learner in their classes, their coping strategies and their advice to educators not yet exposed to this type of experience.

The learner's mother(M) was requested to come to the school to be interviewed. She was asked background information about the learner, his hearing problem, his education, available support, family background, possible concerns and follow-up contact with the school for the deaf and the hospital as well as her role in assisting her child.

Permission was sought from the mother to interview her son and to access his personal records. An interview with the learner(A) proved difficult since he seemed shy and would not respond to questions from the researcher. His mother, in a gentle way acted as intermediary and coaxed him into responding. She translated the questions into Xhosa and elicited his responses this way. The questions posed to him revolved around how he experienced his learning, his feeling about wearing his hearing aids, his experience of wearing them, his favourite and least liked subjects, his friends and extra-mural interests. The interview was short.

The support educator (SE) was interviewed at the school for the deaf. She was asked about the role of the special school in supporting the learner in his pre-school year, the methods used, information about the child's hearing loss, aided hearings, role of the parent, ongoing support, attitude of the school towards inclusion, support for black children, difficulties experienced and follow-up contact.

4.2.2 Personal records (rec)

A request was made to the present school to review the learner's school records but this was not possible because apart from the learner's address, date of birth and admission number, no records were kept. Copies of his school reports were sent to the school for the deaf .

At the school for the deaf, however, the researcher was granted access to the learner's audiograms both before and after being fitted with hearing aids as well as a record of his general scholastic progress. Records of psychological assessments were not available.

4.2.3 Field notes (FN1 & FN2)

Field notes (FN1) were made during the observation sessions which took place over two days in the classroom and during the course of the researcher's presence at the school as well as at the school for the deaf (FN2).

Information pertaining to the physical facilities, the activities of the educators and learners and atmosphere of the school was noted. In the classroom the position of the learner, the physical state of the classroom, the positioning of the other learners, the learner's listening style, his interaction with his educator, his participation in the lesson as well as his interaction with his peers were monitored. General observation notes were made at the school for the deaf.

4.2.4 Data analysis

The data were analysed using aspects of content analysis described by Berg (1995) and Merriam, as discussed in Chapter three.

The transcribed data were open coded. Themes were identified and categories constructed and coded. Lastly patterns of categories were clustered. As mentioned previously, the categories were named by taking the theoretical orientation of the study, the concepts discussed in the literature and the researcher's orientation into account. The identified categories were coded by means of identifiable cues in order to facilitate analysis and interpretation.

(A list of the categories and codes appears in Appendix D.)

The categories were then recorded in the format of tables. This helped to facilitate the integration and discussion of findings. (see Appendix E)

4.3 FINDINGS

The discussion that follows, will present the main findings of the data analysis as well as relate these findings to aspects of the literature review in Chapter two.

The findings of the study will be presented within the eco-systemic framework, using the identified patterns of child-related factors, school-related factors, family factors, support-related factors, education department-related factors. The references in brackets refer to the codes given to the

sources of data and the page reference in the transcribed interview (e.g. E2:4 refers to the interview with educator 2 on page 4). Although the findings are presented under headings identifying patterns, it must be noted that these patterns do not exist as exclusive entities as there is a reciprocal dynamic influence between patterns as well as between categories within patterns. The findings will be presented in the narrative.

4.3.1 Child-related factors

4.3.1.1 *Case history information - developing a 'profile' of the learner*

Data collected from interviews with the learner (A), his mother (M), field notes (FN2) as well as data from his medical records (rec) formed the basis for the following profile.

Ayabonga (not his real name) was a slightly built twelve-year-old who seemed quite shy to engage with the researcher . He was very interested in the researcher's presence and seemed alert (FN1:1). He seemed healthy (FN:1) and this was confirmed by his mother (M:2).

He has a bilateral sensori-neural hearing loss. He has a severe to profound loss at low frequencies and a moderate to severe loss at high frequencies. He has been fitted with hearing aids in both ears from which there are excellent benefits (rec). His aided hearing falls within the mild hearing loss range (rec). He became deaf at the age of one year and some months as a result of meningitis (rec). His mother reported that he had reached his milestones as normal up to the age of his illness, was ill for three months and then resumed his development where he had left off. She said that he developed like other children and was healthy ever since. She noticed that he did not respond when spoken to, did not seem fully aware of conversation around him and that he spoke softly. When he was five years old, his mother was convinced that something was amiss. She took him to hospital where he was diagnosed as being deaf. It was then that he was first fitted with hearing aids. He immediately started pre-school at a school for the deaf which uses the oral-aural approach (private communication with the principal). He was taught to maximise the use of his residual hearing as well as listening skills which included speech reading. While at the school, he received the full range of support offered by the school. This included speech therapy, consultation and some poverty relief from the social worker, specialist teaching by a mother tongue educator and medical care. His mother also received counselling and practical advice on how to support her child at home and on what he needed at school (SE). At the age of seven he was placed in a school in his community. The school for the deaf aims to place learners in the mainstream as far as possible. A support educator at the school monitors the progress of children placed in the mainstream and maintains contact with the mainstream school (SE). An annual follow-up visit to the hospital and the school was recommended.

The mother was informed initially of the appointment and followed up. At these visits his hearing and ears were checked, his hearing aids tested and general progress monitored. School reports are still sent to the school for the deaf and his progress is monitored this way. Thus far the reports from his present school have been favourable and the school for the deaf feels satisfied that he is making good progress.

After being at a different school in the community for his first year, his mother transferred him to his present school which borders on his backyard. He has made good progress since then (he is doing well (E1), I am happy with his progress (E3)) and has not repeated a grade. He copes by relying on his hearing aids and speech reading and when his hearing aids are broken, he relies even more on speech reading to follow the lesson. He is presently in Grade 5.

He seems to fall within the normal range of intellectual functioning and this is supported by the statements "he is average (E1:2; E2:3); he was not formally assessed but he coped well (S.T:2); he gets 40-60% for his school subjects" (rec,E1,E2 ,E3,E4:1,T5:1).

No additional disabilities were reported. This was reflected in statements such as :"He is fine -no other disabilities or learning problems (E2:3); his attention is normal (E1:2), average (E1:2;E2:3); no additional problems only money" (M:4). This factor counts in his favour, because additional disabilities have a significant negative effect on a learner's success in a mainstream class (Powers (1999:266).

Several data sources comment on Ayabonga's lack of confidence (E1,E2); unsureness (E1, E2); shyness (FN), and his embarrassment about his difference (E1, M). This seems to indicate a low self - esteem which may be linked to the desire to conform, a characteristic common to the developmental stage in which he finds himself, his difference as well as personality factors, such as shyness.

Ayabonga seemed well-adjusted, socially integrated and happy in his school. Statements such as; "He is happy (M); I like to play cricket and soccer at school (A:1); I like to come to school(A); I like History and Geography (A:1); he is part of the friends" (E2, E4, E1) as well as the researcher's own observation, support this.

4.3.2 Family-related factors

The categories clustered under this pattern are family composition, achievement-supporting factors and socio-economic status.

The family consists of a mother and two sons aged fifteen and twelve years. The learner's father had abandoned the family before Ayabonga was born and has subsequently not had contact with the family (M:1).

The family lives in a shack next to the school's perimeter fence (FN1). Statements such as; "The children here are from the poorest of the poor (P:4); I am not working (M:4); I only have food for him in the morning (M:4); ...I do not have money for the things he needs at school" (M:4), attest to the low socio-economic status of this family.

His mother has displayed several "achievement-supporting behaviours" (Kluwin et al 1992:72-80) that have played a pivotal role in her son's success at school. She has ensured that new educators were informed of his needs and provided educators with advice on how to speak to him so he could speech read. She also requested that he sits in the front row of the class. This advice she had learnt previously from the school for the deaf. The achievement-supporting factors are reflected in the following statements; "she is interested in her child's school and is always available when we call her (P:8); she told me about his problem when I first arrived here (E1:5, E2:3); she said I must look at him when I teach him because he watches my mouth (E1:5) the mother takes his hearing aids for repairs (E2 :8); only mother knows how to clean, change batteries of hearing aids (E2:8); I look at his homework" (M:3). The positive relationship that this mother has with the school and the interest she has in her child's education are factors that contribute positively to the success of the learner. She has assisted educators by sharing the information she received on how to support her child and this has been critical in informing them about his needs and in getting support for him. The role of this parent supports the view held by Kluwin et al (1992:80) that achievement-supporting behaviours, such as interest in learning, homework checking and assistance have a positive effect on a learner's academic performance and that socio-economic factors merely facilitate these behaviours. Although the socio-economic factors are unfavourable in this case, it is secondary to the achievement-supporting factors displayed by the mother.

4.3.3 School-related factors

Several categories were clustered under the pattern of school-related factors. These were the physical facilities at the school; administrative practises; educator-related factors; co-ordinating factors concerning the learner who is deaf; classroom factors, social integration; parental involvement and the issue of support. There is considerable overlap between categories due to the highly interactive nature of subsystems within a school.

4.3.3.1 *Physical attributes*

As previously mentioned, the school is situated in a small, rural township 50 km from Cape Town. The area was formerly reserved for blacks and still serves this community. The school consists of a brick building set in a reddish, hard clay playground with a few trees and an area set aside for gardening (FN1).

The school operates as a primary school (grades 1-7) until 12.30 pm and thereafter the same classrooms are used for a separately administered high school (according to the platoon system).

The learner who is the subject of this case study is placed full time in a mainstream class of 42 mixed ability learners.

A special LSEN unit, consisting of three specially designed classes, has been established at the school. This occurred in response to an initiative by an LSEN school in the nearby town, that the education of LSEN should take place in the learners' own communities (P:1). Presently the LSEN unit is funded separately by the education department and houses forty two learners with a range of mental, sensory and physical disabilities. A new wing which makes special provision for possible wheelchair users has been built. The staff of the LSEN unit presently consists of two educators (P:1, FN1). The school is aware of the need to remove physical barriers to learning and is in the process of making the whole school accessible to all learners, including those with physical disabilities (P: 6). The LSEN unit currently serves only the learners in the unit and the staff is not available to other learners.

As previously mentioned, the school serves mainly children from low and very low socio-economic status families (FN1: , P:4). The basic needs are for food and shelter. The school is aware of these needs and assists by feeding the very needy children.

According to the school principal, all learners have a right to learn and the school welcomes all learners (from the community), including those with disabilities. As a rule such learners are placed in mainstream classes and only transferred to the LSEN unit if their needs cannot be met in the mainstream and on the advice of the visiting psychologist.

The school-based administration takes place from the principal's small office which is shared by the secretary and which houses the photocopier, the telephone and fax machine and a computer (FN1). Very scant records are kept at the school and records on the learner's academic or medical history were not available (FN1). This caused a problem in that new educators do not have school-based

records to consult to access learners' case and academic histories. Statements such as; "the principal or deputy should know (E1); I did not know about his problem (E2, E4); no-one told me before his class educator(E4), E2); no-one knows" (E1,E2), reflect the reliance on information being passed on by word of mouth and not by means of documented records.

4.3.3.2   *Attitude towards inclusion*

During the apartheid era there were few alternate placement options for LSEN in schools for black children . Many learners were simply included by default. There was an acceptance of all learners coupled with a feeling of helplessness in providing for their needs. It is only when schools were desegregated that LSEN could access schools outside the community.

As the principal stated, "(including all learners albeit by default) it was never an issue". The school was quite prepared to accept the responsibility of providing education services to all learners from the community. The principal stated that "all learners have a right to education and the whole system must change so everyone can attend". The principal's full support for inclusion is a very strong factor in determining the positive attitude of the school towards inclusive education.

4.3.3.3   *Educator-related factors*

There was a strong positive feeling among the educators about having the learner who is deaf in their mainstream classes. Acceptance, a desire to help, ownership and normalisation were some of the sentiments expressed. There was a general feeling of acceptance as indicated by the statements "I enjoy having him (E3); he is no problem (E1, E3,); he's just one of the children (E3); he could have been my child". Educators also expressed a keen desire to help such as;" I want to help(E2), I really want to teach him because I know he can do it (E1:2); I want all children to succeed"(E2). Evidence of educators' feeling the need to own the responsibility of educating all learners is expressed in the statements;" All learners are the responsibility of all educators, all learners have problems sometimes and need to be helped (E1)". The inclusion of Ayabonga in the mainstream class has lead to educators normalising him and seeing him like any other learner; "He is normal except for hearing (E2); like other kids (E2); just like other children (E3); after a while we don't notice who is disabled or not (P)". An educator also expressed the feeling that, "it is not right to discriminate against children(E2) or to separate them." One educator who is struggling with his subject was negative and asked whether Ayabonga should not be moved to the LSEN class because he was a "slow learner". The same educator said that "all the children are struggling" with his subject (E3). His general demeanour was negative and he quickly found a reason to exit the interview (FN). He also complained that, although he knows about the learner's needs, he finds it difficult to make even little

adjustments to his set style of teaching. The researcher attributes this exception to unexplored factors.

There seems to be a high turnover of educators at the school. Three out of the four educators interviewed were in contract positions. When asked about educators who previously taught the learner who is deaf, it was said that they no longer taught at the school. This has implications for the continuity of support for LSEN as well as job security and morale issues in educators. The principal also said that the educators are mostly inexperienced and new, which means that, when educators leave, their experience leaves with them.

A serious shortcoming of the school is related to the co-ordination and administration of information on the learner who is deaf. As mentioned, apart from basic information pertaining to the learner's address, date of birth and recent academic records, no other records were available. Educators rely on information being passed on by word of mouth. Unfortunately educators come and go and information about a learner is often lost this way, as the answers to questions about Ayabonga's previous educators reveal; "he no longer works here" (E1, E2). No one has the responsibility of ensuring that the next educator will be informed of the learner's needs and no-one is responsible for the co-ordination of the support needed. His mother has in a limited, informal way played this role, but it is not sufficient. Statements such as; "I know about his problem, so I try to meet his needs, (E2, E3); ...knowing about the problem helps me to cope better in teaching him (E2); his class educator told me about his problem, so now I have to change my teaching style (E3)"; highlight the importance and value educators place on being fully informed of the learner's needs.

Collegial support was another useful coping strategy used by educators as expressed by the statement, " Ms H and I discuss ways of teaching him, it helps (E1&E2) ".

All the educators interviewed felt that they were not adequately equipped to deal with learner's special needs. Their statements; "I really need to know how to help with the problem (E2); we need to learn how to deal with these problems (P); I wish I could do more (E2); I don't know how bad his hearing is... (E2); I need in-service training (E1)" reflect this need. There seemed to be a lack of knowledge on how to access resources, as indicated by the statements; "Where do we get training (P, E2); where do we get hearing aids, who makes recommendations about hearing aids (P); I did not know that the feeding scheme will help with food (P); if you hear of workshops, will you let us know (P); I've applied for a learning support educator but I can't get one (P); I talk to the principal (about hearing problems), but he doesn't know (E1)".

Support for educators is an important factor in that it empowers the educator to better help the learner. There was no evidence of support for the educator from any specialists in the field of learning support or deaf education.

Educators have different personalities and this affects their teaching styles and flexibility. One educator found it very difficult to change his set teaching style and he felt inconvenienced by the presence of the learner who is deaf. It is a bonus if there is a good match between the educator's personality and learner's needs, but this is however not always possible (P, FN1). This human factor is prevalent in teaching and learning in general.

All educators offered Ayabonga some learning support in the classroom. This will be discussed under the next category, Classroom-related factors.

4.3.3.4   *Classroom-related factors.*

Different subjects are taught by different educators. The learner's educators are presently aware of his barriers to learning and that he relies on listening and speech reading to follow the lesson. The educator who achieved the most successful academic results (Geography) used mainly English and engaged Ayabonga often by asking him questions (FN1). Constantly checking for comprehension through questioning is a useful strategy to keep the learners' attention focused and to actively engage their listening skills. The other educators used a combination of Xhosa and English when teaching and switched languages without warning. This could be confusing to the learner who is deaf and speech reads. All Ayabonga's educators supported him in some way. All said that they faced him while teaching, as the following statements indicate; "Whenever I speak, he must look at me (E1); I look at him when I talk (E1); I always try to face him when I teach (E3); I have to face him all the time (E2); I face when I teach (most of the time) (E4)". Other strategies of learning support in the classroom were "standing close to him when speaking, (E1); repeating the work to him when the work in his book indicated that he had not understood (E2), repeating parts of the lesson (E1); letting him sit in the front row in the classroom (E1, E2, FN1); and using visual learning techniques such as drawings, pictures and writing on the board" (E2, E3). Educators did not adapt the curriculum for Ayabonga, because they felt it was not necessary (E1, E3).

Social integration in the classroom was reported to be good. All educators said that he was part of the class in all respects. He was part of a group of friends and was "not treated differently" (E1). His peers are aware of his disability but, according to his educators (E1, E3), they do not treat him

differently. He participates in classroom activities (FN) and interacts regularly with his peers (E1, E3, FN). He enjoys sport and is part of the school's soccer and cricket teams (A, M,E3, FN).

4.3.4 The issue of support

Inclusive education is rendered less effective if the learner who experiences barriers to learning, and/or the school, is not supported. Presently the educators provide support based on their knowledge and understanding, but have not been advised or assisted by a specialist in the education of the deaf. The learning support educator and language and listening educator at the local education support centre have not provided support. A psychologist at the same centre services the school in terms of assessments for placement in the LSEN class but, according to the educators, no other support has been forthcoming. The following statements support this finding; "(I have had) no support from anyone .....(reference to school clinic/education support centre, school for the deaf)(E1); no, they have not helped me (E2), no help (E3, E4); no learning support (P)."

Early intervention in terms of the learner being fitted with hearing aids and the specialist teaching and support services provided by the special school for the deaf in the learner's pre-school year, proved to have laid valuable foundations. The learner's mother has drawn on the advice given to her at the pre-school to assist educators in supporting her child. The school for the deaf is dedicated to the oral-aural approach and strives as far as possible to prepare learners for placement in the mainstream. They are committed to teaching communication through speech. Their admission criteria is that, apart from the hearing loss, the learner should have no other disabilities and should fall into the normal range of intellectual functioning (SE, private communication with the school's principal). As the support educator at the school explained, their limited staff made it difficult to reach all children placed in the mainstream on a regular basis. They rely on parents to take the initiative and contact the school annually and on the mainstream school to submit copies of the child's progress reports. The data suggests that a breakdown in the continuity of this support due to staff limitations (SE) and the fact that the learning support educator at the school for the deaf is not familiar with black communities, has unfortunately occurred.

Hearing aids are critical in assisting learners who are deaf in overcoming the barrier to learning of not being able to perceive sound normally. These aids do however require special care and regular checks as they often break. While the learner, parents and educators play valuable roles in the day to day care of the aids, it is highly recommended that an audiologist be consulted on a regular basis to service the aids and ensure maximum benefit from the aids. In the case of Ayabonga, his mother is the only person who knows how to care for the hearing aids. Her socio-economic realities make it

difficult to purchase batteries or travel by train to a hospital to have them repaired. The following extract from the interview with the mother explains the problem; "His aids are broken. I must have them repaired, but I don't have money. I have to borrow someone's train ticket when they are not working, but it is difficult".

4.3.5 Factors relating to the education department

The school is administered by the provincial education department which is responsible for enacting national policy. The education department is, amongst other things, responsible for funding. At present, schools and units for LSEN are funded separately and according to a more favourable formula than mainstream schools. The school under discussion in this study, receives a less favourable allocation for the learner who is deaf and placed in the mainstream than his counterpart in the LSEN unit (P). The principal feels, "The department keeps them separate and gives them separate allocation".

Another theme which is evident in this study is that the education department has not provided the school with support in terms of in-service training and a directory of available support. Essentially this previously disadvantaged school still has Cinderella status.

4.4   DISCUSSION

4.4.1 Implications for the education of a learner who is deaf in a mainstream class

The implications of educating a learner who is deaf in a mainstream class is closely related to the learner's needs and the ability of the system to meet those needs in a mainstream class. The needs are determined by his/her parameters of deafness, communication needs, physical, intellectual and personality differences in dynamic interaction with systemic factors such as parental achievement-supporting behaviours, availability of learning support and the capacity of the school to provide the support. The general social milieu and degree to which the school is prepared to make shifts to welcome the learner and value him/her as a full member of the school with his own valuable contribution which he brings in his diversity, is important. A positive attitude towards inclusion is a prerequisite.

The implication for South African schools which have included all learners by default because services for LSEN were not available to them, is that there is already a feeling in those communities that all children belong to the community. As discussed previously, learners were accepted, but educators felt helpless in that they did not know how to address the learners' special needs. It is now the responsibility of the education department to focus on building capacity for learning support

amongst the staff at these schools and to set up support structures that actively service schools in black townships. It is a legacy of the past that most support staff stationed at the current education support centres are white and not familiar with or in some instances fearful of working in the black townships. This is an obstacle that has to be overcome and should include the training of more black support personnel as well as structuring a compulsory support service component for these schools.

Assistive devices, such as hearing aids and F.M. systems, are expensive but a necessity and in the long term a fraction of the cost of placement in a school for the deaf. Given the background of the learner in this study, a scheme whereby indigent learners too can access these devices is needed.

Theoretically all children could be included in mainstream classes, given that the necessary support is available. However, it is presently not attainable in South Africa. The cost of more intensive support, such as interpreters, for learners who are deaf and use Sign Language, is too high for a country struggling to supply basic education to all its children. This is supported by negative reports on social integration of Sign Language users in speaking mainstream schools (Watson et al, 1999; Domfors, 1998; Moores, 1987). Fiscal constraints and negative reports seem to mitigate in favour of educating learners who are deaf and who use Sign Language in separate Sign Language medium schools or units. As previously mentioned in Chapter one, deafness is not a homogenous entity. The parameters of deafness, as well as intrinsic and extrinsic factors may combine in any one of several computations resulting in a different set of educational needs. In order to meet the needs of this diversity optimally, each learner's case in context should be assessed and, on the basis of the findings, one of a full range of placement options should be matched to his/her needs.

4.4.2 Indicators of successful inclusion of a learner who is deaf in a mainstream class

4.4.2.1 *Intrinsic factors*

Learners who are able to communicate by means of speech and who with hearing aids or other amplification systems are assisted to the extent that they can access classroom teaching, are more suited than learners who communicate through Sign Language. Other favourable intrinsic factors are an absence of other disabilities and normal levels of intellectual functioning. The learner in this study met these criteria.

Several parameters of the learner's deafness favoured an inclusive placement. These are the nature of his hearing loss, the fact that he benefits significantly from aided hearing, his onset of deafness and the fact that he uses speech for communication and is able to access the curriculum without major adjustments on the part of the educators. The fact that his perceptions of sounds in the human

speech range are more favourable puts him in a better position to cope in an inclusive classroom than a learner whose hearing loss is profound at all frequencies (private communication with a speech therapist). His excellent benefits from the hearing aids is an important factor in facilitating inclusion.

He is linguistically competent and communicates through speech. His educators and peers have no problem communicating with him and this aids integration in the mainstream class. According to Watson, Gregory and Powers (1999), linguistic competence in Sign or a spoken language is crucial to successful integration.

His 'normal' range of intellectual functioning and the absence of other disabilities further enhance successful learning in a mainstream class and corresponds with findings in the literature (Watson , Gregory and Powers 1999; Smith 1998; Kluwin and Moores 1992).

To summarise, Ayabonga's parameters of deafness, intellectual functioning and linguistic competence are intrinsic factors which contribute positively to his success in an inclusive setting. His poor self-esteem would have to be monitored and support provided.

4.4.3 Extrinsic factors

4.4.3.1   *Family-related factors*

While the researcher would at no stage like to underplay the devastating effects of extreme poverty on the lives of people, it is with admiration and deep respect for the mother's interest and concern for her child that the socio-economic factors claims a second place in ensuring academic success of the learner. Her achievement-supporting behaviours played a critical role in the learner's success. This has implications for actively involving parents regardless of how humble or poorly educated they are regarding the decisions around their child's education and to co-opt them in sharing the responsibility in the education of their child. The findings of this study have highlighted the value of making parents active members of the learning support team.

4.4.3.2   *School-related factors*

The school's positive attitude towards the inclusion of all learners as well as efforts to accommodate learners with a broad range of needs create a facilitating environment for inclusive education. This factor plays an important role in ensuring a positive learning experience for the learner in this study. The school's administration with regard to record keeping, was not satisfactory, and needs attention because it is a critical source of reference to educators and other professionals who may be involved in working with the learner. The support provided by the educators in the classroom is important to the learners progress. In the absence of assistance from outside, the educators had to rely on the little

advice from the mother and their own knowledge, critical observation and intuition on how to help the learner. It is important that educators are made to feel confident of their knowledge and skills and that they are encouraged to be independent problem-solvers in their classrooms. Good practice should be affirmed and a platform for sharing with other educators should be created in every school. Collegial support is a valuable yet under-utilised means of support and method of improving practice.

The high turnover of educators at the school is detrimental to the continuity of support to learners and the development of an experienced staff. It also has negative effects on staff morale and stability in a school. This, together with the absence of a support co-ordinating person, seriously affects the communication of learners' needs as well as the quality and quantity of support provided. It is essential that a person permanently based at the school assume the co-ordinating responsibility of LSEN in the mainstream and that this person be developed in terms of knowledge of the range of support services available and where to access them in order to secure the necessary support for the learner. While the learner might be making satisfactory progress, he could do even better with co-ordinated support.

Ayabonga seems to be well-integrated socially. He seems happy among his friends and part of the class in every way. It was, however, difficult to assess whether the reports of a lack of confidence, unsureness and poor self-esteem is indicative of problems with integration on a deeper level. It is nevertheless serious enough to warrant psychological intervention. The class should also be counselled as to the needs of learners who are deaf and some basic information about hearing losses and hearing aids could serve as an introductory point.

To sum up, the school-related factors that have stood out as positively enabling Ayabonga's learning are the positive attitude of the school towards inclusive education, the willingness of educators to support him and to adapt to his needs, classroom support and the acceptance by and social integration with other learners.

The lack of an effective administration system with regards to record keeping and the co-ordination of the learner's needs are factors that, if attended to, will improve the learning process.

4.4.3.3   *The issue of support*

The early intervention and intensive support provided by the school for the deaf as well as the excellent benefits from hearing aids have enabled Ayabonga to access classroom teaching that would otherwise not have been possible. These factors have played an instrumental role in his learning in the mainstream class.

As the learner progresses into the higher phases of learning and the adolescent stage of development, his needs may change and access to ongoing support may be needed. The education department should assume a greater responsibility in ensuring that support is provided for this learner.

4.5   RECOMMENDATIONS

- In-service training for all educators on deafness should be a priority. The needs of learners who are deaf and how to support them should be addressed. This should be provided by educators and support staff who are familiar with deaf education such as those who work at schools for the deaf.
- A person at the school should be assigned the role of co-ordinating support for LSEN and for briefing all who work with them. This person should be permanently appointed at the school.
- A supportive relationship should be established with a school for the deaf.
- Record-keeping should receive attention and assistance should be provided to the school in setting up such a system if needed.
- A report should be sent to the local education support centre enlisting their help in providing support for the learner and educators.
- The learner should receive psychological counselling and support to enhance his self-esteem.
- Information and advice should be given to the class about deafness and the needs of a peer who is deaf.
- the existing LSEN unit should become involved in supporting the whole school.
- A directory of available sources of support should be compiled to help educators.
- The education department's current model of funding of LSEN should be reviewed. Funding should be linked to support and not to classification according to LSEN placement.

4.6   LIMITATIONS OF THIS STUDY

The limitation of this study lies in its contextual placement and does not meet the criteria of the general South African population.

4.7 CONCLUSION

South Africa is presently a country scarred by a history of prejudice and separatism. The present government is committed to a rights culture and a democratic order. Transformation in several social structures is underway. The social construction of disability has been challenged and set to change. The right to participation at all levels in society is recognised. Inclusive education as a means of facilitating participation will soon become policy. It must, however be remembered that certain sectors of South African society enjoyed privileges in education under the previous regime which they are reluctant to share or relinquish. Understandably, some may be sceptical of a model of inclusive education not yet tested on a wide scale in South Africa.

After a review of the literature and an eco-systemic approach to a study of a learner in the context of a mainstream school, it was concluded that learners who are deaf can be successfully included in mainstream classes given that certain intrinsic and extrinsic criteria are met. The findings of this study suggest that intrinsic factors such as parameters of deafness, the absence of additional disabilities and normal intellectual functioning were critical factors in the learner's success in the mainstream. Extrinsic factors, such as parental achievement-supporting factors, the school's positive attitude towards inclusion, classroom-based learning support, good social integration and early intervention were identified as critical factors in the learners success. It is suggested that an eco-systemic approach be used when assessing learners for placement and that evidence of the factors mentioned above could be used as part of a predictive index of indicators of successful inclusion.

Since neither deafness or education systems are homogenous or static in nature, the researcher understands that a different set of intrinsic and extrinsic factors could yield very different needs. With this in mind, each individual learner who is deaf should have his/her needs carefully assessed and matched to the systems ability to meet those needs and on this basis the most suitable placement out of a range of possible placements should be recommended.

REFERENCES

AFZALI-NOMANI, E. 1995. Education conditions related to successful inclusion programs involving deaf/hard of hearing children. *American Annals of the Deaf.* Vol.140, No. 5: 396-401.

AINSCOW, M. 1995: Special needs through school improvement; school improvement through special needs. In Clark et al (Eds) *Towards inclusive schools?* London: Fulton.

ANTIA, S.D. 1998: School and classroom characteristics that facilitate the social integration of Deaf and hard of hearing children. In Weisel, A. 1998(b): *Issues Unresolved: New Perspectives in language and deaf education.* Washington D.C.: Gallaudet University Press.

ASHMAN, A .& ELKINS, J. (Eds) 1994: *Educating children with special needs* ; second edition. Sydney: Prentice Hall.

BAKER R. & KNIGHT P. 1998. 'Total communication' - current policy and practice. In Gregory, S., Knight, P., McCracken, W., Powers, S. & Watson, L. (Eds) 1998: *Issues in deaf education.* London: David Fulton Publishers Ltd.

BARCHAM, L. (1998) The international dimension. In Gregory S ., Knight, P., McCracken, W., Powers, S. & Watson, L. (Eds) : *Issues in deaf education.* London: David Fulton Publishers Ltd.

BERG, B. L.1995. *Qualitative research methods for the social sciences.* Second edition. Boston. Allyn & Bacon.

BILIR, S. & BAL, S. 1998: A study on social communication behaviour of 5 to 7-year-old kindergarten children with profound hearing loss in integrational situations. In Weisel, A.(Ed) 1998(c). *Proceedings of the 18th International Congress on education of the deaf.* Tel Aviv.

BOOYSEN, M.I; ENGELBRECHT, P. & KRIEGLER, S.M. 1996: *Perspectives on learning difficulties. International concerns and South African realities.* Pretoria: J.L. van Schaik.

BROESTERHUIZEN, M. 1998. The need of a decision model in parent guidance. In Weisel, A. (Ed), 1998(c): *Proceedings of the 18th International Congress on education of the deaf.* Vol. 1: 397. Tel Aviv.

BUNCH, G. 1994. An interpretation of full inclusion. In *American Annals of the Deaf.* vol. 139. No. 2: 150-152.

BYRNES, C. 1998. In Weisel, A. (Ed), 1998(c): *Proceedings of the 18th International Congress on education of the deaf.* Tel Aviv.

COHEN, O. P. 1998. Realities of inclusion for Deaf students. In Weisel, A.(Ed) 1998(c): *Proceedings of the 18th International Congress on education of the deaf.* Tel Aviv. Vol. 1 346-352.

DANIELS, H. & GARTNER, P. 1999: *Inclusive Education.* World Yearbook of Education. London. Kogan Page.

DAVILA, R. R. 1998 : Trends and issues facing education of the deaf in the United States. In Weisel, A. (Ed) 1998(c), : *Proceedings of the 18th International Congress on education of the deaf.* Tel Aviv. Vol. 1, 353-357.

DEAF FEDERATION OF SOUTH AFRICA. 1997. Unpublished document on Deaf Culture.

DEPARTMENT OF EDUCATION (D.N.E.). 2000. *Draft White Paper 5 special needs education* Pretoria: Government Printer .

DEPARTMENT OF EDUCATION (D.N.E.). 1999 : *Consultative Paper No.1 on special education: Building an inclusive system, first steps.* Pretoria. Government Printer.

DEPARTMENT OF EDUCATION (D.N.E.). NATIONAL COMMISION ON SPECIAL NEEDS IN EDUCATION AND TRAINING (NCSNET) & NATIONAL COMMITTEE FOR EDUCATION SUPPORT SERVICES (NCESS) 1997: *Quality education for all. Overcoming barriers to learning and development.* Pretoria: Government Printer.

DEPARTMENT OF EDUCATION (D.N.E.). 1996. *White Paper on Education.* Pretoria: Government Printer.

DOMFORS, L. A. 1998. Mainstreaming hard of hearing students in the perspective of symbolic interactionism. In Weisel, A. (Ed) 1998(b): *Issues unresolved: new perspectives in language and deaf education.* Washington D.C.: Gallaudet University Press.

DONALD D., LARARUS, S. & LOLWANA, P. 1997. *Educational Psychology in social context.* Cape Town : Oxford University Press.

DYSON, A. 1999: Inclusion and inclusions: theories and discourses in inclusive education. In Daniels, H. & Gartner,P 1999: *Inclusive Education.* World Yearbook of Education. London. Kogan Page.

DYSON, A. & FORLIN, C. 1999: An international perspective on inclusion. In Engelbrecht, P., Green, L., Naicker, S. M. & Engelbrecht, L. 1999: *Inclusive education in action in South Africa.* Pretoria : Van Schaik.

DU TOIT, L. 1996: An introduction to specialised education. In Engelbrecht, P., Kriegler, S.M., Booysen M.I. (Eds) 1996: *Perspectives on learning difficulties. International concerns and South African realities.* Pretoria : Van Schaik.

EASTERBROOKS, S. 1999: Improving Practices For Students with hearing impairments. *Exceptional Children,* 65(4), 1999: 537 - 555.

ENGELBRECHT, P., GREEN, L., NAICKER, S. M. & ENGELBRECHT, L. 1999, *Inclusive education in action in South Africa.* Pretoria : Van Schaik.

ENGELBRECHT, P., NAICKER, S. M. , ENGELBRECHT, L. 1998. Perspectives on inclusive schooling in South Africa. *International Journal of Special Education* 1998, vol.13, No. 2 96 - 103.

ENGELBRECHT, P. & ELOFF, I. 1997: The role of the educational psychologist in inclusive education in South Africa. *International Journal of Special Education* 1997, Vol. 12, No.1.

ENGELBRECHT, P., KRIEGLER, S.M., BOOYSEN M.I. (Eds) 1996: *Perspectives on learning difficulties. International concerns and South African realities.* Pretoria : Van Schaik.

GALLAGHER, J.J. & KIRK S.A. 1983 : *Educating exceptional children* ; fourth edition. Boston : Houghton Mifflin Company.

GREGORY, S., KNIGHT, P. McCRACKEN, W.,POWERS, S. & WATSON, L. (Eds) 1998: *Issues in deaf education.* London: David Fulton Publishers Ltd.

HEGARTY, S. 1994: England and Wales. In Meijer, C.J.W., Pijl, S. J. & Hegarty, S. (Eds) 1994: *New perspectives in special education. A six-country study of integration.* London: Routledge.

HUYSAMEN, G. K. 1994 : *Methodology for the social and behavioural sciences.* Johannesburg : International Thomson Publishing (Southern Africa).

JONES, B.E., CLARK, G.M. & SOLTZ, D.F. 1997: Characteristics and practices of Sign Language interpreters in inclusive education programs. *Exceptional Children,* Vol.63, No.2 : 257-268.

KIRTCHNER, C.J. 1994 . Co-enrolment as an inclusion model. In *American Annals of the Deaf, selected topic of interest,1994. Full Inclusion.* 139. No. 2: 163-165.

KLUWIN, T.N., MOORES, D.F.; GAUSTAD, G.M. (Eds) 1992. *Toward effective public school programs for Deaf sudents - context, process & outcomes.*New York: Teacher's College Press.

KNIGHT, A. B. 1999: Towards inclusion of students with special educational needs in the regular classroom. *Support for learning.* 14(1), 1999: 3 - 7.

KRIEGLER, S.M. 1989. The learning disabilities paradigm: Is it relevant in the South African context? *International Journal of Special Education,* 4(2): 165-171

KUMSANG, M. & MOORE, T. (1998) Policy and practice in the education of deaf children and young people in Gregory S ., Knight, P., McCracken, W., POWERS, S. & Watson, L. (Eds) 1998: *Issues in deaf education.* London: David Fulton Publishers Ltd.

LAMPROPOULOU, V. 1998: The integration of Deaf children in Greece: Results of a needs assessment study. In Weisel, A.(Ed) 1998 (a). *Insights into deaf education - current theory and practice.* Tel Aviv: Academic Press of the School of Education.

LAMPROPOULOU, V. & PADELLADU, S. 1997: Teachers of the deaf as compared with other groups of teachers - attitudes towards people with disabilities and inclusion. Am*erican Annals of the Deaf.* Vol.142, No 1.

LEWIS, R. 1998 : Teachers' support for inclusive forms of classroom management. *International Journal of Inclusive Education,* 3(3), 1998: 269 - 285.

LIPSKY, D.K. & GARTNER, A. 1999: Inclusive education: a requirement for a democratic society. In Daniels, H. & Gartner,P 1999: *Inclusive Education.* World Yearbook of Education. London. Kogan Page.

LIPSKY, D.K. & GARTNER, A, 1990: Restructuring for quality. In Lloyd, J. W., Singh, N.N. & Repp, A.C. (Eds) 1990 : *The regular education initiative: alternative perspectives on concepts, issues, and models.* Illinois : Sycamore Publishing Company.

LLOYD, J. W., SINGH, N.N. & REPP, A.C. (Eds) 1990 : *The regular education initiative: alternative perspectives on concepts, issues, and models.* Illinois : Sycamore Publishing Company.

LUETKE-STAHLMAN, B. 1998 : Providing the support services needed by students who are deaf or hard of hearing. *American Annals of the Deaf,* 1998: 143 No. 5 389 - 391.

LYNAS, W. 1999 : Supporting the Deaf child in the mainstream school: is there a best way? *Support for Learning*, , 1999: 14 (3) 113 - 121.

MEIJER, C.J.W., PIJL, S. J. & HEGARTY, S. (Eds) 1994 : *New perspectives in special education. A six-country study of integration.* London: Routledge.

MERRIAM, S. B. 1998: *Qualitative research and cases study applications in education.* Revised and expanded from 'Case study research in education'. San Francisco: Josey-Bass.

MERRIAM, S. B. 1988: *Case study research in education: a qualitative approach.* San Francisco: Josey-Bass.

MERTENS, D.M. 1998 : R*esearch methods in education and psychology. Integrating diversity with quantitative & qualitative approaches.* California : Sage Publications.

MOORES, D.F. & MEADOW-ORLANS K.P. (Eds) 1990 : *Educational and developmental aspects of deafness.* Washington : Galluadet University Press.

MOORES, D.F. 1987 : *Educating the deaf: psychology, principles, and practices*; third edition. Boston : Houghton Mifflin Company.

NAICKER, S.M. 1999: Inclusive education in South Africa. In Engelbrecht, P., Green, L., Naicker, S. M. & Engelbrecht, L. 1999: *Inclusive education in action in South Africa.* Pretoria : Van Schaik.

O'DONNELL, A., MOORES, D.F., & KLUWIN, T.N. 1992: In Kluwin, T.N., Moores, D.F., Gaustad, G.M. (Eds) 1992. *Toward effective public school programs for Deaf students - context, process & outcomes.* New York: Teacher's College Press.

OJILE, E. 1998: Individual variation with the hearing-impaired: The past, the present and which way forward. In Weisel, Amatia (Ed) 1998(a): *Insights into deaf education - current theory and practice.* Tel Aviv: Academic Press of the School of Education.

PICKERSGILL, M. 1998: Bilingualism - current policy and practice. In Gregory, S., Knight,P., McCracken, W., Powers, S. & Watson, L.1998: *Issues in deaf education.* London: David Fulton.

POWERS, S. 1999: The educational attainments of deaf students in mainstream programs in England: examination results and influencing factors. *American Annals of the Deaf,* 144(3), 1999 : 261 - 269

POWERS, S. 1996(a): Inclusion is an attitude not a place: Part 1. *British Association of Teachers of the Deaf.* Vol. 20, No 2, 1996:35-41.

POWERS, S. 1996(b): Inclusion is an attitude not a place: Part 2. *British Association of Teachers of the Deaf.* Vol. 20, No 3, 1996:65-69.

POWER, D. 1994 : Deaf and hard of hearing children. In Ashman, A .& Elkins, J. (Eds) 1994: *Educating children with special needs ; second edition.* Sydney: Prentice Hall.

REPUBLIC OF SOUTH AFRICA (RSA) 1996. *Constitution of the Republic of South Africa.* Pretoria. Government Printer.

SHAW,J.& JAMIESON, J. 1996. Patterns of classroom discoursein an integrated, interpreted elementary school setting. *American Annals of the Deaf.* Vol.142.no1: 40-47.

SMITH, J. D. 1998: *Inclusion - All schools for All children.* Belmont. Wadsworth Publishing Company.

SOUTH AFRICAN FEDERAL COUNCIL ON DISABILITY (SAFCD) 1995. *Statement on Disability.* Durban: SAFCD.

STAINBACK, S. & STAINBACK, W. 1992 : *Curriculum considerations in inclusive classrooms: facilitating learning for all students.* Baltimore : Paul H Brookes.

STAINBACK, W. AND STAINBACK S. 1990 : A rationale for integration and restructuring: a synopsis. In Lloyd, J. W., Singh, N. N. & Repp, A. C. (Eds) 1990 : *The regular education initiative: alternative perspectives on concepts, issues, and models.* Illinois : Sycamore Publishing Company.

STINSON, M.S.& LANG, H.G. 1994 : Full inclusion: A path for integration or isolation In *American Annals of the Deaf.* vol. 139. No. 2 : 156-158.

STORBECK, C & HENNING E. 1998: Experiences and perceptions of Deaf students in a South African Sign Language Class. In Weisel, A.1998(b): *Issues Unresolved: New Perspectives in language and deaf education.* Washington D.C.: Gallaudet University Press.

TURNER, N.D. & TRAXLER, M. 1997. Children's literature for the primary inclusive classroom. *American Annals of the Deaf.* Vol.142 No.5

TVINGSTEDT, A., 1998. Classroom interaction and the social situation of hard-of-hearing pupils in regular classes. In Weisel, A. (Ed), 1998: *Proceedings of the 18th International Congress on education of the deaf.* Tel Aviv. Vol. 1 407 - 411.

UNITED NATIONS (U.N.). 1994. Resolution adopted by the General Assembly, A/48/96. New York.

UNITED NATIONS EDUCATION, SCIENTIFIC AND CULTURAL ORGANISATION (UNESCO) 1994. *The Salamanca Statement and Framework on Special Needs in Education.* Paris: UNESCO.

WATSON, L. & PARSONS, J. 1998: Supporting deaf pupils in mainstream settings in Gregory S ., Knight, P., McCracken, W.,POWERS, S. & Watson, L. (Eds) 1998: *Issues in deaf education.* London: David Fulton Publishers Ltd.

WATSON, L., GREGORY, S & POWERS, S 1999: D*eaf and hearing impaired pupils in mainstream school.* London: David Fulton Publishers Ltd.

WEISEL, A. (Ed.) 1998 (a): I*nsights into deaf education - current theory and practice.* Tel Aviv: Academic Press of the School of Education.

WEISEL, A. (Ed.) 1998 (b): *Issues Unresolved: New Perspectives in language and deaf education.* Washington D.C.: Gallaudet University Press.

WEISEL, A. (Ed.) 1998 (c): P*roceedings of the 18th International Congress on education of the deaf.* Tel Aviv.

WESTERN CAPE DEAF INTEREST GROUP 2000. Defining the deaf learner. (Unpublished handout).

APPENDIX A

INTERVIEW SCHEDULES

The following themes served as a framework for the semi-structured interviews and were constructed on the basis of the literature review.

1. Interview with principal

Begin with an informal discussion about the school, its history, the ethos of the school, the organisational structure etc.

It is not common to find a learner with a hearing loss in a mainstream school, how does the school feel about having Ayabonga in the school.

1.1   What is the general feeling of the school about inclusive education?

1.2   How did the teachers respond when they first heard that Ayabonga was going to be included at   ?

1.3   What in your opinion has helped Ayabonga's learn in a mainstream school?

1.4   Are the parents of your school community generally involved with school. Do you get good support from Ayabonga's parents? Are they quite involved/ interested?

1.5   Where does M......... (school's name) get support from for learners like Ayabonga?

2. Interview with class teacher (list of possible questions)

2.1   What is it like having Ayabonga in your class?

2.2   How does he manage?

2.3   What is his attention like?

2.4   Does he sometimes not hear you?

2.5   Do you have to make special arrangements for him? How do you help him
        cope/learn?

2.6   Do you get any support from anywhere?

2.7   Who provides support?

2.8   What type of assistance is available? Elaborate .....

2.9   What about you? What do you do to manage?

2.10   What are his relationships like with other learners in the class?

2.11   What does he like to do during breaks?

2.12   Has he made special friends? Do you know whether he has any friends who are deaf?

2.13   Does he wear hearing aids?

2.14   What do the other learners say about his hearing aids?

2.15   Has anyone explained to the class what they are?

2.16   Does Ayabonga look after his aids?

2.17   Do you have to remind him?

2.18   Has anyone shown you how the hearing aid needs to be cared for?

2.19   What happens when the battery runs out?

2.20   Is his parent careful about caring for the aid?

2.21   Some teachers in other schools are very worried about having learners like
        Ayabonga in their classes, what advice do you have to give them?

2.22   Who can you contact if you are worried about Ayabonga's learning or if you are
        experiencing a difficulty teaching him

3.   Interview with parent

3.1   When did you first notice your child had a hearing problem?

3.2   Where did you go for help?

3.3   What help did you get?

3.4   How is Ayabonga learning at school? Does he learn easily or is it difficult for him?

3.5   Were you given the full range of options on where Ayabonga can learn?

3.6   What made you choose M…….. and not a different school, like a school for Deaf for

         children who are deaf?

3.7   What's he like at home?

3.8   Who lives at home with Ayabonga?

3.9   Any thing else?

APPENDIX B

An example of the first stage in the data analysis. The transcribed data were open coded and notes made on the data.

Interview with Ms H (E1)

Interview with the class teacher who is also his Geography and History teacher (Ms H (E1) and his Science teacher (Ms Q...F2). Please note that the interviewer often spoke in simple English so as to be understood by second language speakers of English.

Interview with Ms H... his class teacher and Ms Q....,his Xhosa and Science teacher

L.C.:   How long has Ayabonga been in your class?

Ms. H...:   Since February, I started here in February.

L.C.:   and before that?

Ms.H.... :   He was with another teacher, but he is no longer a standard two teacher.

L.C. :   Was he in standard two this year.

Ms. H. :   No, he was in standard three (grade 5) when I got him.

L.C. :   Do you know when he started here?

Ms. H...: No.

Ms. Q.....:   No, I don't think the teacher still teaches here.

L.C.:   Do you know who will know?

Ms Q.... :   The principal or Deputy.

L.C.   What is it like having Ayabonga in your class?

[Handwritten margin notes:]

come + go
teachers
up ost.
cher eft.

k grouned info years early school. at school.

es on cipal info. learners out learning ckground

Teacher started in February

different teacher (previous Std teacher no longer there.

Ayabonga in Grade 5.

Don't know when Aya... Started at school.

Think teache left.

L.C. asked for records. Principal preferred secretary to. Secretary did not have.)

Principal or deputy Should know

1   no other disabilities (E1)

2   no other disabilities, learning problems (E2)

3   No other disabilities(M)

4   normal attention (E1)

5   I think he is average (E1)

6   Average (E2)

7   His IQ was not formally assessed but he coped very well when he was here (SE)

8   no obvious physical abnormalities (FN1)

9   When he didn't understand he can say "I don't understand" but the problem is he remains

10   quiet and relaxed   (E1)

11   He pays attention but then when he doesn't understand I don't know that he doesn't

12   understand. (E2)

13   Even if he knows the answer, he won't put up his hand (E1)

14   He does answer questions but he won't put up his hand (E2)

15   he is worried that he may not know the right answer (E1).

16   He does not want special attention. He does not want to be noticed (E2)

17   Very shy - would not talk directly to interviewer (FN)

18   He feels uncomfortable when children ask about his aids and doesn't want to wear

19   them(E1).

20   I don't think he is shy. He is worried that the other children might laugh at him if he makes a

21   mistake (E2)

22   happy(M)

1

APPENDIX C

An Example of the data being assorted according to themes

No additional disabilities

no other disabilities (E1)

no other disabilities, learning problems (E2)

No other disabilities(M)

normal attention (E1)

I think he is average (E1)

Average (E2)

His IQ was not formally assessed but he coped very well when he was here (SE)

no obvious physical abnormalities (FN1)

Self Esteem

When he didn't understand he can say "I don't understand" but the problem is he remains quiet and relaxed   (E1)

He pays attention but then when he doesn't understand I don't know that he doesn't understand. (E2)

Even if he knows the answer, he won't put up his hand (E1)

He does answer questions but he won't put up his hand (E2)

he is worried that he may not know the right answer (E1).

He does not want special attention. He does not want to be noticed (E2)

Very shy - would not talk directly to interviewer (FN)

Assigned category codes , category formation and clustering of categories into patterns

category codes	category names	clustered into pattern
C1	no additional disabilities	
C2	self esteem	child related factors
C3	happy	
C4	parameters of deafness	

S1	manifestation of hearing in class	
S2	achievement	
S3	physical facilities	
S4	school administration	
S5	attitude of school towards inclusion	
S6	teacher attitude towards inclusion of deaf	
S7	teacher appointments	school related factors
S8	knowledge about problem	
S9	collegial relations	
S10	lack of knowledge on how to help learner	
S11	teacher personalities	
S12	classroom support	
S13	compensatory learning strategies	
S14	curriculum	
S15	peer relationships	

F.F 1	achievement enhancing factors	
F.F 2	socio-economic factors	family factors
F.F 3	family structure	

D 1	funding	education department

LS 1	external support	
LS 2	consistency of support	
LS 3	co-ordination of support	support
LS 4	classroom support	
LS 5	early intervention	

APPENDIX E

C. Child related factors

Categories	P	E1	E2	E3	E4	M	ST	A	FN	rec
C.1. No additional disabilities		xx	x			x	x			
C.2. Self esteem		xx	xx						+x	
C.3. Happy						x			x	
C.4. Parameters of deafness				x		xx	x		x	xx

S. School related factors

Categories	P	E1	E2	E3	E4	M	ST	A	FN	rec
S.1 Manifestation of hearing problem in class		x	x	x						
S.2 Achievement		xx	x	x	x	x		x		x
S.3 Physical facilities	x								x	
S.4 School adminisration	x								xx	x
S.5 Attitude of school towards inclusion	xx	xx	xx	x			xx			
S.6 Teacher attitude towards inclusion of deaf	xx	xx	xxx	xx	--					
S.7 Teacher appointments	xx	xx	xx	x						
S.8 Knowledge about problem		xx	xxx	xx	x	x				
S.9 Collegial relations		x	x							
S.10 Lack of knowledge on how to help learner	xxxx	x	xxx		x					
S.11 Teacher personalities	x	x	xx							
S.12 Classroom support	x	xx	xx	xx	x		x		x	
S.13 Compensatory learning strategies		x	x	x	x				xx	
S.14 Curriculum		x	x	x	x					
S.15 Peer relationships		xx	xxx	xx		x		x	x	

D. Education Department

Categories	P	E1	E2	E3	E4	M	ST	A	FN	rec
D.1 Funding	xxx									

F.F. Family factors

Categories	P	E1	E2	E3	E4	M	ST	A	FN	rec
F.F 1 Achievement-supporting factors	x	xx	xx			x				
F.F 2 Socio - economic factors	xx								x	
F.F 3 Family structure						xxx				x

LS. Support

Categories	P	E1	E2	E3	E4	M	ST	A	FN	rec
LS.1 External support	x	x	x	x	x		x		x	x
LS.2 Consistency of support		x	x				xx			
LS.3 Co-ordination of support		-	-	-					-	
LS.4 Classroom support		xx	xxx	xx	x				xxx	
LS.5 Early intervention						xx	xx			