

The Inclusion of a Deaf Learner in a Regular School :

A Case Study

**A mini-thesis presented in partial fulfillment of the requirements for the
degree of Masters in Specialized Education by SULOCHINI JAIRAJ**

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DECEMBER 1996

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ACKNOWLEDGEMENTS

The financial assistance of the Centre for Science Development (HSRC, South Africa) towards this research is hereby acknowledged. Opinions expressed and conclusions arrived at, are those of the author and are not necessarily to be attributed to the Centre for Science Development.

The writer records her sincerest thanks to all those without whom the research and production of this mini-thesis would not have been possible:

- * Her supervisors, Dr N. Muthukrishna and Mrs H. Rocher for their assistance and advice.
- * The pupil in the study who was the writer's inspiration, and the pupil's family for their keen interest and unstinting co-operation at all times.
- * The principal and staff of Bonela Primary School for permitting the writer to conduct her research so freely at the school and for allowing her time to conduct interviews with them, particularly the form teacher, Ms. R. Johnston, for her assistance.
- * The principals of V.N. Naik School for the Deaf and Durban School for the Hearing Impaired for allowing the subject in the study to undergo psychological and hearing tests at these schools.
- * The speech therapists and psychologists for the time and patience they devoted to conducting tests and discussing the results thereof.
- * Mrs S. Jacobs, liaison teacher at the Carel du Toit Centre for Hearing Impaired Children, Tygerburg Hospital and Mrs L. du Preez, principal of the Centre for time taken to respond to the writer's letters requesting assistance and for covering postage for information forwarded by them.
- * DEAFSA (Deaf Federation of South Africa) for their immediate response in forwarding their policy and information documents.
- * Rokam Dukhea, from the Education Media Resource Centre, Natal University (DBN), to whom the writer is greatly indebted for the masterful production of a video which forms part of the research.
- * Partheeban Chetty, an ever-willing friend who remedied the many computer 'hiccups', and for sacrificing his time to assist the writer in the final layout. Siva "Johnson" Maistry and Santhamala Chetty who were instrumental in the copying and binding stages. A special note of thanks for their time and patience.
- * Nadira, Saajidha and Rashid, the writer's dear friends and colleagues, for their ongoing encouragement and motivation.
- * The writer's family, Roshini, Vernon, Pyria, George, Vishal, Denetia, Talia, Devi, Agoram and the Jairaj family for their understanding when the writer had little time to share, and for their support at all times.
- * A very special thank you goes to her ever-supportive and helpful husband, Rob, who allowed her the time to complete her work by graciously assuming her responsibilities at home.

DECLARATION

I hereby declare that the work presented in this mini-thesis is my own, and that reference to work by other persons has been duly acknowledged.



SULOCHINI JAIRAJ

Durban, January 1997.

ABBREVIATIONS and NOTES

dB	decibels (unit of measurement for hearing)
DEAFSA	Deaf Federation of South Africa
DSHI	Durban School for the Hearing Impaired
HI	Hearing Impaired
P.E.	Physical Education
VNNS	V.N. Naik school for the Deaf

note:

The terms 'mainstream school' and 'regular school' are used synonymously in this study.

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ABSTRACT

In South Africa, education for learners with special needs has historically been provided for within a separate system of specialized education. Over the past few years, following international trends, there have been a few informal initiatives towards integration of learners with special needs into regular schools. This study examines the placement of a hearing impaired pupil at regular primary school in Durban, Kwazulu-Natal.

The subject of the study is a hearing impaired child with a severe to profound hearing loss, who was placed by parent choice into a mainstream school in the neighbourhood, from preschool level. The eleven year old subject is a standard three pupil at Bonela Primary School.

A case study approach was followed. Data was gathered through semi-structured interviews with the subject, parents, peers and staff at the school. Document analysis was undertaken on school reports, psychological reports, test records and pupil's books. In addition, the researcher used observation in order to capture details concerning the subject's social and academic ability in a natural environment.

The results of this study reveal that the hearing impaired pupil made good progress in this regular school setting, despite the fact that there were minimal curriculum adjustments made. The placement experience was inclusive in practice, and proved to be successful in terms of the overall development of the hearing impaired child in this case.

Positive attitudes of school personnel and peers, support from teachers, early identification, early intervention, consistent speech therapy, strong parent support, the child's language ability and the subject's personality were key factors contributing to the success of this placement.

Findings suggest it is possible to include a child with severe to profound hearing loss in a regular classroom, with minimal support services. The study has implications for current debates in South Africa on the education of Deaf children. The issue of the right of choice of the parent and the Deaf learner is a critical one, and needs to be taken into account by policy makers.

CHAPTER ONE

1. BACKGROUND TO THE STUDY:

1.1. DEAF EDUCATION IN SOUTH AFRICA

1.1.1 Introduction

Historically, the issue of special educational need in South Africa has been relegated to the periphery of educational concern (Donald, 1993). Social control was the dominant organizing motive with respect to the provision for individuals with disabilities in South Africa between 1800 and 1990 (Lea and Foster, 1990). Social deviants (the deaf included) were housed in asylums which later became institutions for the 'feebleminded'. Some were cared for in hospitals. In 1863, five sisters from the Dominican Convent in Ireland founded a school for the Deaf in Cape Town, later known as the Grimley Institute for the Deaf, and another school for the Deaf in King William's Town in 1877. So began the emergence of separate schools for the Deaf in South Africa.

Owing to the apartheid policies of the time, race was also an issue. As a result of this, the schools were further classified according to 'European' and 'Non-European' (Penn, 1993). This, together with unequal funding, rendered the Black Deaf doubly disadvantaged. Whilst special schools for the Deaf under the Indian and White Education Departments were well funded and resourced, the education of the Black Deaf, particularly the African Deaf, had been sadly neglected.

Most special schools for the Deaf are situated in and around urban areas (Singh, 1992). As a result, there remains a large number of children with special needs, including those who are deaf, especially in rural areas who have no access to schooling and as such receive no form of education. According to the Deaf Federation of South Africa (DEAFSA, 1994), an estimated 16 000 Deaf learners of school-going age do not attend school, nor have they done so. They

are mainly from the rural areas, squatter camps and so called "townships". This estimated number include the numerous hard-of-hearing learners who are currently in mainstream education as a result of the lack of efficient screening procedures and support services in these areas (*cf.* Green, 1991). According to DEAFSA (1994), these learners in mainstream education cannot cope and their specific educational needs are not being met. DEAFSA (1994) provides statistics reflecting the inadequacy of the Deaf educational system.

1.1.2 Approaches and philosophies

Two major approaches to the education of the Deaf exist in South Africa, namely the medical approach and the socio-cultural approach.

1.1.2.1 Medical approach

In South Africa, Deaf people have been viewed from a medical perspective. The level of hearing loss (measured in decibels) as well as the ability to speak, was used as the primary yardstick to ascertain the level of functioning of a Deaf person (DEAFSA, 1994).

The medical approach attempts to remediate deafness, and promotes the use of spoken language, with the exclusion of Sign Language as a means of communication in education. Arising from this approach, speech is encouraged as the medium of expression of the spoken language. This is referred to as the 'oral' approach.

DEAFSA (1994) argues that the oral approach is successful for a limited number of learners, usually those who have either sufficient hearing to process speech, or who became Deaf after the age of acquiring spoken language.

1.1.2.2 Socio-cultural approach

The alternative view of deafness, and the one held by the vast majority of the Deaf community, is that deafness does not require remediation because it is not handicapping, but rather reflects a language difference (DEAFSA, 1994). Within this perspective, the Deaf require only an educational system that allows for instruction through the medium of Sign Language. Within this system, spoken language should be taught as a second language, in written and/or spoken form, depending on the residual hearing and other abilities of the individual. Such an educational system, termed the bilingual-bicultural approach, is currently being established in other parts of the world (DEAFSA, 1994).

In several countries the free choice of language and modality is constitutionally recognised and protected. The Deaf in South Africa have advocated for the same right. The South African Schools Act (Nov, 1996) in Clause 6(1) states:

“A recognised sign language has the status of an official language for the purpose of learning in a public school.” (p. 8)

1.2. TERMINOLOGY

Placement of children with hearing impairments are often decided upon in terms of the degree of hearing loss. Much confusion, however, exists over the terms 'deaf', and 'hard-of-hearing'.

Many distinguish between these two terms. For example, according to Penn (1993, p.11), the term 'deaf' is traditionally defined in relation to the audiogram. Those, she believes, with a severe to profound degree of hearing loss who will

not benefit from amplification, should be referred to as 'deaf'. Many support this definition, adding that these children will therefore not be able to benefit in a mainstream classroom. In comparison, those referred to as 'hard-of-hearing' who will benefit from amplification and who have greater residual hearing, might benefit from education in a regular school.

There are others, such as the audiologists in this study, who believe that such a distinction is questionable since there exists the narrowest of differences between hearing thresholds. This, in turn, affects the results of amplification. Bearing these arguments in mind, it is therefore difficult to categorize hearing impaired pupils, or to decide the most suitable option for them.

Sellers and Palmer (1991) sum up this debate over terminology and its implication for placement, by stating that hearing loss alone is a poor predictor of ultimate success, however defined. Many factors are involved in determining the most suitable type of provision for each child.

DEAFSA (1994) agrees that decibels should not be used as the only yardstick to estimate a person's functioning or educational needs. They believe that numerous other factors play a more determining role, for example, the age of diagnosis, the age at which a hearing aid was fitted, the extent of parental guidance received as well as parental involvement, age of school admittance, the cause of deafness, intellectual capacity, the presence of secondary handicaps, and the ability to learn a spoken language. Factors such as these must be taken into account in a holistic way to determine the level of functioning of the specific person (DEAFSA, 1994).

1.3. CURRENT DEBATES ON THE EDUCATION OF LEARNERS WITH SPECIAL NEEDS

1.3.1 MAINSTREAMING AND INTEGRATION

'Mainstreaming', a term coined by the Americans is used synonymously with the term 'integration, used by the British. Both these terms are used interchangeably. 'Integration' is generally used to refer to 'a variety of non-segregated settings and also a process of increasing participation in the mainstream' (Booth, 1992 as cited in Hornby, 1992). This trend followed a shift in thinking from segregation to integration based on a humanitarian perspective. It rests on the belief that disabled people should share the same opportunities for self-fulfilment enjoyed by other people. ✓

In South Africa, education provision for learners with disabilities has been provided for within a second segregated system. Parents have access to more resources for their children only through placement in special school settings. If the learner were to be placed in a regular school, he/she was either placed in a special unit, or in a special class, or remained in an ordinary class. These placement options were largely for children classified as having mild mental retardation, and children with learning difficulties. A limited number of pupils with other disabilities were found in these settings, for example, high functioning children with Down Syndrome. This was often the case in well-funded schools under the former House of Delegates (HOD), House of Assembly (HOA) and House of Representatives (HOR).

In the 1980's, following international trends, there was a move in South Africa towards mainstreaming children with special needs. This, in practice, involved placing students who were classified as having mild mental retardation and those with learning difficulties, into regular schools.

Mainstreaming in essence meant placing children from special classes and remedial units back into mainstream classes, if they progressed adequately to meet the demands of the existing curriculum. The emphasis of such an approach is on trying to fit the child and with special needs to existing classrooms.

"At the philosophical level, integration is about the notions of 'becoming part of' and 'acceptance by' and 'assimilation into' what is perceived as 'normal society' by the majority group."

(Sellers and Palmer, 1992, p. 4)

Hornby (1992) and Sellers and Palmer (1992) caution against such an approach for *all* children with SEN (Special Educational Needs).

Hornby (1992) summarizes the reviews of literature concerned mainly with the integration of children with learning difficulties. He maintains that there has been a lack of research evidence in Britain in support of the effectiveness of integration for children with SEN in ordinary schools. Hornby adds that many children with SEN can be successfully integrated into regular classes given a favourable school ethos, sufficient in-service training and adequate back-up resources.

Sellers and Palmer discuss the implications of such an approach for Deaf children. Firstly, integration for deaf people has predominantly been taken by hearing people to mean 'normalisation'. Integration was defined as helping the hearing impaired child to live his life as near normal a manner as possible and making available to him patterns and conditions of daily living that are as close as possible to the mainstream of society (Sellers and Palmer, 1992). ✓

Secondly, the implication of a commitment to full 'normalisation' is that the hearing impaired child should in all respects be helped to be like a hearing child, that is, should adapt. The ultimate aim would, therefore, be normal

speech, communication by the least obvious means possible - unobtrusive hearing aids, lip reading, handouts. The child would be expected to be treated on equal terms academically and socially with his/her peers.

According to Sellers and Palmer, this ultimate form of the paradigm would allow, for example, no obvious special help from a teacher of the Deaf, and certainly no use of sign language. They add that experience has shown, and empirical results of surveys have confirmed that, aside from the really exceptional, only children with useful residual hearing and reasonable speech can reach that level of normalisation.

Booth (1988), challenges the conception of 'normalisation' as described by Wolfensberger, arguing that viewing society as a unified cultural whole, inevitably devalues some groups, for example, those with disabilities. He further criticizes Lynas's assumption that deaf people need to use spoken language in order to assimilate into normally hearing society. He highlights the denial of deafness on the part of deaf children and educators and the need for sign language to optimize thinking and learning. Booth opposes the notion of 'normalisation' and advocates a redefinition of integration to include diversity and to support people to define their aspirations and opportunities for themselves.

By the 1990's there was a shift in thinking towards a new kind of integration as advocated by Booth (1988). The new trend which rejects the medical-deficit suggested by integration and the concept of 'normalisation' is referred to as 'Inclusion'.

1.3.2 INCLUSION

"..instead of an emphasis on the idea of 'integration', with its assumption that additional arrangements will be made to accommodate exceptional pupils within a system of schooling that remains largely unchanged, we see moves towards 'inclusive education', where the aim is to restructure schools in order to respond to the needs of all children."

(Clark, Dyson and Millward in Ainscow, 1995, p. 1)

This inclusive orientation was a strong feature of the Salamanca Statement on Principles, Policy and Practice in Special Needs Education, agreed by representatives of ninety-two governments and twenty-five international organisations in June 1994 (UNESCO, 1994). The Salamanca Statement argues that regular schools with an inclusive orientation are

"the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all; moreover they provide an effective education to the majority of children and improve the efficiency and ultimately the cost-effectiveness of the entire education system."

(Salamanca Statement, 1994, p. 10)

Barton (1995) sees inclusion as a vision which challenges the existing politics and power underlying delivery of services to disabled people. He views inclusive schools as a means to eradicate all these disabling barriers.

He supports Fulcher's view (1989) that disability is socially constructed. Fulcher (1989) advocates that the image of disability, for example of people in wheelchairs, should be denounced. Disability, he adds, must not be understood

primarily as a medical phenomenon. Instead it should be seen as welfare's categorization of people in order to regulate them.

"In this sense and context, it is a political and social construct used regulate."

(Fulcher, 1989, p. 21)

The 'special needs' of people with impairments are viewed as a personal trouble and not a public issue (Mills, 1970). Furthermore, policy has been largely informed by medical and psychological ideas. It is difficult within such an approach to question the politics of disability as one would question issues such as power, politics, class, gender and race. There is a strong traditional belief that professionals involved in special education provision are caring, patient and loving and that politics should be kept separate from education (Mills, 1970).

Fulcher (1989), therefore, expresses the need to separate impairment from disability in order to develop a social theory of disability. A social theory of disability inherent in the philosophy of inclusion, implies that schools have to work to accommodate diversity, a process described by Barton (1995).

Firstly, Barton sees inclusive education as part of a human rights approach to social relations and conditions. This vision of inclusion sees education as part of the whole society. Issues of social justice, equity and choice are central to the demands for inclusive education. Existing assumptions of disability and existing practices therefore need to be challenged in order to promote positive views of others (Barton, 1995).

One of the goals of inclusion is to

"change the attitudes of teachers and students without disabilities who, some day, will become parents and taxpayers, and service providers."

(Fuchs & Fuchs, 1994, p.301)

Secondly, inclusive education is concerned with the well-being of *all* pupils, and schools should therefore become welcoming institutions. Barton sees the existence of special schools as a segregatory, discriminatory and offensive option. As Dessent (1987) argues:

"Special schools do not have a right to exist. They exist because of the limitations of ordinary schools in providing for the full range of abilities and disabilities amongst children."

(Barton, 1995, p. 158)

Thirdly, schools adopting an inclusive philosophy are required to change to accommodate all children. Giangreco (1995) points out that special and general educators need to be concerned also about the unmet needs of students.

Schools must not be about assimilation in which a process of accommodation leaves the school remaining essentially unchanged (Barton, 1995). Changes within the school may include those of the plant, organisation, ethos, pedagogy and curriculum. This will require transfer of resources, careful planning and continual monitoring. Inclusionists do not advocate a dumping practice into existing provision (Barton, 1995).

An analysis of the draft proposal (summary of all reports submitted by working committees) of the Forum for Specialized education Kwazulu-Natal (1995), reflects some concerns about inclusion as a philosophy in South Africa. The belief is that in practice, inclusion will not work because teachers in ordinary schools are not adequately trained to deal with children diverse needs within a single classroom.

Various researchers describe ways in which all teachers can be helped in this process of change. Ainscow (1995) addresses questions relating to how teachers can be helped to organise their classrooms in ways that foster the learning of all their pupils. He discusses strategies for teacher development which include

opportunities to consider new possibilities and support for experimentation and reflection, especially for teaching in large mainstream classrooms. These include planning for the class as a whole; utilizing the pupils' rich source of experiences, inspiration; modifying plans and activities whilst they are occurring in response to the reactions of individuals within the class ; teamwork ; dialogue; critical reflection and collaboration with colleagues. Teacher development programmes and inservice training are needed to encourage critical thinking amongst teachers.

Ainscow (1995) also addresses the issue of how schools can be restructured in order to support teachers in these efforts. He describes the need to develop "moving" schools (a phrase borrowed from Rosenholtz, 1989). "Moving" schools imply that the school is continually being structured to meet the changing challenges which face it. These challenges include curriculum changes and a fluctuating student population. In order to achieve this, schools must have effective leadership, not only by the head teacher but spread throughout the school; involvement of staff, students and community in school policies and decisions; a commitment to collaborative planning; co-ordination strategies; attention to the potential benefits of enquiry and reflection; and a policy for staff development (Ainscow, 1995).

Ainscow also sees the tasks of all those who regard themselves as special needs specialists to support development activities and to lead staff to a greater sense of confidence and empowerment. These tasks include responding to those pupils who struggle within existing arrangements, and perhaps, in doing so, unintentionally assist in the retention of the status quo; responding to those pupils who struggle within existing arrangements by seeking to adapt existing arrangements; and responding to those pupils who struggle within existing arrangements by working with colleagues to make new arrangements that facilitate the learning of all pupils.

Phillips, Sapona and Lubic (1995) report similar partnerships in a Kentucky school faced with the challenges of inclusion. This school is in the midst of changes in curriculum in which partnerships between special and general educators were strongly encouraged. The classes comprised of multi-age, multigrade pupils from general education classes and special education class. These pupils included those identified as having learning disabilities, mild mental disabilities, emotional-behavioural disabilities, or multiple disabilities. Although the teachers experienced anxiety at first, they began to share an excitement about the academic and social progress of the students and beliefs about the benefits of inclusive education.

In South Africa, special school proponents informing policy, are reluctant to address the divide between special education and general education (Draft proposal of the Forum for Specialized Education, 1995). They assume the role of 'special protectors' of special education. They maintain that, although the benefits of inclusion are recognised, there are many factors which make full inclusion impractical and inappropriate for the foreseeable future. The draft proposal of the Forum for Specialized education Kwazulu-Natal (1995), proposes a system of 'responsible inclusion'. This model is based on a continuum of placement options from least restrictive to 'most restrictive'. The researcher finds the latter term highly contradictory. If each child is to develop to his/her full potential in the most appropriate educational environment, then the researcher would assume it to be 'most enabling', not 'most restrictive'. The researcher finds the term 'responsible inclusion' a misnomer. Inclusion has to be responsible if it aims at providing the most enabling environment for a learner, and ultimately full citizenship.

In summary, inclusion rejects the medical model and the deficit of disability, and responds positively to the social model - that society has to work to accommodate diversity. The focus should be on the needs of individuals within the system, regardless of medical and other labels. The understanding is that the greatest barriers to inclusion are caused by society, not by particular medical impairments. The primary concern of 'inclusion' is that schools should

include all children regardless of their physical, intellectual, social, emotional, linguistic and other special needs, mirroring the society. Inclusion is ultimately a social rights issue and is enshrined by The Constitution South Africa of February 1996. It states:

"No person shall be unfairly discriminated against, directly or indirectly, and, without derogating from the generality of this provision, on one or more of the following grounds in particular: race, gender, sex, ethnic or social origin, colour, sexual orientation, age, disability, religion, conscience, belief, culture or language." [Section 8, (2)]

The Constitution calls for the protection and advancement of persons or groups disadvantaged by unfair discrimination

"...in order to enable their full and equal enjoyment of all rights and freedoms..."

[Section 8, (3)(a)]

In response to this, The South African Schools Act of November 1996, made provision for admission of individuals with disability in public schools.

"Admission requirements for *public schools* shall not unfairly discriminate in any way, particularly on grounds of race, gender, sex, ethnic or social origin, colour, sexual orientation, age, disability, religion, conscience, belief, culture or language."

(Chapter 2, 5(1), p. 6)

'Public schools' includes all schools

"which are currently known as community schools, farm schools, state schools, and state-aided schools (including state-aided specialised schools, church schools, Model C schools, mine schools and others).

(Government Gazette No. 17096 No.24, p. 7)

In light of such provisioning, the Deaf have been afforded the right to education of their choice.

1.3.3 CURRENT DEBATES ON THE EDUCATION OF THE DEAF

The debate on inclusive education for the Deaf proves rather controversial. There have been various conflicting perspectives and views on the issue. The language issue is central to the issue of placement and education for the deaf. There are a range of opinions, concerns and views from Deaf people, organisations representing the Deaf community at large, parents and special schools. DEAFSA (Deaf Federation of South Africa) (1996) argue that most deaf people prefer to use sign language, instead of speech and that mainstreaming attempts to force deaf people to speak in a hearing world.

Organisations like DEAFSA represent the Deaf community in South Africa and Deaf Culture. In South Africa, as elsewhere in the world, Deaf people view themselves as belonging to a different and separate minority cultural group. They have their own language, history, values, norms and mores, like one would refer to the Venda people or the Zulu people. The Deaf community, therefore, do not view themselves as "disabled" or "handicapped".

Deaf culture can be distinguished by language (Penn, 1993). Deaf culture strongly influences the language choice of Deaf individuals, including those who have sufficient residual hearing to develop speech. Those who are labelled 'hard of hearing' are often excluded from the Deaf cultural group (Penn, 1993). As such, residual hearing, instead of being a valuable asset, becomes a type of handicap which excludes certain individuals from the Deaf group. This, Penn says is

"the force which causes deaf adolescents to remove their hearing aids and to abandon attempts at oral communication."
(Penn, 1993, p. 12)

DEAFSA supports the inclusive philosophy, emphasizing the need to consider the unique language needs of the Deaf. DEAFSA's information document (1996) makes reference to Rule 21 in the Salamanca Statement (1994) which states:

"Educational policies should take full account of individual differences and situations. The importance of Sign Language as the medium of communication among the Deaf, for example, should be recognised and provision made to ensure that all Deaf persons have access to education in their national Sign Language. Owing to the particular communication needs of the Deaf and deaf/ blind persons, their education may be more suitable in special schools or special classes and units in the mainstream schools."

(p. 66)

Although DEAFSA (1996) claims to support all possible placement options, their key recommendation is the demand for

"specialized schools with residential facilities due to the unique language need of the Deaf child."

(DEAFSA, 1996, p.8)

They add that

"The first or natural language of the deaf is Sign Language. For the Deaf learner to develop his or her full potential, he or she needs a natural signing environment that can only be provided by Deaf peers. The Deaf learner also needs to be part of his or her Deaf culture that can only exist if a group of Deaf learners is together. The Deaf learner also needs to identify freely with Deaf adult role models. This would only be possible within a specialised school for the Deaf with Deaf house parents, Deaf assistants and where possible, Deaf teachers....As a Deaf learner needs a school environment that is a microcosm of the Deaf community, such an environment can only be created within a specialized school for the Deaf."

(DEAFSA, 1996, p. 8)

The response of the World Federation for the Deaf (WFD) to the inclusive philosophy supports DEAFSA's recommendations.

"The education of Deaf children should not be carried out by placing him/her alone in hearing schools if proper interpreting service is not available during all lessons. Deaf children have the right to education in Sign Language and Deaf children have the right to be educated in their own schools."

(DEAFSA, 1994, p. 2)

These views are contrary to those of proponents of inclusion, like Barton (1995) and Dessent (1987) who oppose the existence of special schools as perpetuating segregation and discrimination, and work against the philosophy of inclusive education.

Four adult Deaf who responded to questionnaires in Cleaver's study (1992) were against the views expressed by DEAFSA, an organisation aimed to represent them. The four respondents in the study who in the first few months of their school years went through an oral programme at the Carel Du Toit Centre in Cape Town, were integrated into mainstream schools in South Africa. Three of the four respondents had completed schooling and went on to higher education. They did not believe that deaf pupils should be brought up believing that they are different. These respondents believed that deaf children should not be made aware of the stigma attached to being deaf, which is being perpetuated by a separatist system of education. They added that hearing people also benefit from the interaction with the hearing impaired. According to the respondents, hearing peers begin to

"understand how to live naturally with those with handicaps."

(Cleaver, 1992, p. 23)

DEAFSA (1994) recognises that some oral programmes may continue. According to this organisation, it may be suitable for a small minority. DEAFSA encourages the rights of these few segregated schools/centres for the Deaf who follow the oral method as well as the parents' right to choose the oral method for their child to be respected, provided that a proper information and guidance structure which assists the parent in deciding which method to choose, must be in place.

DEAFSA recommends that mainstreaming of the Deaf learner must be discouraged (1994, p.9). If the parent chooses to mainstream their Deaf child, adequate provision must be made for such a learner, depending on the specific needs of the particular learner, for example, assistive devices, interpreting services, awareness of the learner's unique problems as a Deaf person among hearing people, and/or full integration with hearing pupils. DEAFSA also recommends that the necessary posts for specialized visiting teachers must be created in each region in order to act in an advisory capacity where Deaf learners are in mainstream schools (DEAFSA, 1994, p.9).

DEAFSA views inclusive education as an ideal situation if teachers, learners, parents and the public are fully aware about the needs of the disabled, if there is a major attitudinal shift within all sectors of education and provided that all necessary support services are properly in place and freely available (DEAFSA, 1996). According to DEAFSA, research has shown that it takes up to 25 years for the full implementation of an inclusive education system in South Africa. During this time, DEAFSA and its affiliates believe they have enough time to develop Sign Language and interpreting services, according to the educational needs of the Deaf learners in South Africa.

Parents of young deaf children also play a significant part in decisions regarding choice of language and placement. For example, Megan Wilkinson,

a one and a half year old, had developed a rich vocabulary of signs, equivalent to the vocabulary of a hearing child her age. Once her parents discovered she was deaf at six months, they decided to teach her sign language to communicate with her. Megan was enrolled as a pupil in a play group at Fulton School for the Deaf outside Durban. Megan's parents reinforced the programme at home. Her mother, in a Daily News article (April, 1996), said:

"We didn't want to wait several years until Megan could lip read or speak before communicating with her."

Other parents choose the cochlear implant in the hope of making their child 'normal'. A cochlear implant is a special type of hearing aid that works by stimulating the auditory nerve electrically. It does not restore "normal hearing", and is therefore considered only suitable for people who are so deaf that they cannot hear through powerful conventional hearing aids. The one debate surrounding the cochlear implant issue is that the diagnosis of deafness is not accurate enough in infants to justify using intra cochlear systems which would destroy any residual hearing. The other argument is that cochlear implants implies a return to oralism. Meanwhile, pressure groups like DEAFSA believe they are winning the battle to get signing generally accepted. Penn (1993) reports:

"There has been a very strong voice among Deaf groups internationally against such early and drastic intervention. In a sense to implant a child is to commit oneself to oralism, and hence a rejection of deaf culture and language." (p. 22)

A strong reaction to DEAFSA's position, came from South African cricketer, Fanie de Villiers whose daughter is deaf. During a television interview on a television programme, Good Morning South Africa (GMSA, August, 1996), he said:

"DEAFSA says that we're separating deaf people by putting them in the middle of deaf and hearing worlds. My little girl can hear sound for the first time. So, that's nonsense!"

In contrast, DEAFSA (1996) is against such choices made by parents, saying that

"If the choice of the parents and the rights of the parents is the rule of thumb, it would mean the violating of Deaf learners' rights." (p. 8)

However, the adult hearing impaired respondents in Cleaver's study (1992), conducted in South Africa, acknowledged the support given by their parents and were thankful for the choices that were made.

There appears to be conflicting opinions expressed by organisations, deaf adults and parents regarding education for the Deaf. The unique language needs of the Deaf, the lack of a common Sign Language system and the lack of acceptance of Sign Language as an official language in South Africa (Penn, 1993), the lack of interpreters and teachers proficient in sign language, are believed to be barriers to inclusive education for the Deaf in South Africa (DEAFSA, 1996).

1.4 AIMS OF THIS STUDY

The present study documents how a deaf learner at a primary school in Durban, Kwazulu-Natal is experiencing schooling in a regular school setting.

The aim of this study is, firstly, to evaluate the overall development of a deaf pupil at a regular school, investigating the factors affecting academic, social and emotional development. Secondly, the study will establish whether the placement is inclusive in this case, and if so, whether such placement is the most enabling in terms of the subject's development.

The objective is to inform policy regarding education and placement of the deaf in S.A., particularly in the light of current debates around the philosophy of inclusion.

The following are the **research questions** which will serve as the basis for the investigations and arguments in this study:

To what extent has placement in a regular school benefitted the deaf pupil in this study in terms of his/her overall development?

What are some of the factors affecting the deaf child's development at the regular school?

Is this placement inclusive? If so, how successful is it?

CHAPTER TWO

2. OVERVIEW OF RESEARCH INTO THE INCLUSION OF HEARING IMPAIRED

Much has been written about mainstreaming initiatives in the U.S. and integration in the U.K.. Many have debated and theorized over the efficacies of such initiatives in terms of the language, social and academic development of hearing impaired children (*cf.* Brill, 1978; Cappelli, 1995; Dean & Nettles, 1987; Gjerdingen & Manning, 1991; Kluwin, 1993; Sellers & Palmer, 1992; Zwiegel & Allen, 1988, Lynas, 1986). There is no evidence, however, of deaf children in truly inclusive school settings. The reason being that it is a fairly new concept even in developed countries such as the U.S.A. and U.K..

In South Africa, research has been done in the area of deaf education in special schools, focusing primarily on language and vocational issues (*cf.* Du Toit, 1990; Nieuwenhuis, 1985; van Staden, 1985; Smit, 1979; Robbertse, 1970; de Le Bat, 1969; Du Toit, 1969, Storbeck, 1994; Puren, 1991; Kruger, 1990). There is limited information regarding mainstreaming or inclusive initiatives. As a result of this limited information, the investigations in this study are essentially directed by issues raised in studies conducted outside South Africa. Cleaver's study (1992) is the only study conducted in South Africa which raises the issues under investigation.

During the 80's, there was much discussion regarding integration or mainstreaming, particularly in the U.S.A. , U.K., and other developed countries, as mentioned earlier. Many offered suggestions on how to successfully mainstream or integrate the hearing impaired into mainstream classrooms (Milo, 1979: Brill, 1979: Higgens, 1990).

Studies were conducted, evaluating integration attempts that had either worked or failed in terms of hearing impaired pupils' academic, language and social development (Zwiebel & Allen, 1988: Kluwin & Moores, 1989: Moskos & Mayer, 1990: Whitehead & Barefoot, 1992). Researchers also looked at factors facilitating or impeding such development.

This section will discuss some of these studies and their findings.

2.1 ACADEMIC DEVELOPMENT

Hearing impaired students in integrated settings were found to have higher achievement levels in mathematics than their hearing impaired counterparts in segregated settings. Zwiebel and Allen (Israel, 1988) compared teachers' ratings of the mathematics achievement of severely to profoundly hearing impaired Israeli students in special schools, special classes, and mainstream placement. When variables related to communication skills and intellectual potential were controlled, teacher ratings of student mathematical achievement was lower for segregated classrooms than for integrated settings. This study set out to compare the achievement levels of a hearing impaired pupil in an integrated setting to that of a hearing impaired counterpart in a segregated setting. The present study will, however, compare the subject's achievement levels to those of the hearing children in the subject's class, not to other hearing impaired pupils in another setting.

Kluwin and Moores (Britain, 1989) conducted a similar study with 215 hearing impaired pupils with hearing losses from mild to profound, and found that student background factors (family support, early identification and speech therapy) and the quality of instruction a hearing impaired student receives, are primary determinants of achievement in mainstream settings. They also

discovered that mainstreaming with an interpreter had no specific effect on achievement for hearing impaired students.

The present study will also investigate the same student background factors and the quality of instruction that the subject receives, and the effect these factors have on the overall academic development of this subject.

2.2 LANGUAGE DEVELOPMENT

A study of reading, writing, spoken and signed language, speech perception and production, and cognition of 100 profoundly hearing impaired students in oral and mainstream high school programs suggests that hearing impaired students have much higher potential for literacy than previously reported (Geers and Moog, 1989).

Another study by Moskos and Mayer (1990) found that deaf children's writing skills developed in the same way as that of hearing children. Moskos and Mayer described a mainstreaming project carried out in Toronto, Canada, in which four deaf students, aged 5 through 8, were integrated into a classroom of hearing students in grades 1 and 2, for 1 hour, 5 days a week, to participate in a writing program. Both groups of children participated in all aspects of the writing program: writing, peer conferences, class conferences, mini-lessons, and sharing of finished pieces. Both teachers participated; the teacher of hearing impaired students acted as both a teacher and sign language facilitator. Both groups of students increased in their ability to express ideas in written form. It was discovered that the hearing impaired student's movement through developmental steps in spelling paralleled that of hearing students; both groups moved from early phonetic stages through transitional stages to the conventions of standard spelling in the same way.

The present study will also investigate the subject's reading, writing, spoken language, speech perception and production in comparison to the abilities of the subject's hearing peers.

Schildroth (1991) quote studies in the U.S showing that loss of hearing as well as family language and home environments not conducive to strong academic development, results in slow English language development and depressed reading level. The present study will investigate whether this or its converse is true.

Whitehead and Barefoot (1992) add that deafness from infancy is probably the greatest barrier to the development of any language which is based on the spoken form. According to them, children in the infant stage learn language through imitation. If the child is unable to hear spoken language during this stage, then the child will be unable to learn the language. This results in a lag in language development as compared to their hearing peers.

Whitehead and Barefoot (1992) believe that with early detection of a hearing loss and appropriate hearing aid fitting, an infant can overcome these barriers. In fact, they believe that a young child may develop speech and language skills that parallel the development of these skills for children with normal hearing, depending on the extent of the hearing loss and the benefits of amplification. Intensive language therapy at an early age is also said to be a contributing factor to developing language paralleling that of a hearing child.

The Clarke School Model described by Gjerdingen and Manning (1991), advocates such therapy. This model is based on developing oral, reading and writing language skills for profoundly deaf pupils in an intensive clinical or therapy setting, before these pupils are mainstreamed. 92% of Clarke School graduates who took part in a survey done by Blish (1991) (*cf.* Gjerdingen & Manning, 1991), graduated from regular high schools and 59% went on to

further education and to professional careers. No account is given of why the remaining 8% of graduates did not graduate from high schools, except that 1.3% dropped out.

A similar model is advocated by the Carel du Toit Centre for Hearing Impaired Children at the Tygerberg Hospital in Cape Town, South Africa. A study of four hearing impaired students from this centre was conducted by Cleaver (1992). The subjects had hearing losses ranging from mild to severe. Three of them successfully matriculated from mainstream schools and went on to pursue professional careers, whilst the fourth was then still in Std 9. It must be noted, however, that all four subjects were White South Africans, three of whom were Afrikaans speaking and the other, English speaking. They had been mainstreamed in the 80's into privileged White schools with small classes which were well resourced. Mainstreaming under these conditions may have been easier than in Black, Coloured or Indian schools which were poorly resourced with large classes. Unfortunately, no studies were conducted investigating this assumption.

The present study therefore investigates the age at which the subject's hearing loss was detected; if and when she received appropriate hearing aid fitting; whether she underwent intensive language/ speech therapy; and the effects thereof, in terms of speech and language development and its subsequent effect on the placement experience.

2.3 THE LANGUAGE ISSUE AND DEAF CULTURE

As described earlier, Gderdingen & Manning (The Clarke Model, 1991), strongly supported the idea of developing English spoken and written language in hearing impaired children. They believe that English is the language of the

majority and in order to survive in the hearing world as it is today and to gain access to the same opportunities as their hearing peers, hearing impaired pupils have to learn this language.

In opposition to this argument, Storbeck (1994) conducted a case study, focusing on the perceptions and experiences of a Standard 4 class in a school for the deaf in urban South Africa, in which Sign Language had recently been introduced. Using interviews and observations, Storbeck explored the experiences of the student in the class through the perceptions of the students themselves and their teachers. Pupils reported that it was easier to communicate with their peers and their teachers using both sign language and spoken language. Teachers felt that sign language facilitated the teaching learning process. The investigation concluded that deaf education policy should accommodate bilingualism in which Sign Language is complemented by English literacy.

Penn and Reagan (1995) note that while the use of South African Sign Language as a medium of instruction for the deaf can be defended, it is essential also for deaf children to learn to function in the hearing world - through the written language of their community, as well as through speech and speech reading whenever possible.

In light of the debate surrounding the language issue, deaf culture and education for the Deaf (including the discussion in Chapter One), the present study investigates the attitudes of the subject and her parents to oralism and sign language; the reasons why parents opted for placement in an oral environment; their attitudes toward the Deaf, and their view of Deaf Culture; and the outcomes of the language choice on the subject's overall development.

2.4 SOCIAL DEVELOPMENT

Results of studies and views relating to the social outcomes of hearing impaired pupils in mainstream settings generally point to poor social relations between hearing impaired children and their hearing peers (Tvingstedt, 1993; Antia & Lee, 1992; Strinson & Whitmere, 1990).

Cleaver's study based on data from questionnaires, revealed that the subjects had made a few friends during their mainstream schooling, but that these were good friends. The subjects reported that there was some resistance from hearing peers to establishing friendships with them. Despite this, they were determined to survive in the mainstream, and they did.

A Swedish study (Tvingstedt, 1993), describes the social situation of 215 hearing impaired pupils integrated in regular classes. Pupils with hearing impairments in grades 1-11 in two counties in Sweden were interviewed, questionnaires were completed by parents and teachers, sociometric studies were carried out, and observations were made. Results indicated that hearing impaired pupils were less satisfied with their social situation and had fewer friends than their hearing classmates. Antia(1982) and Levy-Shiff and Hoffman(1985) also found that American hearing-impaired pupils in grades one to six and in preschool interacted more with other hearing impaired pupils than with hearing peers. Antia and Lee (1992) quote studies in the 80's particularly in the area of mainstreaming young hearing impaired children, that generally showed poor social interactions between hearing impaired and hearing students (*cf.* Madden and Slavin, 1983; Odom and McEvory, 1988; Levy-Shiff and Hoffman, 1985; Antia, 1982; Ispa, 1981; and Brown and Foster, 1989).

Antia and Lee (1992) also state that, despite sharing classrooms, hearing impaired and hearing students resegregate during non-academic activities. They used Allport's contact theory, which involves various types of contact (verbal and non-verbal communication, listening skills, touching, sharing, working in pairs or in a group, interaction in class activities and on the playground) as a basis for examining the difficulty in accomplishing the social goals of mainstreaming.

With regard to the age groups most affected by poor social relations, the Swedish study (Tvingstedt, 1993) which included observation, concluded that hearing impaired pupils were less satisfied with their social situation and had fewer friends than their hearing classmates, particularly among teenagers. The results of Strinson and Whitmere's study (1990), which were based on the self-perceptions of hearing impaired pupils, were similar. They investigated social relationships amongst 84 mainstreamed hearing impaired adolescents in secondary schools and further education programmes in England. These students indicated that they were more emotionally secure in relationships with other hearing impaired peers than with hearing peers.

In contrast, Cappelli, Daniels, Durieux-Smith, McGrath and Neuss (1995) found that older children with hearing impairments in the U.S.A. were better accepted by their peers. Their study was also based on self-perceptions and the perceptions of others. They conducted a longitudinal study evaluating the social development, based on peer relationships, of a group of orally communicating children with hearing impairments who had been integrated into regular classrooms and the factors associated with their social adjustment. The two major findings were that, firstly, children with hearing impairments had significant peer interaction problems. Secondly, younger children seemed more vulnerable to peer rejection than did older children. Older children with hearing impairments were better accepted by their peers, suggesting that these children may have slowly acquired through time and practice the necessary

social skills for improving peer relations. The familiarity with hearing children developed over time may tend to diminish some of the limitations observed with the younger children

The reason for mentioning the methodology used in the above investigations is that the results based on self-report measures of either self-perceptions or others' perceptions may differ from outcomes based on behavioral observations. Judging by the results obtained in the three studies discussed above, it is difficult to conclude whether poor social relations exist among younger or older children.

However, it is important to note, as the Swedish thesis concludes, that many different circumstances influence the social situation of a pupil with a hearing impairment, including attitudes, behaviours, and personalities of staff and schoolmates; circumstances in the physical environment; and characteristics of the hearing impaired pupils themselves, such as functional hearing capacity, additional disabilities, personality, and age. Antia and Lee (1992) also quote several researchers as having proposed factors affecting social development such as personality, motivation, and communication ability.

These factors are investigated when evaluating the social development of the subject in the present study, particularly the subject's communication ability in the light of the language debate discussed earlier. The evaluation is also based on the pupil's self-perception, the perceptions of others *and* observation by the researcher.

2.5 FACTORS AFFECTING OVERALL INTEGRATION

Studies investigated other factors affecting the overall attempt at integration into the mainstream, for example, home environment, parent support, teacher attitudes and pupil attitudes.

Teller and Lindsey's (1987) examination in the U.K. context, of parent factors (joint attitudes toward their hearing impaired children and their children's exceptionality, maternal attitudes, parental interest in educational activities, parent participation in educational activities, and income level) indicated that hearing impaired children with mothers exhibiting positive and expectant attitudes toward them are more likely to have a successful mainstreaming experience.

Three of the four subjects in Cleaver's study (1992) reported their parents' support (including decision-making regarding placement; involvement in school activities, homework) was of grave significance in their development.

Lynas (1986) conducted a study in the U.K. involving interviews on mainstreaming with 50 hearing impaired, and 40 hearing students, as well as 45 teachers. The study revealed problems for hearing pupils (including disruption in their own education), for hearing impaired pupils (including excessive noise levels), and teachers (including requirements for extra time).

In comparison, the respondents in Cleaver's study (1992) reported their classmates as one of the major support systems (including providing help with homework, keeping him/her informed, relaying information when the noise levels were high or the speaker was incoherent in class or on the sportsfield). They reported their teachers as being helpful and understanding, particularly in the primary phase. There were, however, those who treated some of the subjects differently from others. But, most teachers treated them in the same manner as their classmates.

Chorost (1988) conducted a study with 17 regular classroom teachers who had taught six oral hearing impaired children at some time over a six-year period. Whilst most teachers expressed positive feelings having worked with a hearing impaired child, teachers of grades three-six (i.e. Std 1 - Std four) were more positive than teachers of grades kindergarten through two (i.e. preschool to Class 2).

The present study investigates the home environment, parent factors (as described above), teacher and pupil attitudes, and their effect on the overall placement experience of the hearing impaired pupil in the study.

2.6 CUMULATIVE EFFECTS OF INTEGRATION

According to Kluwin (1993), a study of mainstreaming for deaf students *must* include three components: the child, the placement experience, and the interaction of the child in the placement environment. The following studies focus on the cumulative effects of integration and mainstreaming (that is, the effects on the overall placement experience and the development of the child within this experience). These studies are of interest to the ensuing discussion in this study.

Kluwin (1993) conducted a longitudinal study of 451 deaf adolescents in 15 local districts across the United States. He wanted to investigate the cumulative effects of mainstream placement in terms of achievement and grade point average. The results of Kluwin's study revealed that students who attended more classes and attended more academically demanding classes did have higher achievement levels. Another conclusion reached was that for some deaf students, mainstreaming is a good educational option; but for others, special classes are more appropriate.

The results of research conducted in Berkshire, England are of particular interest to the present study. Sellers and Palmer (1991) investigated the integration of 21 individual hearing impaired pupils in ordinary schools in Berkshire, England. The integration initiative was part of a national educational policy in Britain (1988 Education Reform Act). The sample included children with moderate, severe and profound hearing losses. The authors found that parents and professionals were unanimous in their support of integration as a policy, but varied in their views as to how well it was working, even can work, in practice. Factors impeding the success of the integration projects in the Berkshire study included the following: limited funding resulting in inadequate educational support; differences in provision for different children which seemed to go beyond differences in context and need; less than satisfactory physical environments in ordinary school, especially in respect of acoustic treatment; high student/staff ratios; the general feeling among ordinary school teachers that they lacked adequate preparation for having a hearing impaired pupil in their class and also the time necessary for liaison with the specialist support teacher; lack of 'deaf awareness' amongst those with whom the hearing impaired children came into contact; inadequate sign language development and training of new teachers of sign language to meet the particular needs of those hearing impaired pupils who require it.

The present study evaluates the cumulative effects of the placement in this particular context. The researcher will investigate whether the factors mentioned in the Berkshire study affected the development of the subject in the present study.

CHAPTER THREE

3. RESEARCH METHODOLOGY

3.1 SELECTION OF SUBJECT

This study set out to investigate cases of hearing impaired pupils who were being educated at regular schools in and around the Durban area, Kwazulu-Natal. Special schools in the area were able to offer lists of past pupils who were transferred to regular schools after a few years. Unfortunately, neither the schools nor the Provincial Department of Education in Kwazulu-Natal had lists of hearing impaired children who never attended special schools.

The reason for seeking such information was that the objective of this study was to inform policy regarding inclusion as a placement option for hearing impaired pupils from initial school entry. The researcher therefore found it necessary to find hearing impaired pupils who had never been in segregated settings.

Unlike the Berkshire project (Sellers & Palmer, 1992) and the study done by Cleaver (1992), this meant an investigation of pupils who were included in a regular school without initial placement in a segregated setting which is argued, is more supportive. The sample in the Berkshire project included hearing impaired pupils from special units at mainstream schools and from special schools. The respondents in Cleaver's study (1992) had received oral instruction at a Deaf unit in Cape Town before being mainstreamed.

The subject of this study (henceforth referred to Y.) was discovered by the researcher by chance whilst the researcher was on her way to the secondary school in the area. Y's brother, J., was in the researcher's class in the secondary

school. When the researcher waved to J., Y. also turned to wave and it was then that the researcher noticed that Y. wore a hearing aid. Upon questioning J., it was found that Y. had never been to a special school. She was in Std 3 (Grade 5) at the Bonela Primary School, formerly an Indian school, under the House of Delegates. Y. was selected for the study according to the criteria discussed above.

3.2 RESEARCH PROCEDURE

An appointment was first made with Y's parents to gain permission to conduct the research. Thereafter, permission was sought from the principal at Y's school. A letter was submitted to this effect (refer Appendix A, pp. 110). At the first meeting with the principal, information was provided regarding the nature and purpose of the study, and its relevance to current developments in education. Prior arrangements were made for visits to the school, during which a lesson was videotaped, interviews conducted and observations made.

3.3 CASE STUDY METHODOLOGY

"Case study research is an examination of a specific phenomenon such as a program, an event, a person, a process, an institution, or a social group.

(Merriam, 1988, p. 9)

A qualitative case study method was chosen for this particular study since its aim was to examine in depth the placement of hearing impaired pupils in the regular school who had no experience in segregated settings. Y. in this case was selected as an instance from such a class of pupils.

According to Merriam (1988), a qualitative case study can be described as an intensive, holistic description of a single entity, phenomenon, or social unit. "Traditional" or "scientific" research referred to as quantitative research is based on the assumption that there is a single, objective reality - the world out there - that we can observe, know, and measure. Such research often results in accumulation of facts which forms the basis for advancing laws. In contrast to this paradigm, qualitative research assumes that there are multiple realities - that the world is not an objective thing out there but a function of personal interaction and perception. It is a highly subjective phenomenon in need of interpreting rather than measuring. Beliefs rather than facts form the basis of perception (Merriam, 1988).

The aim of applying this design is to inform policy, practice and future research. As noted by Cohen and Manion (1989), a case study would also serve multiple audiences, in this case, anyone interested in this field of education, including individuals at the school in question, or in similar schools; or in schools as a whole; or those directly involved in policy making regarding education for the hearing impaired in South Africa.

In the words of Adelman et al. (Cohen and Manion ,1989), this case study should be seen as

" 'a step to action'. They (case studies) begin in a world of action and contribute to it. Their insights may be directly interpreted and put to use ; for staff or individual self-development , for within - institution feedback ; for formative evaluation; and in educational policy making." (p. 150)

In essence, the objective of conducting a qualitative case study research was to understand the meaning of an experience. In this case, the experience of a hearing impaired child in a regular school. This case study is evaluative in nature. It involves description, explanation and judgment.

Firstly, a detailed account of the pupil's history is presented along with an account of her overall development. This would be useful in presenting basic information about the subject of inclusion where no research has been done in South Africa. Secondly, links in real-life interventions between parents, school and pupils is explained in relation to the developmental outcomes in order to best evaluate the educational placement. Finally, an evaluation of the descriptions and explanations will result in an overall judgment of the placement in question.

3.4 RESEARCH TECHNIQUES

3.4.1 INTERVIEWS

Interviews were semi-structured and the questions were essentially open-ended (refer Appendix B, pp. 108, 109). The aim was to encourage the interviewees to express subjective feelings about the issues under investigation as fully and as spontaneously as they chose. There was minimal direction or control on the part of the interviewer. The course of the interview was mostly guided by them. A list of areas to be investigated served to direct the questioning but there was no predetermined framework for recorded answers. This approach allowed the interviewer to elucidate doubtful points, to rephrase the respondent's answers and to probe generally.

These interviews were conducted with:

- (a) Y.
- (b) Y's parents
- (c) Y's siblings
- (d) principal and /or members of management staff at Bonela Primary School
- (e) Y's past and present teachers at Bonela Primary School
- (f) audiologists/ speech therapists
- (g) psychologist
- (h) pupils at the school
- (i) Y's friends at school

With the consent of the participants, most of the interviews were tape-recorded and later transcribed. Tape-recording was essential in capturing exact responses. The vocal expressions on tape also reminded the researcher during the transcription, of facial or other expressions during the interview that added valuable information regarding their immediate, implied opinions.

3.4.2 OBSERVATION

The study was conducted on participant observation lines. The researcher realized that it would have been difficult to remain covert in natural settings such as the class or the playground. It would have made the researcher obvious to the participants in the class and thus would have inhibited spontaneous interaction. Instead, participant observation in the class and on the playground, allowed the researcher, after a few visits, to become unnoticed. Under these conditions, it was easier to observe Y. in her natural settings and to discern ongoing behaviour as it occurred. Salient features of such behaviour were noted and analysed later.

Observations were made during different lessons with different teachers. During the first visit, the form teacher introduced the researcher as a visitor to the school. Following advice by the researcher, the teacher did not explain the reasons for the researcher's visit. The intentions were not to cause anxiety amongst the pupils in class which might have had an effect on the responses and interaction in class.

The researcher sat amongst the pupils, usually from where Y. was visible. After a few visits, the pupils had become accustomed to the presence of the researcher, accepting her as part of the class. The researcher walked around the class whilst the pupils were busy writing, talking quietly to pupils. Notes were compiled regarding the subject's interest in each subject, her reactions and responses to her teachers and to her classmates.

Y. was also observed outside the class, during recess, interacting with her friends. The researcher walked around whilst eating her lunch, or chatted with a few pupils, or sat on the playground usually in a position where Y. was visible. Observations and interviews during this time provided important information regarding the subject's social development.

During these observation sessions, notes were compiled pertaining to the everyday running of the school as a whole, the teachers' attitude and the attitudes of the pupils in general.

3.4.3 VIDEO RECORDING

Y. was video-taped during a Science lesson in class. The video was then analysed in terms of Y's responses in the lesson as compared to those of her classmates; her teacher's teaching style and attitudes to pupils, particularly to Y.; Y's classmates' reactions to her; the type of language used in the class; communicative styles and the subject's response to this; the effect of the class size on the lesson; and pupils' response to instructional modes.

The participants in the lesson, including the teacher, were very aware of the camera. This definitely impacted on the lesson proceedings. Some pupils were overly zealous in answering questions, whilst others remained shy and unresponsive.

This technique was, however, valuable in capturing most of the detail (facial expressions, and subtle innuendos impacting on analysis) that might have otherwise gone unnoticed during normal observation. An interview with the class teacher was also videotaped for the same reason.

3.4.4 DOCUMENT ANALYSIS

This technique, like the other techniques mentioned above, was selected for the reasons pointed out by Merriam (1988):

"Using documentary material as data is not much different from using interviews or observations.... Tracking down leads, being open to new insights, and being sensitive to the data are the same whether one is interviewing, observing, or analysing documents."

(p. 115)

Reports based on audiological examinations and psycho-educational assessments were analysed to provide information regarding her developmental history. The audiological report provided information regarding the age at which she was diagnosed, the diagnosis in terms of her levels of hearing loss, the age at which she was fitted with a hearing aid, the number and type of hearing aids she was fitted with and her response to the fitting. The Psycho-educational Assessment Report was used for information regarding her psycho educational progress and potential in a regular school. This data was evaluated against the comments made in her school reports.

Y's school reports reflecting her scholastic history were analysed to establish her academic development. Her test records were analysed to verify her academic progress in each subject. Analysis of exercises completed in her books, both in class and at home, served to provide an overall picture of her academic potential.

3.4.5 FORMAL AND INFORMAL TESTS

Speech therapists from Durban School for the hearing Impaired (DSHI) and V.N.Naik School for the Deaf (VNNS) conducted a thorough audiological examination of Y's levels of hearing loss, reviewed the efficiency of her hearing aids, and commented on her speech levels.

Speech therapists and a psychologist from another school were approached for the following reasons. Bonela Primary did not have a school psychologist or a visiting speech therapist. DSHI and VNNS were schools within the Durban area, known to the researcher, which offered to provide these services to Y. at no cost. Gaining permission from the principals of these school was easy.

An IQ test known as the Senior South African Individual Scale (SSAIS) was conducted by the psychologist of VNNS. The test was conducted merely out of interest since it is often argued that a hearing impaired child surviving in a regular school probably has a high IQ. The test is made up of five verbal and four non-verbal subtests. Comments were made by the psychologist based on the results of each subtest.

A formal test known as the Northwestern Syntax Screen Test (refer Appendix C, pp. 110) was administered by the speech therapist from Durban School for the Hearing Impaired. The results of this test were analysed to measure Y's receptive and expressive language abilities.

Y. was given a standard three english test from Kenville Primary, a neighbouring school also under the former House of Delegates (refer Appendix D, pp. 111-113). The aim was to test Y's comprehension of questions that she may not have been exposed to at her own school. The results of this test also provided information regarding her language levels in relation to her hearing peers.

Y. was asked to write a composition on a given topic (refer Appendix E, p. 114). The composition was analysed in terms of her ability to express ideas in the written form and her spelling ability.

Y. was asked to read an excerpt from a story taken from a library book which she had not read before (refer Appendix F1, p. 115 for copy of story). She was

evaluated in terms of her language levels and her reading skills (for example, pace, expression, intonation, audibility word recognition and use of contextual clues). Questions were asked relating to what she had read and what she predicted would happen at the end of the story (refer **Appendix F2, p. 116 for questions**). Y. then summarized the story.

Y. was given a second story of her choice to read and summarize (refer **Appendices F4 and F5, pp. 117,118**). This was done to confirm her reading and comprehension skills and her language levels.

3.4.6 TRIANGULATION

The techniques mentioned above were used concurrently to triangulate information. Similar questions were posed to teachers, parents, siblings and peers regarding her academic, social, language and psychological development. The interview responses related to Y's academic development were analysed against information gleaned from observation of Y. in class, from her books, her school reports, and from test results. An assessment of her psychological development was made on these results. Psychologists reports and recommendations based on the results of formal tests were evaluated against the researcher's assessment of her academic development.

Y's social development was critically evaluated in terms of information gained from interview responses and from observation. Interviews with parents, audiologists/speech therapists, teachers and pupils provided information regarding her speech and language ability. Formal and informal speech and language tests, reports based on the results of some of these tests, and observations, served to triangulate this information.

CHAPTER FOUR

4. FINDINGS AND DISCUSSION

4.1 THE SUBJECT

4.1.1 DEVELOPMENTAL HISTORY

Whilst still in the foetal stage, members of Y's immediate family contracted German measles. Y. consequently had German measles during infancy. Her mother did not notice anything wrong with Y. until she was three years old. Y. would ignore calls. Her mother then contacted a general practitioner who referred her to an audiologist. She was diagnosed as having a hearing loss in both ears. After being fitted with a hearing aid, Y underwent speech therapy at a local hospital (R.K.Khan Hospital). Speech therapy continued until the age of six. At age three, she was also operated for strabismus in both eyes.

4.1.2 LEVEL OF HEARING LOSS

The first audiological assessment was conducted by a private audiologist when the subject was three years old. The audiology report (dated March 1988) based on this assessment, read that Y. was referred to her paediatrician

"as she was not developing speech and language."

The results of the hearing tests administered during the assessment indicated a **"profound sensori neural hearing loss in the right ear, and a moderate to severe sensori neural loss in the left ear....She was then fitted with a Widex E52 behind the ear aid to the left, to which she responded positively."**

Widex E52 refers to a type of hearing aid suited to a moderate to severe loss.

FIGURE 1 is a copy of the audiogram:

First hearing test (March 1988)

(age 3)

Mr. P.M. Naidoo

B.A. (S.P. & H. THERAPY), (WITWATERSRAND)

AUDIOLOGIST & SPEECH THERAPIST

SUITE 1104 11th Floor
DURBAN MEDICAL CENTRE
94 BEATRICE STREET
DURBAN 4001

Phone: 3095798
Residence: 824430
Pr. No. 8203547

Name: Y Age:

Date: 25/3/92

Referred by: DR R. FILLARD

Patient No. 214237

AUDIOMETRY RECORD

PURE TONE AUDIOGRAM (I.S.O.)

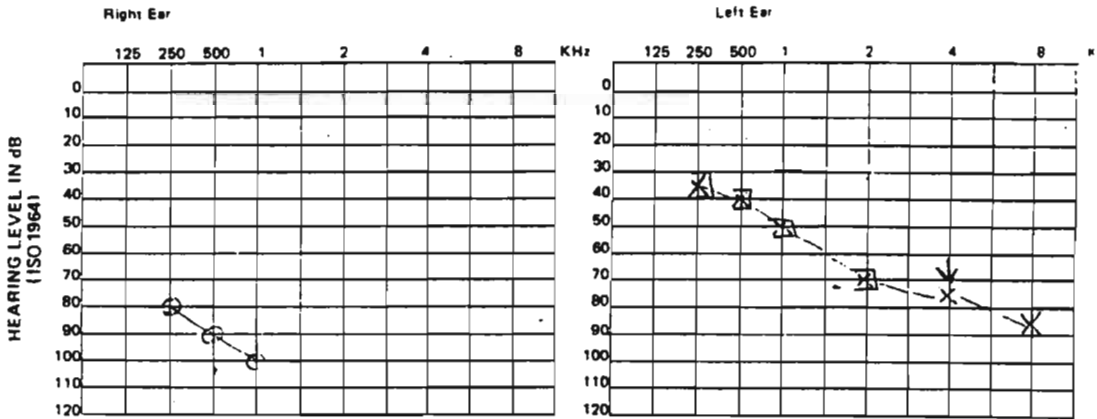


FIGURE 1

In interpreting the audiogram, the speech therapist at Durban School for the Hearing Impaired (DHSI) indicated that the Pure Tone Average (PTA) in the left ear was approximately 53 dB and approximately 100 dB in the right. PTA is a

rough estimate of the level at which the subject can hear speech.

The speech therapist pointed out that Y's hearing was quite good in the low frequencies. This implied that Y was able to hear voices since speech is often in the low frequencies.

FIGURE 2 reflects the results of the second audiological examination which was conducted by the speech therapist at DHSI.

Second hearing test (17 May 1996)
(age 11)

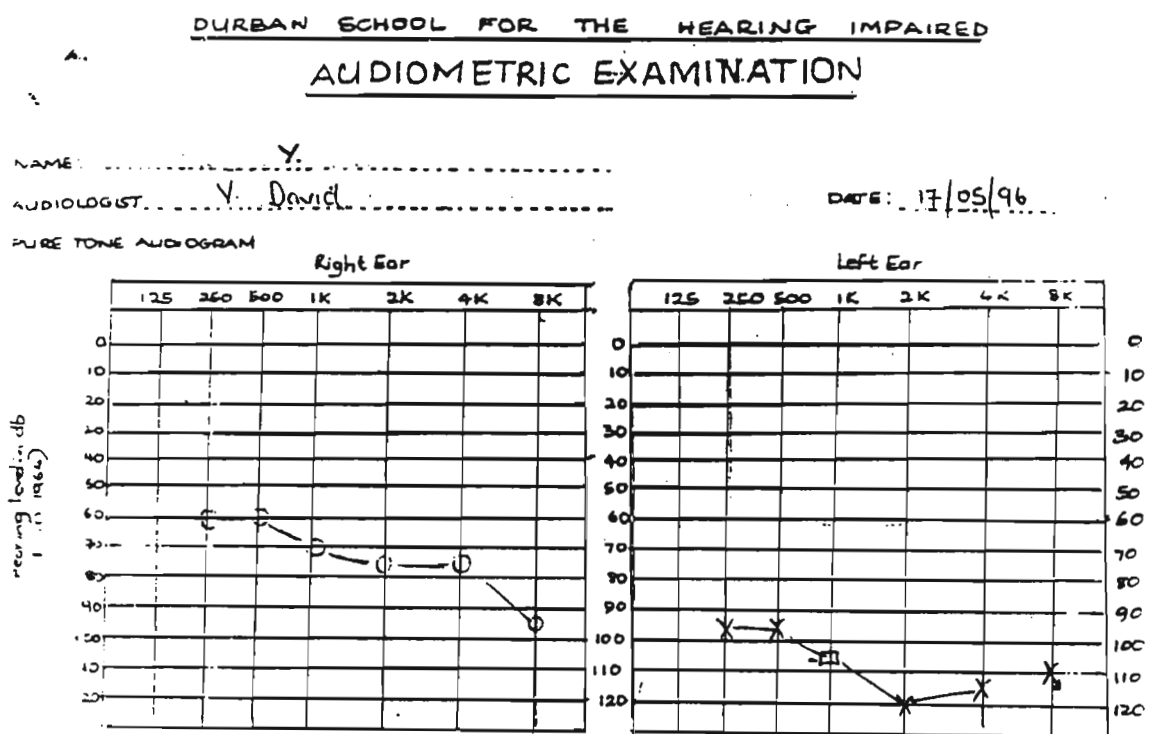


FIGURE 2

Y's left ear was said to have a lower PTA than the new result, that is, from 53 dB it increased to 68 dB . This was probably due to the presence of wax in this ear. The speech therapist also felt that the first test done at the age of three was probably through play audiometry whereby the tester looks for localisation responses and eye movement. The new test, she said, was a little more objective.

The results indicated that Y. did in fact have a severe to profound hearing loss in the right ear. The speech therapist described it as being like a 'dead' ear. According to her,

"anything over 90 dB is very hard to stimulate. Her PTA is 106 dB."

However, the speech therapist felt that Y. might benefit from amplification in this ear and that this possibility should be explored. She advised that the test be repeated at V.N.Naik School for the Deaf (VNNS) for a more reliable result. VNNS had a more reliable testing system.

After a third test at VNNS (May 1996), it was found that Y. did have a severe to profound hearing loss in the right ear and a moderate to severe loss in the left.

FIGURE 3 is a copy of the results.

Third hearing test (24 May 1996)
(age 11)

AUDIOMETRIC EXAMINATION
V.N. NAIK SCHOOL FOR THE DEAF
DEPARTMENT OF SPEECH AND HEARING THERAPY

NAME: Y.

CLASS TEACHER: _____

AUDIOLOGIST: Mrs. P. Modley

DATE: 24/5/96

PURETONE AUDIOGRAM

D.O.B.: 12/5/85

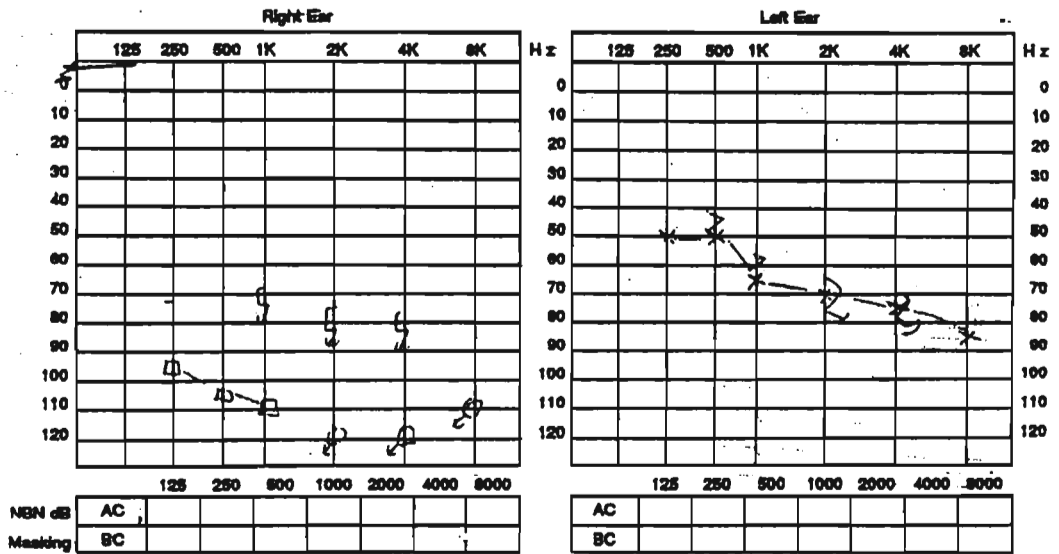


FIGURE 3

The speech therapist at VNNS detected wax in the left ear which she advised should be removed immediately. She disagreed with the opinion expressed by the speech therapist at DSHI that Y. should be fitted with a hearing aid to her 'profound' ear. She felt that Y.

"would only benefit from a hearing aid in her left ear, not her right. The right ear will distract. It will be too powerful. Discrimination will be very poor."

Confused by these differences of opinion, the researcher scheduled an appointment with the speech therapist at R.K.Khan Hospital (31 May 1996) to confirm the results of the test and to explore the possibility of fitting a hearing aid in the right ear. The speech therapist at the hospital confirmed that Y. had a severe to profound loss in the right ear and a moderate to severe loss in the left. She added that Y. had

"minimal hearing only in the low frequencies in the right ear."

Since the speech therapist at the hospital was doubtful about fitting the right ear, she contacted a hearing aid company (Natal Hearing Aids) for advice. The company reported similar cases of hearing impaired children who had benefitted from fitting in the so-called 'dead' ear.

She subsequently fitted Y. with a suitable hearing aid recommended by Natal Hearing Aids. The speech therapist went on in the interview to describe the worth of the new aid for profound losses. It was not possible to measure the gain on the new aid since the hospital did not possess the appropriate equipment.

Informal tests were conducted. The speech therapist reported:

"Informally when talking to her, I could see the change in her response. She was a bit of a hesitant respondent before I fitted her. She seemed to be more confident after that."

Y's mother reported a noticeable change in her daughter's response. She described the Y's first response as that of joy. Y's face lit up and her responses were quicker and more confident. Y. was evidently enthusiastic about wearing two hearing aids.

After Y. had received the new aid (September 1996), she reported being able to 'hear better'. She said, however, that she only preferred using both the aids at school for improved speech reception during lessons. But, at home, she preferred taking off the new aid. She was still in the process of familiarizing herself with the new aid.

Discussion

The researcher found it necessary to persist with the hearing tests to confirm Y's exact level of hearing loss. As pointed out by the speech therapists, the validity of each test relies on the test environment (the equipment and the test procedure). Test results may differ according to the test environment.

More importantly, on examination of the first test result, the researcher was surprised that a child with a severe to profound hearing loss was included in a mainstream school. It is often believed that deaf children with severe to profound levels of hearing loss cannot be placed in a mainstream school/oral environment because of very limited residual hearing (DEAFSA, 1994). The researcher's aim was to confirm Y's hearing loss.

The researcher chose to intervene after the second test because the speech therapist at DSHI indicated that bilateral fitting (fitting of hearing aids on both ears) would facilitate better hearing in an oral environment, and hence facilitate learning to a greater extent. Before acting on this advice, the researcher sought a second and a third opinion to avoid making a mistake of suggesting that the parent should purchase another hearing aid. Apart from avoiding unnecessary cost, the researcher did not intend causing Y. any discomfort. The researcher's aim was ultimately to help Y. since neither her parents nor her teachers were aware that she might have needed another hearing aid fitting. Y. herself was not aware that she could benefit from another hearing aid.

This intervention was rewarding because Y's left ear was eventually cleared of the wax which hampered hearing in this ear, and she was fitted with a hearing aid to the right ear which improved hearing. Y. was consulted throughout the investigation and she was ultimately given the choice of a new hearing aid.

In summary, it was clear that Y. had a moderate to severe loss in the left ear and a severe to profound loss in the right ear. She was also able to benefit from amplification in both ears when fitted with appropriate hearing aids. The researcher provided additional support through her interventions. This was required in this context since Y's teachers were unaware of hearing aid maintenance and the need for regular audiological examinations.

4.1.3 PSYCHOLOGICAL ASSESSMENT

At 6yrs 10months, Y. was referred for a psycho-educational examination by the first primary school her mother wished for her to be enrolled. The report on this assessment (dated 7 May 1992) stated in summary that

"Y. presented as a pleasant and hypervigilant child whose general intellectual capacity was within the lower limits of scores designating Borderline

competence. In addition, she displays:

- mild deficits in attention and concentration**
- poor memorization skills**
- poor listening comprehension skills"**

As part of the recommendations submitted in this report, the psychologists felt that long-term remedial intervention on a regular basis would help with scholastic/intellectual weaknesses. They also felt that overall psycho-educational progress was to be monitored and evaluated at least once per school term in the following two years. This never materialized. After four years since the report, Y. had never repeated a year at school. Nor had she performed below average according to her teachers' reports.

As part of this study, Y. underwent an IQ test at VNNS. This was done merely out of interest. From the researcher's experiences of teaching at a school for the Deaf, it was clear that many educators at special schools believed that a high IQ was the key contributory factor to a successfully included hearing impaired child. The assessment sought to test this theory.

The IQ test was administered by the school psychologist. The test was known as the Senior South African Individual Scale (SSAIS) and was said to be culturally appropriate. It was designed to test both verbal and non-verbal abilities. The norms of the test, however, were suited to hearing children. The tester indicated that the scores were adjusted by 5 either way for hearing impaired children. She was also aware that this would imply that standards needed to be dropped for hearing impaired people, which she felt was questionable.

The average IQ was said to be between 90 and 100. Y. scored 74 which was a below average IQ. The tester attributed some of Y's low scores in both verbal and non-verbal subtests to

"environmental deprivation, inadequate expressive ability, guessing, restlessness, dependency on concrete aids to perform calculations, difficulty with auditory sequencing perhaps owing to hearing impairment..."

Apart from the comment that Y's

"understanding of social symbolism is satisfactory",

no other comments were made regarding her abilities. A great deal of emphasis was placed on her inabilities as reflected in the test results.

As mentioned earlier, the assumption was usually that a hearing impaired child who was coping in the mainstream would probably have had a high IQ. If the IQ test described above was anything to go by, then this assumption was obviously a myth in this case. What the test, in fact, proved was that even with a so-called 'below-average IQ' coupled with the fact that she had a bilateral moderate to profound hearing loss, Y. seemed to have surpassed all expectations with respect to her academic progress at school.

4.2 LANGUAGE AND SPEECH DEVELOPMENT

4.2.1 SPOKEN LANGUAGE

The speech therapists from DSHI and VNNS were impressed by Y's ability to speak so intelligibly. The speech therapist at VNNS described her as having

"very good, very intelligible speech."

The speech therapist at DSHI said:

"She really is very good. I asked some teachers to just speak to her. They didn't even know she had a hearing loss because her interactive skills are so good."

The Northwestern Syntax Screen Test (refer Appendix C, p. 110) was administered by the speech therapist at DSHI. The test assessed receptive and expressive language abilities. Y. scored 28/40 on receptive and 32/40 on expressive. This reflected that Y's expressive language was higher than her receptive language.

The speech therapist was surprised by the results. She said:

"Usually reception is better than expression. Deaf people understand more than they speak. I can't understand how she's so good in speaking."

On comparison of Y's language ability with that of other hearing impaired pupils at DSHI, the speech therapist reported:

"She's very good. I've done this test with pupils from bridging module right up to std three in this school. All of them couldn't go past item 7. They cannot manage this test at all. I just don't know why. This is on the receptive level. On the expressive level, they cannot give me anything."

She said that their difficulty with word order in English stemmed from their use of sign language, even with the hard of hearing. They ignored words like 'is. They only use important words to convey a message, for example, 'baby sleeping' instead of 'the baby is sleeping'. In the test, it had to be scored as wrong.

The speech therapist at DSHI concluded that Y's speech level was due to the interaction with hearing peers. At DSHI, however, there was a lack of role models amongst peers to improve spoken language.

A standard three english test (refer Appendix D, p. 111-113) was administered to Y. The test was taken from another mainstream school, namely Kenville Primary which reflected a pupil population from similar socio-economic backgrounds to that of Bonela Primary. The standard of english at Kenville Primary would therefore be comparable to that of Bonela Primary.

The test was used to assess Y's language competency in comparison with her hearing peers from this mainstream school. The test consisted of a comprehension and a grammar section. The subject scored 6/10 in comprehension and 12/20 in grammar.

In the comprehension section, Y. had difficulty answering questions such as "How do you know?", "Pick out phrases from the passage to support your answer". She also found difficulty answering the question on 'punctuation' in the grammar section (refer Appendix D, pp. 111-113 for Y's answers to in test). Y. was able to answer the multiple choice questions in the comprehension section, for example, 'The description in Paragraph 2 tells us that the man was':

- (a) elegantly dressed
- (b) dirty and untidy
- (c) neat and tidy

She was able to choose (c) as the right answer. Y. was also able to answer questions such as "Where did he make the boy sit?" (she answered, "The boy sat on the tombstone") and "What does the word 'ravenously' tell us about the man?" (she answered, "The word tells us hungry --he was").

In the language section, Y. was able to provide plurals for given words, for example, "knives, ladies". She was also able to choose the correct singular/plural verb within a given sentence, for example, "The children have many toys" and "He was absent today". She was also able to punctuate a given passage correctly although, through habit, she wrote the entire passage in capital letters (refer p. 113).

Overall, Y's English test results indicated a language competence comparable to that of the average hearing peer at Kenville Primary. Unfortunately, time did not allow for the administering of more tests from various other mainstream schools to verify the above results. The test results were compared to her performance in English at her own school to make an overall assessment of her language competency.

4.2.2 WRITING

It was difficult to evaluate Y's writing ability in class. Her composition book contained final copies of written essays which were edited by the teacher who followed a process approach to writing. There were no records of drafts, even in the pupil's scrap book. Evaluating the final copies would have been partly an evaluation of the teacher's ability.

As part of this study, the researcher asked Y. to write on 'What I would like to become when I grow up' (refer Appendix E, p. 114, for the composition). This task was assigned to her in the comfort of her home with the researcher present. From her immediate response to the request, it was also clear that Y. was eager to engage in the writing task and obviously enjoyed writing. She completed the task in approximately three minutes.

Y. was able to respond to the topic directly, justifying her position throughout the essay. By expressing her wish to become a teacher, it was evident that she had set high academic goals for herself. She began by answering the topic in a clearly written, grammatically correct sentence. She was able to express clear reasons for choosing to become a teacher. However, she repeated grammatical errors by writing

**"My reason is, because....
But one thing is I don't like is....
The most thing I like is...."**

She also tended to omit words from sentences

"I ____ teaching the best.
The most ____ thing I like is...."

Her introduction was clear, and her ideas came through quite clearly. It was obvious from her closing statement that her admiration for her teachers had influenced her choice. The overall composition was good, consisting of short, intelligible sentences.

From her experiences as a teacher in the primary school phase, the researcher found that Y's entire essay reflected typically the images of teaching through the eyes of a primary school pupil. Ideas that teachers 'have a tough time' because pupils refuse to do their homework and that teachers send deviants to the office for punishment, reflected that she was able to write on a personal dimension. Pupils of the subject's age generally looked at life on a simplistic level, explaining events in terms of cause and effect. The essay was clearly reflective of such an approach.

It was evident that the subject was able to write spontaneously on the given topic without any help and she evidently enjoyed writing. She was able to express meaningful ideas in a spontaneous manner. From the researcher's experiences at a regular school, it was clear that Y's writing abilities could be compared favourably to an average writer in a standard three class.

The results of these findings can be compared to the results of a study carried out in Canada (Moskos and Mayer, 1990). Four deaf students, aged 5 to 8, were integrated into a classroom of hearing students in grades 1 and 2, for 1 hour, 5 days a week, to participate in a writing program. The program included writing, peer conferences, class conferences, mini-lessons, and shared pieces of finished pieces. The teacher of hearing impaired students acted as both a

teacher and sign language facilitator. The pupils' writing pieces were evaluated in terms of the pupils' ability to express ideas in written form in terms of the movement from early phonetic stages through transitional stages to the conventions of standard spelling. The results revealed that deaf children's writing skills developed in the same way as hearing child

In this context Y. was able to develop her writing ability using a purely oral medium. The results were, nevertheless, the same as those of the Canadian study (Moskos and Mayer, 1990).

4.2.3 *READING*

Y. was observed reading aloud in class during a lesson. She was asked to read a passage from a story. She read confidently and with expression. Thereafter, she was asked a few questions based on what she had read and questions predicting possible outcomes in the story, without reference to the text. Her answers were clear and thoughtful. It was obvious, therefore, that she had read for meaning.

During a visit to Y's home, the researcher gave Y. a story to read aloud (**refer Appendix F1, p. 115**). The story was chosen by the researcher from a neighbouring library. From experience with standard three pupils, the researcher was able to choose books which she felt would be of interest to Y. The researcher felt that the stories were at her instructional level.

When presented with this task, Y. enthusiastically began reading. She clearly enjoyed reading. Y. read loudly with expression and with correct intonations. Her speech was intelligible. The only words she had difficulty recognizing were 'dazzled' and 'millet'. This was probably because the words were unfamiliar to her. Questions were asked during the course of her reading (**refer Appendix F2, p. 116 for questions and subject's answers**).

Y. was able to answer recall questions, for example, "Was the first sister as beautiful as the second sister?". Y. correctly answered "No". She was also able to answer questions that required her to make interpretations and draw inferences, for example, "Why was the man confused?". She correctly answered "He did not know which one to marry". Y. was able to predict outcomes in the story. Towards the end of the story she was able to predict which sister the man was going to marry. When asked "Which sister do you think he would marry?", she answered "The second sister". Y. was also able to summarize the story in her own words, clearly highlighting key events in the story (**refer Appendix F3, p. 116 for subject's synopsis**).

To further evaluate her reading skills, the researcher asked Y. to choose any story she found interesting from the three library books. Without hesitation, she was able to choose one which interested her (**refer Appendix F4, p. 117 for story**). She was then asked to read the story silently which she completed in five minutes. It was again clear that she had enjoyed the task. She discussed the story in her own words without referring to the story. Her summary was clearly expressed (**refer Appendix F5, p. 118**). She was able to select relevant information, describing events in the story in the correct sequence.

The reading exercises thus showed that Y. had good reading and comprehension skills. Y. also showed a very keen interest in reading. According to her mother, she was always reading. Her mother described her as a 'bookworm' who was always 'hungry for books'. Y's mother also related personal stories to illustrate Y's intense need to read books. According to the mother, Y. looked for magazines when there were no books to read at her grandmother's house during her visits there. Y. was also disappointed when there was no one to take her to the library to borrow new books.

A study of reading, writing, spoken and signed language, speech perception and production, and cognition of 100 profoundly hearing impaired students in

oral and mainstream high school programs suggests that hearing impaired students have much higher potential for literacy than previously reported (Geers and Moog, 1989). In terms of Y's overall language and speech development, the findings reveal that she had good expressive language in terms of speech, writing and reading, and good comprehension skills in all three areas. Her level of functioning in these areas paralleled that of her hearing peers.

The findings also confirm Whitehead and Barefoot's (1992) belief that with early detection of a hearing loss and appropriate hearing aid fitting, an infant who is deaf from birth, can overcome oral language barriers and develop language paralleling that of his/her hearing peers.

Intensive language therapy, as advocated by Gjerdingen and Manning (1991), further helped Y. to develop language paralleling that of a hearing child. This was also evident from observations made in Y's class. It was evident that she was able to communicate adequately with peers and that she was able to follow the language of the teacher during lessons (a detailed discussion follows in the next section).

Schildroth (1991) quoted studies showing that family language and home environments not conducive to strong academic development, result in slow English language development and depressed reading level. The converse is true in this case. Y's level of language development could also be attributed to family language and a home environment conducive to strong academic development. From the researcher's experiences with Y's brother, J. who was in the researcher's class, and from analysis of his previous progress reports, it was evident that J. was an 'A' student in school. He was then in Std 5. Discussions with Y., her parents and Y's siblings, revealed that J. readily assisted Y. when she requested help. Y's parents also assisted all their children in their studies, as best they could. Y. herself was reported to occasionally

assist her younger brother, M. who was also in standard three in Bonela Primary. According to Y's parents, Y. and M. often competed during tests and exams. Their last exam results, at the end of Standard Three, showed that Y. achieved higher marks than M. in most of their subjects.

The parents reported encouraging their children to watch television and to read books from their school libraries. Y's father took them regularly to the neighbouring municipal library. During interviews with family members, it was evident that they were able to converse with confidence, and this obviously encouraged Y. to speak with the same level of confidence.

It is evident, therefore, that, in this case, where the family language was good and the home environment was conducive to academic development, the subject's English language development and reading levels were good.

4.3 ACADEMIC DEVELOPMENT

4.3.1 EARLY ACADEMIC DEVELOPMENT (*preschool to Std One*)

Y's preschool years from age 4 to 6 were spent at a neighbouring preschool with hearing peers. The preschool was part of Highlands Primary School in Chatsworth, Durban. During this time, Y. underwent regular speech therapy. According to her mother, Y. enjoyed preschool and interacted freely with her hearing peers. Y's preschool teacher felt that Y. had adjusted well to preschool life and she subsequently advised the parents to place Y. in the primary phase at Highlands Primary School.

According to Y's mother, Y. enjoyed preschool so much that she refused to go to Class One at age six. After spending a day in Class One at Highlands Primary, Y. insisted on returning to the preschool class. Her mother then

waited a year before placing her in S.R.S Primary, a school near their new home in Overport, Durban.

The principal of this school was at first reluctant to accept her and requested that she undergo psycho-educational assessment. The tests were done at age 6 yrs 10 months. She was referred by her audiologist and assessed by two clinical and educational psychologists. The psychologists recommended

"psychotherapy to deal with Y's socioemotional difficulties; long-term remedial intervention on a regular basis to help with scholastic/intellectual weaknesses and monitoring and evaluation of the overall psycho educational progress at least once per school term in 1991 and 1992".

The report also stated that with the increasing demands of the normal classroom,

"she might require Special Class Placement".

None of these recommendations were followed up.

Y's class reports in class one and two indicate satisfactory progress. Like most hearing impaired pupils, she found difficulty with written English. She was only able to construct simple sentences and her expression was poor. In mathematics, she found difficulty understanding word problems and assimilating certain mathematical concepts. In standard one, she made steady progress and she started to take an active part in discussions. Throughout these initial school years, her teachers noted her perseverance. She was always trying to do her best.

Both the preschool and the primary school had made little curriculum or other adjustments, except to accept Y. in spite of her hearing impairment. Contrary to the predictions made by the psychologists on the basis of medical diagnoses,

the schools accepted Y. as part of their social realm. Acceptance and support from teachers and the schools at large, resulted in successful academic development in the earlier stages.

4.3.2 LATER ACADEMIC DEVELOPMENT (Std 2 and 3)

In standard two, the family moved to a new home and Y. was placed at Bonela Primary.

Her standard 2 form teacher found that

"She was able to do all her work, although very slowly. I found that she had more of a sight problem because quite often what I wrote on the board was not what she wrote in her book."

Y's ex-History teacher also noted that

"She has a slight eye problem especially when it comes to boardwork."

This was before she was fitted with glasses. From observation, it was evident that Y. sat in the front of the class and that with the aid of her glasses, she had no difficulty reading off the board.

It was evident from the above comments made by her teachers that they did not see Y's hearing impairment as a problem. They saw her poor eye sight as more of a problem, not to them, but to her. As a result they changed her seating position to allow her to see the board more clearly. They were evidently responsive to her needs.

Y's present form teacher, her Geography teacher and her Health Education teacher described her as

"an average child."

An analysis of Y's test records from the teacher's markbook and from her textbooks, confirmed that she was functioning at an average level when compared with her peers in class. This was the case in each of her subjects. Her Progress Report, reflecting her quarterly test results (**refer Appendix G, p. 119 for details**), showed an average or above average mark in each subject. She passed each quarter on a 'C' aggregate in comparison to the rest of the pupils in her class. Her teachers commented that she had produced a 'satisfactory' result in the first three quarters. By the end of the year, she had produced a 'good' result.

Y's english teacher described her as being a responsive pupil. Observations were made during an english lesson. The lesson focused on a discussion of 'ambitions'. It was evident that Y. was confident and responsive. She raised her hand spontaneously to answer questions. She even discussed the issue with a boy sitting next to her during the lesson. Thereafter, each child was asked to consider his/her ambitions. In a later interview with the mother at home, it was reported that Y. questioned her about the topic in detail. It was obvious that Y. was interested in her lesson.

Her afrikaans teacher reported that Y. was weak in afrikaans like most of the other pupils for whom Afrikaans was the third language (English, was their second language and Y's first language).

From the analysis of the video -taping of a science lesson made specifically for this study, the subject was responsive in class. She spontaneously raised her hand to answer questions. She answered questions confidently and completed written tasks without assistance from her peers (**refer Appendix H, pp. 120, 121 for transcript of video**). Y. remained alert to communication during the lesson. She was able to follow the language of the teacher and understood instructions.

During the interview on the video, her form teacher said that she was coping. The teacher defined 'coping' as

"probably with the use of her hearing aid, she manages to pay attention. She knows what's going on in class and during class discussions, she's actively involved."

Her mathematics teacher reported that her poor performance in mathematics could be attributed to her lack of basic knowledge of multiplication tables. This was evident during the researcher's classroom observations. The lesson was on 'long multiplication'. The teacher explained and demonstrated on the chalkboard the method to be used when working out the answers to similar sums. Thereafter, the class was instructed to complete two similar examples. The researcher walked around the class whilst the pupils were busy and it was clear that Y. found difficulty completing the sums correctly. In comparison, about 75% of the class had the sums correct. Although Y's work was neatly set out and she clearly attempted to find the correct answer, her knowledge of multiplication tables *was* poor.

Zwiebel and Allen (1988) compared mathematics achievement levels of Israeli hearing impaired pupils in an integrated setting to that of their hearing impaired peers in segregated settings. They found that hearing impaired pupils achievement levels in mathematics were higher in integrated settings. The researcher in the present study was unable to compare Y's mathematics achievement levels to those of her hearing impaired peers in segregated settings. An investigation of this nature lay outside the parameters of this study. However, Y's achievement levels were compared to her hearing peers in the same mainstream setting. It was evident that Y's mathematics achievement levels were lower than her hearing peers in this setting.

In summary, the findings in this section show that despite reservations from psychologists in the early stages of schooling, Y. was able to succeed academically and socially in the regular school. An analysis of later academic development reveals that Y. was functioning at an average level when compared to her hearing peers.

4.4 SOCIAL AND EMOTIONAL DEVELOPMENT

With reference to the deaf, Antia (1994) states:

"Peer interactions are crucial for the formation of peer relationships. Communication with peers (both linguistic and non-linguistic) becomes part of the child's pattern of interpersonal behaviour and interpersonal relationships." (p. 277)

Antia encourages interaction between hearing and hearing impaired peers from an early age so that it could lead to social acceptance, self-esteem and the ability to form later social relationships.

Y's mother reported that when Y. entered school

"she never had a problem with friends, to communicate with them. She never complained to me."

The mother ascribed Y's ability to socialize to the fact that she had many cousins. She said:

"Every weekend she mingled with a lot of kids, all her cousins. I think that's what really helped her to get along."

Dean and Nettles (1987) describe the reverse mainstreaming model used at Houston School for the Deaf in the U.S.A. which was based on the assumption that peer interaction may be highly influential in the development of language, cognitive and social skills in young children. Two hearing pupils were integrated with three to five hearing impaired pupils in a special school. It was found that hearing impaired children who could communicate through written and spoken language, developed better oral language skills. Their social skills improved among their hearing peers. They were more confident during interaction.

This was true for Y. As has been discussed, her language skills were evidently well developed. Socially, she appeared to be confident and outspoken. Her mother said that she

"takes no nonsense from anybody. She is quick to defend herself in any problems."

She interacted freely with hearing people. According to her std 2 form teacher,

"She is quite outspoken, not a withdrawn person. She is like a normal child. If you don't see the hearing aid, you wouldn't say that she's hearing impaired."

Her hearing aid was sometimes covered by her plait. When the speech therapist at DSHI first met her, she felt that Y. probably wore her plaits in that way to cover the hearing aid. According to Y's mother, this was not true. Y. subsequently wore her plaits away from her ears so that her hearing aids were more visible. She remained just as confident. She even agreed to wear two hearing aids after it was recommended.

According to Y., the pupils at school did not tease her about her hearing problem. Instead they teased her about her glasses. She said

"They call me 'four-eyes'".

Y. recalled a pupil asking about her hearing aid and why she was deaf. She said

"I explained to her".

Her mother added

"She knows how to defend herself".

The children interviewed at her school were not disturbed by the fact that she was hearing impaired or by the fact that she wore a hearing aid. One pupil in her class had no knowledge of a hearing aid. a few boys in the class knew that Y. was hearing impaired but said they did not see it as a problem because she 'spoke'. Another girl in the class said that she'd known about Y's hearing impairment but was not affected by it. She also said she knew what a hearing aid was and she realized that without it Y. would not be able to hear.

Three standard two pupils, selected randomly on the playground during recess, knew Y. as

"the girl with the hearing aid"

but added that

"she is not a problem"

Three standard three pupils also knew of Y. and they echoed the same sentiments. One of the pupils happened to know Y. out of school as well. Their mothers were friends and they met on occasion. According to this pupil, she and Y. were friends both in and out of school.

Y's form teacher reported:

"She mixes very well. She has many friends. She's not a lonely child."

Observations made in and out of class and from analysis of the video, confirmed this report. Y. did not hesitate to move around the class when she wanted something. She also conversed freely with the pupils sitting around her. On the playground, Y. was observed chatting quietly with her girl friends. Her group of friends varied from one to about five.

The findings therefore revealed that Y interacted very well with her hearing peers, was accepted socially, and had a good sense of self-esteem. Antia (1992) contends that this might influence her ability to form later social relationships. This view is supported by Cappelli, Daniels, Durieux-Smith, Mcgrath and Neuss (1995) whose studies in U.S.A. suggest that Y. would be even more accepted as she grew older. Cappelli et al. believe that the familiarity with hearing children developed over time may tend to diminish some of the limitations observed with the younger children.

The results of the Swedish study (Tvingstedt, 1993) indicated that hearing impaired pupils integrated in regular classes were less satisfied with their social situation and had fewer friends than their hearing classmates. In contrast, Y. said that she was satisfied with her social situation. From observation, it was also evident that she had just as many friends as her hearing classmates.

Contrary to other studies which show poor social interactions between hearing impaired and hearing children (*cf.* Madden and Slavin, 1983; Odom and McEvory, 1988; Levy-Shiff and Hoffman, 1985; Antia, 1982; Ispa, 1981; and Brown and Foster, 1989; and Elser, 1959), the findings in the present study reveal that interaction between Y. and her hearing peers was good. Y. was not isolated in any way by her peers.

As concluded by the Swedish study (*cf.* Tvingstedt, 1993), many different circumstances influence the social situation of a pupil with hearing

impairment including attitudes, behaviours, and personalities of staff and schoolmates. Vlachou (1993) also believe that the creation of a positive accepting environment and positive attitudes from teachers and peers are critical factors in the social and academic development of a disabled child in mainstream school. Characteristics of the hearing impaired pupils themselves, such as functional hearing capacity, additional disabilities, personality, age, motivation and communication ability also influence social development (Tvingstedt, 1993: Antia and Lee, 1992).

In the present study, the success in Y's social development were influenced by some of these factors. For, example, the staff and schoolmates displayed positive attitudes towards Y. and her hearing impairment. This was partly because of Y's personality. She was outspoken and confident and she knew how to react to questions regarding her hearing impairment. She was also motivated to work in class and to establish social links with her hearing peers. As a result, her teachers and peers did not see her as being any different from the other children. The findings supported the claims made by the deaf respondents in Cleaver's study (1992). They believed that hearing people also benefit from the interaction with the hearing impaired, adding that hearing people begin to

"understand how to live naturally with those with handicaps."

(Cleaver, 1992, p.23)

One of the goals of inclusion is

"to enhance social competence and to change the attitudes of teachers and students without disabilities."

(Fuchs & Fuchs, 1994, p.301)

It was evident in this case.

4.5. OTHER FACTORS IMPACTING ON THE SUBJECT'S OVERALL DEVELOPMENT

4.5.1 PARENT SUPPORT

According to the Y's parents, she was able to communicate intelligibly with her peers and her teachers from the time she started preschool. This was largely due to their efforts in eliciting the help of a speech therapist at a local hospital. The parents also facilitated Y's contact with many hearing peers, by visiting with her cousins over weekends. As a result, she had no difficulty adjusting to life at school, both socially and academically.

It was owing to parent pressure that she was enrolled at the first primary school. They acted immediately on the principal's request to have Y. undergo a psycho educational examination before enrolment. They did so to ensure that the subject was accepted at this school.

For the first two years at SRS Primary, Y. had one teacher whom she disliked. Both Y's siblings had been in this teacher's class and they, too, disliked her approach. Y. reported

"I made a mistake in the book. It was in Class Two. She called me in the front. She had a thick ruler. I really had to call my mother to school."

The mother reacted immediately by approaching the principal regarding this matter. The mother said:

"I told the principal. I said, 'You know the problems that my daughter has had with this teacher for the whole year and why did you put her back with this teacher this year?' "

The principal claimed that he was unaware that Y. was the child that refused to be in that teacher's class again. In response to this claim, the mother warned that she would approach the Department of Education to report the teacher if she repeated her actions.

The principal at Bonela Primary reportedly had good rapport with parents. According to him, he did not hesitate, for example, when a child was sick, to personally take the child home no matter where the location. The school facilitated parent involvement. Functions were held annually at the school, for example, Parents' Day in which parents were invited to see their children's work and to speak to their teachers. Meetings held in the evening were not well attended because of the locality of the school. Some found it difficult to walk the distance to school, and it was unsafe to do so at night.

Y's teachers at Bonela Primary reported that her parents were very supportive, especially the mother. Both parents had attended parent meetings. Y's standard two form teacher reported that whenever there was a problem at school, the parents responded in writing or they personally visited the school on their days off from work. They responded to the teacher's advice to obtain a pair of glasses for Y. She was reported to have had problems reading from the chalkboard, and this evidently was affecting her schoolwork.

Whenever the parents were consulted during the study, they responded without hesitation. They acted on advice to take Y. to the hospital for another hearing aid and to the doctor to have her ear syringed.

It was evident, therefore, that Y's parents were very involved in their child's schooling and general well being, in spite of financial constraints. The parents saw their role as partners in their children's education. They regularly monitored their children's progress at school. Such support is critical (*cf.* Teller and Lindsey, 1987).

The findings in this section support Teller and Lindsey's (1987) claim that hearing impaired pupils' are more likely to have a successful mainstreaming experience if their parents exhibit maternal attitudes, take an interest in educational activities and participate in educational activities. With this level of parent support, Y. was able to develop academically and socially.

4.5.2 SUPPORT OF TEACHERS

Y's mother reported that Y. "adored" her preschool teacher and also liked many of her teachers in her first primary school. Y's mother said:

"There was a teacher that was a very good friend. She loved Y. so much. Y. used to spend her lunchbreaks with this teacher. Even now, Y. writes letters to this teacher."

Interviews with the staff of Bonela primary who had made contact with Y., revealed that many of them did not realise that Y. was hearing impaired. As a result, they treated her no differently from the other children in class. Those who learnt of her impairment, did whatever little they could to accommodate her in class, without drawing attention to her impairment.

During the first interview with the principal of Bonela Primary, he admitted not having known there was a hearing impaired child in his school. In a later interview, he said

"I take anyone..... I feel that a child like that with the normal children, are treated normally, they are able to benefit."

Y's ex-form teacher (standard two) described her as being

"like a normal child in class."

The standard two form teacher stated that she had only learnt about the Y's hearing impairment when she saw the hearing aid. She subsequently made Y. sit next to the window so that the better ear was facing the teacher. The teacher was aware of the differences in her responses when placed at different ends of the class. She knew a little about hearing impairment because of her son who had a slight hearing problem, and because one of her relatives was a social worker. The teacher said:

"I didn't differentiate when teaching the class. I treated her like a normal child in the class."

The respondents in Cleaver's study (1992), also found that most of their teachers treated them in the same manner as their classmates.

The standard three form teacher also admitted having known that Y. was deaf. She only realised this after Y's mother came to school, two weeks after Y. was admitted to her class. Y's mother informed the form teacher of Y's impairment, showing her the hearing aid. The teacher's response was

"I paid more attention to her and I realised why she sometimes wasn't paying attention because her mum told me sometimes the hearing aid isn't loud enough for her Y. to pick up sound."

According to the teacher, she changed Y's seating to the front of the class. Staff at the school did not monitor her hearing aid. Her teacher reported

"She takes care of it herself."

Y's english teacher also did not know at first that Y. was hearing impaired. She admitted becoming impatient at times with Y. when she did not respond to instructions immediately. This teacher was later informed by Y's form teacher. The english teacher subsequently adjusted her seating position, and became more understanding and accommodating.

Observations made during the english lessons confirmed that the teacher was accommodating and very patient, not only with Y., but with the other pupils as well. The request made by the researcher to the english teacher to move Y. more to the middle of the class, was responded to immediately. This request was made to improve eye contact with the teacher, to improve localisation of sound and to avoid sitting near the windows. Sounds from outside could confuse the hearing impaired child with a hearing aid.

It was evident that the teachers had very little or no previous knowledge of hearing impaired. None of them reported to have previously taught a hearing impaired child. Y's mother was instrumental in informing Y's form teacher about her hearing impairment and provided basic information about the hearing aid and its importance to Y. Y's teachers were not aware, however, that they had to monitor Y's hearing aids. They responded to her needs as best they could. Her form teacher responded by adjusting Y's seating arrangement and by sharing this information with Y's other teachers.

4.5.2.1 Teaching styles

Teaching styles were evaluated in terms of the suggestions made by Watson (1992) and Culhane and Mothersell (Milo, 1979) on how regular classroom teachers can establish a positive physical and emotional which will enhance hearing impaired students' communication, personal/social and academic skills. Observations were made during an english and a mathematics lesson, and a video recording of a science lesson (**refer Appendix H, pp. 120,121 for transcript of video**) was analysed The following was evident.

Firstly the teachers exhibited communication techniques for successful teaching/learning in a group situation (Culhane & Mothersell: Milo, 1979). The english teacher explained the meaning of the word 'Ambition' before asking the

class to write what about what their ambitions were. She used a simple example at first to introduce the word to the class.

"A soccer player during a game wishes to do something when he approaches the net. He sees the goalkeeper. What does he wish to do?"

Whilst saying this, she pretended to be the soccer player approaching the goal post (the classroom door). Culhane and Mothersell (1979) encourage such use of visual clues, body language, mime and gesture that is purposeful. They believe that it enhances instruction. The class immediately responded. Some put up there hands, whilst others shouted out

"score a goal."

Culhane and Mothersell (1979) also advocate verbal interaction between teacher and pupils, and amongst pupils to enhance communication, social and academic skills. The english teacher used questioning and pupils' personal responses to generate discussion. Using the pupils' responses, the english teacher was able to explain that 'ambition' meant wanting/wishing to achieve something; that it was one's goal in life. She then used other examples, with the help of the pupils. Several pupils were then asked to share their ambitions in life. Y. said that she wanted to become a teacher. Culhane and Mothersell encourage teachers to obtain feedback from students at every opportunity as an indicator of students' level of understanding.

The science teacher also used questioning to generate discussion. She continually probed pupils' responses by further questioning.

Y : (reading aloud a question from the worksheet)

Do seeds need warmth to germinate ?

Teacher:Right, so what will be our answer now? Yes? How many of you say 'no'? Put your hands up. How many of you say yes? (a majority of the pupils spontaneously raise their hands, including Y.)

Such active participation is said to be conducive to meeting the needs of students with disabilities and those without disabilities within a classroom . It is also said to be reflective of inclusive practice (Griangeco et al, 1995).

Teachers also repeated pupils' contributions either verbatim or paraphrased.

Pupil: It started growing.

Teacher: Good. It started growing.

Culhane and Mothersell (1979) believe that questioning and repetition of contributions are strategies which help to clarify questions and comments.

Secondly, Watson (1992) and Culhane and Mothersell (1979) encourage the use of teaching materials to enhance learning. Y's teachers used the chalkboard often to write down key words and phrases. The english teacher wrote down key word during the lesson, for example, 'ambition', 'goal', 'wish to achieve something'.

The mathematics teacher used the chalkboard to explain methods used in 'Long Multiplication'. She wrote down an example on the board, explaining each step in detail. As she explained, she pointed to the relevant step in the example. She then turned to the board to demonstrate what she had explained. She did not talk whilst writing on the board. Culhane and Mothersell (1979) advocate that teachers do not block visual access to their mouths. Hearing impaired pupils depend on visual clues and lipreading.

The science teacher used a real-life activity in class. She explained germination of seeds in different context by placing bean seeds in three bottles with cottonwool and placing a bottle in the classroom, one in the cupboard and one in a fridge. The pupils were asked to conduct this experiment at home. After a week, the pupils' follow-up task included filling in a worksheet with questions based on their observations regarding the growth of the bean seeds **(refer Appendix H, pp. 120,121 for transcript of lesson).**

Apart from the use of the chalkboard, worksheets and real life activities, the teachers reported to occasionally use an overhead projector when the need arose. Limited resources at the school prevented easy access to overhead projectors or televisions.

Thirdly, Watson (1992) mentions the importance of seating arrangements in class so as to allow the hearing impaired child to gain maximum sound input. It was clear from observation that from her position in the front of the class, Y. was able to follow the language and instructions of her teachers.

During the science lesson, Y. responded appropriately and spontaneously by shaking her head, for example,

**Teacher to class: Remember when we soaked the bean seed in the cottonwool and in the water and peeled off the skin and everything... You all remember that?
(Y. shakes her head to indicate that she remembered)**

Y. also spontaneously raised her hand to answer questions. When asked by her teacher to read a specific question, she was able to do so without help from others.

Finally, the teachers exhibited a great of patience and gave considerable support to pupils in class who were experiencing difficulty. In the mathematics lesson, the teacher asked the pupils to complete a few examples which were similar to the one she had explained in detail. Whilst they were busy writing in their books, the teacher walked around the class, helping those who experienced difficulty. After the pupils had completed, she wrote a few more examples on the board, explaining some of the problems that she observed and how these were to be rectified. The mathematics teacher also called a group of pupils who were having difficulty with the exercise and gave them individual instruction at the chalkboard whilst the rest of the class completed an additional exercise on their own. Y. was amongst the group of pupils since she

was identified during supervision as having had difficulty completing the examples correctly.

The science teacher assisted the class in completing the worksheet.

Teacher: Ok, now we go to the fourth day. Now in the classroom more seeds germinated, you remember? Right, so there you'll write down five. You put five, so you can write down 'five'. Fill in 'five'. Right. This is your block. In the classroom five seeds germinated, so over here you'll write five.
(points to space on worksheet)

This teacher encouraged Y. to try to answer a question when she hesitated.

Teacher: Which one grew?

Y.: Mam, the wet cottonwool, eh.. will grow quicker and it will take 4 days.

Teacher: Ok, not the wet cottonwool, the seeds that were in the wet cottonwool will grow better. What conclusion can you come to? Where we have the question 'What can you decide?', what will you write? You just said it just now. Try.

Y.: Mam, the cottonwool will eh.. (teacher helps her along)

Teacher: help....

Y.: will help the seed to grow.

Teacher: ...will help the seed to grow. Good.

The physical education teacher, who knew of Y's hearing impairment, said she was quite responsive and would generally follow the other children in workouts. The researcher found this to be true during observation of a P.E. lesson on the sportsground. Y. followed instructions by using the actions of her peers as cues. She was very much a part of the class during the lesson. The teacher did not treat her any differently from the rest of the class. This finding is in contrast to the findings in Cleaver's study (1992) in which one of the respondents reported feeling isolated during P.E. lessons. In the latter case, this was probably due to poor teaching skills, lack of knowledge on the part of the teacher, or poor interactive skills on the part of the respondent or his peers.

In Y's case, the P.E. teacher responded to the needs of the class as a whole. If she found that individuals in the group were not following instructions correctly, she repeated the instruction, demonstrating wherever possible. She also encouraged pupils to work together another during group activities, for example, during the warm-up routines. It was evident that Y. was accepted as part of the class and the teacher encouraged such acceptance, without isolating Y. as being different.

It was evident that the teachers in this setting were sensitive to the needs of those in the class. They responded appropriately to these needs, providing individual attention where necessary. Inclusion necessitates such response to those pupils who struggle within existing arrangements, and perhaps, in doing so, teachers unintentionally assist in the retention of the status quo (Ainscow, 1995).

In terms of the suggestions made by Watson (1992) and Culhane and Mothersell (Milo, 1979), there existed, unintentionally, a rich level of support for Y. within this particular school. The teachers had very little or no previous knowledge of hearing impaired. None of them reported to have previously taught a hearing impaired child. Slight adjustments were made according to Y's needs. The teachers developed their own teaching styles to suit the needs of all learners within the class, including Y.

Watson (1992) noted that the strategies suggested for use with hearing impaired pupils in a regular class will also benefit the other pupils in class. The converse occurred in Bonela Primary. These strategies were used for all pupils in class and evidently benefitted the hearing impaired child. A positive physical and emotional climate generated by good teaching, clearly enhanced Y's communication, personal/social and academic skills.

4.5.3 *SCHOOL'S PHILOSOPHY*

With the abolition of apartheid policies and the establishment of a non-racial, democratic government, Bonela Primary (historically an Indian school) was one of many schools to experience an influx of pupils from different race groups. The school had a pupil population of 45% African and 55% Indian. The school, thus mirrored the community to which it belonged. According to the principal, the school hoped to teach children racial and cultural tolerance in keeping with the changes in the South African society.

It was evident that the school was open to all children, including children with so called 'disabilities'. Bonela Primary's philosophy embraced attitudes of acceptance, tolerance and education for all, irrespective of differences.

4.5.4 *ATTITUDES TO INCLUSION*

The teachers reported having had no contact with special schools. According to the principal, there wasn't any that he could have contacted around the area. He went on to add that he would not really have wanted to contact them. His reasons were quite profound and direct.

"I've got no time for these people that put people into compartments. I've got no time for psychologists. They talk to you and compartmentalize you and I don't believe that. I don't believe any human has a right to compartmentalize you because he doesn't know the environment you grew up in, whether you had the proper nourishment, anti-natal, pre-natal care, nothing... and then they put you in a compartment straight away. And all your life you grow up like that. that you're mentally retarded or backward, your IQ is here or there, you can't make the grade. I don't believe in it. In all my years I've never allowed them to come into my school at anytime. They compartmentalize you over a test. Look at Winston Churchill, what he was before he became prime minister. He was thrown out, he was useless in school, but became prime minister.

How did that happen? There are others like him in the world, who were regarded as retards in school but they made it."

As a result of this attitude to special schooling, the principal adopted a very flexible admission policy. He said:

"I take anyone."

The principal did not believe that a child was 'backward'. He quoted examples from his experiences in the teaching profession (spanning 36 years), of children who had apparently been classified as 'weak', 'mentally retarded', 'backward', etc. and placed in special classes. He said:

"When we took them and placed them in the normal stream, they managed somehow."

The principal, however, expressed reservations regarding the possible enrolment of blind and physically disabled children at his school at that time. He stated:

"I'll be happy to have them, but the blind child may have the problem, he won't be able to read. But if I had a small class, I'll say bring the child here. I'll try to go and collect some material that will benefit the child, because we don't have any special place in the area. I'd do anything for the child."

Another teacher shared the similar sentiments

"We haven't got trained personnel to handle that, so we won't admit....it depends on the type of disability... physically disabled won't be any problem."

Other teachers were also apprehensive about the possibility of teaching children with disabilities. They said that they would have been willing only if

they were given the necessary support in the class or if the class sizes were reduced. The present class sizes ranged from 40 to 46 per class. Y's teachers also felt the same, although they admitted being able to teach her without any extra support within the existing class size, and without previous or sufficient knowledge of hearing impairment.

One of Y's teachers who was interviewed said that

"It would depend on the disability. If the disability didn't hinder the child to participate in the class activities, I don't think we would not accept the child."

The same teacher added

"If we take Y's case. Y. has proved to everybody that her disability is not a hindrance to her because she has fitted in so perfectly in the class. So much so, that when I go and teach in that class, I don't even realise that she is a child with a disability."

According to Y's form teacher, when she first heard of the subject's disability, she suggested to the parent to take Y. to V.N. Naik School for the Deaf. She believed that this school had specially trained teachers and provided specialized treatment. But she was quick to add

"It was like the first week of school. And now in class she's coping."

It was evident, therefore, that the staff of Bonela Primary was accepting of children with disabilities, but with reservation. They readily agreed to include children of all disabilities only if the class sizes were reduced, additional support was made available, and if the disability was not too severe. Some of them knew very little about educating hearing impaired children and none had the experience of teaching a hearing impaired child. Yet, they agreed that Y.

posed no serious problem and they attributed her survival at this school more to her own perseverance and ability. None of the teachers attributed her success as a hearing impaired child in a regular school to their own acceptance, influence or support. Y. was generally seen as very much a part of the class and she was treated as such. Every child was accepted and supported in the same way.

In essence, the staff of Bonela Primary stated their inability to accommodate children with disabilities within present constraints. They contradicted themselves, however, by admitting that they were able to accommodate Y. in spite of her hearing loss and the existing class sizes. What was most interesting was the fact that they did so, unaware that she had a *profound* hearing loss. The reason for these conflicting perceptions of disability is the existence of a separate education system for children with disabilities. The teachers at Bonela Primary believe that special schools are the only schools which provide the best learning environment for children with disabilities. As one teacher pointed out

"We won't turn the child away. We will first ask the parent if the parent can take the child to a supportive school where the child will be able to get the best training."

These perceptions are socially constructed (Giangreco, 1995). The education system encourages these perceptions by maintaining two separate education systems; mainstream and special education (Wiest and Kreil, 1995). The view is that the special education system has the expertise to teach children with disabilities. Even the teachers at Bonela Primary were not totally confident of their ability to respond to diversity in the student population. The teachers at Bonela Primary denied their potential to accommodate children of diversity.

4.5.5 THE ISSUE OF TEACHER EDUCATION

According to the principal, all the teachers were qualified to teach. None of the teachers who were interviewed taken courses in Special Needs Education in their teaching degrees or diplomas. Non had teaching experience with pupils with special needs. Despite this lack of knowledge and experience, the teachers reported having no problems accepting Y. into their classrooms. They felt that additional support and a reduction in class sizes would be necessary if children with severe disabilities were to be included at their school.

The principal was open to the admission of any child, including those with disabilities and requested assistance with regard to initiating staff development programmes. He felt that staff needed to be supported in their attempts to accommodate children with differing abilities within a single class. His comments regarding staff development programmes of this nature were

"It's going to benefit them (the teachers)".

A certain amount of collaboration existed within the school. Teachers were responsive to difficulties pupils might experience. They were able to share this with each other through staff meetings and subject committee meetings. They then attempted to work out possible solutions as a team. According to Y's mathematics teacher, a decision was taken to drop existing standards in mathematics throughout the school since a majority of the second language learners in class were experiencing difficulties. a decision was taken by the mathematics department in the school to concentrate on teaching basic mathematical operations in standard three, rather than to complete the required syllabus per se. This is in line with thinking in the National Qualifications Framework (NQF) of February, 1996 which allows for

"Multiple pathways leading to the same learning ends."

(P. 22)

According to Ainscow (1995), inclusion implies responding to those pupils who struggle within existing arrangements by seeking to adapt existing arrangements; and responding to those pupils who struggle within existing arrangements by working with colleagues to make new arrangements that facilitate the learning of all pupils. Such response was evident in this case.

4.5.6 COMMUNITY SCHOOLING

Parents make their own transport arrangements for their children. Most of the children walk to school, since their homes are within walking distance from the school. Y. and her younger brother, M., walked to school everyday in the company of their maid, until their parents arranged for another parent to transport them by van. This was decided for safety reasons. Y. and M. travelled together with other pupils from around the area.

During home visits it was observed that Y. and her siblings often played on the street with their friends from the neighbourhood. As a result of community schooling, Y. was able to make friends from her own community. She inevitably was accepted as part of the community, in spite of her disability.

Discussion

Bonela Primary's philosophy reflected the principles of inclusion. The school was committed to serving its community by educating all children within that community. It attempted to facilitate the involvement of parents in their children's education at the school. It was also committed to providing the best education by employing trained teachers to satisfy the needs of the curriculum and to meet the challenges of large class sizes. Teachers adopted interactive teaching styles in trying to make subject matter more accessible to all pupils. They responded to the needs of their pupils by collaboratively modifying syllabi.

Y. was educated in a school which mirrored the society in which she grew up and to which she would return. She was readily accepted as part of the community in which she lived. Being part of a large class she learnt independence and perseverance in order to survive. The support provided by her teachers in the form of acceptance and accommodation also contributed to her development as a person and as a pupil. Y's parents showed strong support for the subject's development at school. They were actively involved in admitting her to a regular school and ensured that her teachers were aware of her needs. They took an interest in and acted upon advice relating to matters that affected her performance at school.

It was evident that Y. was totally included in her school and her community. Despite her hearing impairment, she was accepted and supported both in and out of school as part of the community.

4.6 THE LANGUAGE ISSUE

4.6.1 ATTITUDE OF PARENTS

The parents' decision to place Y. in a regular school was based on her potential for speech and her ability to interact with hearing peers. Y's mother said

"I felt she behaved like a normal child and being in a school for the deaf, she would have grown up in a world of her own."

The mother also stated that when she enrolled Y. into the preschool level, she was willing to reconsider placement into a regular school if the subject did not cope at the preschool level. The mother added

"But when I put her into preschool, the teacher found that she was very bright to be in preschool. She said 'why let her waste a year. Put her into the class one. She is capable of doing that level.'"

Y. had preferred to use oral language instead of sign because she had been taught through speech therapy to use oral language and not sign language. The mother said that Y. was comfortable using oral language as a means of communication.

Y. had apparently advised another child at her school to go for speech therapy to improve her speech. Y. had met this child on her way to school. Y. described her experiences to this pupil, emphasizing how it had improved her speech. It was obvious that Y. saw the benefits of speech therapy and the opportunity it had afforded her in improving her ability to communicate orally.

DEAFSA encourages the rights of these few segregated schools/centres for the Deaf who follow the oral method as well as the parents' right to choose the oral method for their child, to be respected, provided that a proper information and guidance structure which assists the parent in deciding which method to choose, is in place.

DEAFSA (1994) argues that the oral approach is limited to a few learners, usually those who have either sufficient hearing to process speech, or who became Deaf after the age of acquiring spoken language. Contrary to this DEAFSA's argument, Y. was able to function using the oral approach, although she had a profound hearing loss and was deaf from birth.

Factors affecting Y's development of spoken language included early intervention, speech therapy and exposure to an oral environment at home and at school. Sellers and Palmer (1991) support this claim by stating that hearing loss alone is a poor predictor of ultimate success, however defined. Many factors are involved in determining the most suitable type of provision for each child. DEAFSA does acknowledge that numerous other factors play a more determining role, eg. the age of diagnosis, the age when a hearing aid was fitted, the extent of parental guidance received as well as parental involvement,

age of school admittance, the cause of deafness, intellectual capacity, the presence of secondary handicaps , and/or the ability to learn a spoken language. Factors such as these were taken into account in a holistic way to determine Y's level of functioning (DEAFSA, 1994)

6.2 ATTITUDE OF SUBJECT

Y. had never met any deaf children before her visit to DSHI and VNNS to have her speech and hearing tests done. Before and after the tests at DSHI, Y. sat in the standard three class. The researcher observed that Y. found difficulty communicating with her deaf peers. Y. found difficulty understanding their signs and gestures during interaction with each other. She did, however, understand the teacher who basically used an oral approach in teaching. Y. responded well in the lesson. She also understood those pupils in the class who were very oral. Y. relied on the teacher's oral repetitions of the children's responses. Observations were also made on the playground at recess at DSHI and VNNS. Y. relied on pupils who used oral language to explain what the other pupils were saying.

During an interview, the mother said that Y.

"really enjoyed it, she said. But she wouldn't like to be in that school. She said but it was great fun meeting all of them."

After the visit, Y. told the researcher that she liked DSHI because the pupils were very friendly. She said:

They are very friendly in that school."

When asked whether she would prefer to be taught at DSHI, Y. added:

"I think I like to stay in a normal school because I don't like to learn signing....because it is too difficult."

Y's mother reported, however, that

"When there's programmes on T.V. that have sign language. She is very interested. I insist that she should be allowed to watch if she wants. Even I find it interesting. Maybe because I've got her."

Y. claimed that she watched these programmes because of the subtitles. She was unable to hear everything on the other programmes. Her older brother reported that Y. had learnt a bit of sign language used in a television advertisement. He said:

"She was very fascinated about that and she learnt it off. She's always showing it to us."

When Y. was asked whether she regretted being placed in a regular school, she replied

"I am very happy where I am."

Y's mother related an incident to support Y's refusal to be educated at a school for the deaf. The parents had apparently threatened to place Y. into a special school if she did not show any improvement in her mathematics results. The parents told her:

"If you are not going to pull your socks up with your Maths, then you will be forced to go to that school. That will mean you are not coping in this school."

According to the mother, Y. was very upset by this. The mother said

"She started crying."

The attitudes of both parents reflected the attitudes of the respondents in Cleaver's study (1992). They believed that deaf pupils should not be brought up believing that they are different. Y. obviously did not see herself as being any different from her hearing peers and she was clear about her preference to use oralism as her mode of communication.

From the observations and interviews, it was also evident that Y. preferred to be amongst hearing peers because of the oral medium of communication. She admitted a preference for oral language over sign. For this reason, she preferred to remain at a regular school where she felt she belonged. Although she was not averse to sign language, she did not understand it. She was, however, capable of learning it.

It is ultimately an issue of choice. DEAFSA (1994) recognises that in several countries the free choice of language and modality is constitutionally recognised and protected. In South Africa, it is no different. The Draft Constitution (1995) protects Y's right to

**"instruction in the language of his or her choice where
this is reasonably practicable..."**

[Section 32 (b)]

Y's right to choosing oral language as her language of communication is therefore recognised and protected as much as those Deaf people choosing sign language.

CHAPTER FIVE

5. SUMMARY OF FINDINGS, IMPLICATIONS, CONCLUSION, AND SUGGESTIONS FOR FURTHER RESEARCH

5.1 SUMMARY OF FINDINGS

Firstly, it was evident that placement at regular schools from preschool level had greatly benefitted the hearing impaired subject in terms of her overall development. The subject's language, speech, academic and social development paralleled that of her hearing peers.

In this setting there were no curriculum adjustments made for the subject. She was exposed to the full curriculum in the same manner as her peers. The school did not access assistance from "experts" in the education departments support services, or any other "experts" in the field of deaf education. The school did not feel that there was need for intensive teacher development prior to admitting the subject. Neither were peers "prepared" in any way for the inclusion of a child with hearing impairment in their class.

Factors facilitating Y's development included early identification, ability to acquire spoken language, amplification, speech therapy from an early age, interaction with hearing peers from an early age, support from the family, a healthy home environment, positive attitudes on the part of teachers and classmates, support from her teachers, and the subject's personality.

Contrary to Lynas's study (1986), Y. did not cause disruption to her hearing peers' education. Neither did excessive noise levels affect Y. in any way, nor did her teachers require extra time for Y. .

Secondly, the findings challenged the argument presented by DEAFSA (1996, p. 6)

"The first or natural language of the deaf is Sign Language. For the Deaf learner to develop his or her full potential, he or she needs a natural signing environment that can only be provided by Deaf peers."

The assumption that this applies to *all* deaf people, is obviously incorrect. The first language of the subject in this study was spoken language. An oral environment with hearing peers proved to be the most enabling environment in this case. Y. was able to develop academically and socially, despite having a severe to profound hearing loss. Contrary to her initial psychological assessment, her development had, in fact, surpassed all expectations.

Thirdly, the findings challenged the concept of 'normalisation' which views disability from a medical-deficit perspective (Sellers and Palmer, 1992). In the case of Y. attempts were not made primarily to remediate deafness, but rather to foster her ability to acquire spoken language. Before speech therapy (at age three), she had developed a fair amount of speech because of her interaction with others in an oral environment. Based on this need to use spoken language, the parents sought speech therapy and placed Y. in an oral environment. Her placement was carefully monitored by parents and at no time was it evident that Y. needed sign language to communicate more freely.

Throughout her schooling she was accepted, not as a hearing impaired pupil with a disability, but rather as a pupil in the school. The regular school was open and responsive to diversity in the student population. Her teachers' and peers' views of 'disability' changed in the process. According to Barton (1995), one of the principles of inclusion is to challenge existing assumptions of disability and existing practices in order to promote positive views of others (Barton, 1995).

Her teachers and peers did not see her as a 'problem'. Community schooling in this case promoted acceptance. Y's acceptance as part of the community, her school and her family, can therefore, be viewed as part of a social model advocated by Inclusion which challenges existing notions of disability. Y's educational placement was not one of "assimilation into" or 'normalisation', but one of acceptance. Y. felt a sense of security and belonging, not to a specific culture, but to society at large.

Finally, by acknowledging her preference to continue being educated in an oral environment, she ultimately exercised her constitutional right to a school of her choice and a language of her choice.

There is a need for a well-developed sign system, support services and ongoing staff development at Bonela Primary in order to fully include other deaf children whose choice of first language is sign language. Staff development, support, structural, organisational and curriculum adjustments may be required to include children of other disabilities.

5.2 IMPLICATIONS

The following are some implications of this study.

5.2.1 Deaf children should be allowed to exercise their constitutional right to instruction in the language of their choice. Deaf individuals who exhibit the potential and the need to use spoken language as their first language, must be fitted with appropriate hearing aids and provided with ample speech therapy from an early age. It must not be assumed, that in all cases, deaf children do not benefit from amplification in the 'profound' ear.

5.2.2 Parents' right of choice must be respected. They must have the right to choose which school their Deaf child should attend. As suggested by DEAFSA (1994), information and guidance structures should be available on request to provide informed advice. The ultimate choice, however, should be that of the parent.

Findings suggest that parents must be educated on "deafness" and "early identification". Although the parents in this study took the initiative, it might not be possible with all parents. These were not middle class parents, yet through concern and dedication, they took the initiative and were able to make a choice and follow it through. Parents need to be made aware of their rights regarding the education of their children, as enshrined in recent legislation (*cf.* South African Education Act of November, 1996. Clause 5(6)).

5.2.3 Placement cannot be based solely upon the results of psychological tests or the degree of hearing loss. The cumulative effects of the placement must be considered, that is, the child, the placement experience, and the interaction of the child in the placement experience (Kluwin, 1993).

5.2.4 Schools must encourage parents to assume the role of partners in their child's education (The Salamanca Statement, 1994). The placement experience must be monitored on an ongoing basis by both parents and schools. Adjustments must be made accordingly to optimize learning conditions conducive to the needs of the Deaf learner.

5.2.5 Children with special needs, including the Deaf, should be educated in neighbourhood schools. This helps in breaking down disabling barriers within the community and creating welcoming communities (The Salamanca Statement, 1994). Regular schools must accept and attempt to support deaf children who choose to be placed at these schools. Regular schools must be recognized as having the potential to provide the most enabling environment for learners with special needs.

Initiatives such as the one described in the study should not be dependent on the goodwill of the management of the school and the personalities of dedicated and committed staff. All children with disabilities should have the right of choice to be educated in their neighbourhood schools.

5.2.6 Regular teachers must be helped to organise their classrooms in ways that foster the learning of all their pupils, including the Deaf. Teacher development advocated by Ainscow (1995), must include opportunities to consider new possibilities and support for experimentation and reflection, especially for teaching in large mainstream classrooms. These include planning for the class as a whole; utilizing the pupils' rich source of experiences; modifying plans and activities; dialogue; interactive teaching using interactive teaching styles; teamwork; dialogue; critical reflection and collaboration with colleagues. Teacher development programmes and inservice training are needed to develop critical thinking skills amongst teachers (Ainscow, 1995).

5.2.7 The study did find that there was a need for inclusive schools to have access to teachers qualified in the education of the Deaf for advice on managing hearing examinations, assistive devices, and on how to make learning more accessible to students. In this setting researched, it was largely the parent who was the resource.

DEAFSA (1994) recommends that the necessary posts for specialized visiting teachers must be created in each region in order to act in an advisory capacity where Deaf learners are in mainstream schools. Their tasks should include checking of hearing aids and transporting pupils for regular audiological examinations to nearby facilities housing speech therapists. Special schools should act as resource centres for neighbouring regular schools. Schools for the Deaf should provide regular speech therapy and audiological examinations, and provide feedback to teachers in inclusive settings.

5.3 CONCLUSIONS

"The trend in social policy during the past two decades has been to promote integration and participation and to combat exclusion. Inclusion and participation are essential to human dignity and to the enjoyment and exercise of human rights"

(The Salamanca Statement, 1994)

The field of education has seen moves towards bringing about such change in society where equalization of opportunity remains paramount. The Salamanca Statement (1994) reports that experience in many countries demonstrates that the integration of children and youth with special educational needs is best achieved within inclusive schools that serve all children within a community.

The present study concludes that within the context of the regular school in this case, the hearing impaired subject achieved educational progress and social integration. Whilst the school provided a favourable setting for achieving equal opportunity and full participation, the success of the placement for the hearing impaired subject in this case, depended on a concerted effort, not only by teachers and school staff, but also by peers, parents and families.

However, it must be stressed that the research documented experiences of participants in one context in the form of a single case study. This should be seen as one placement option that can work if the school is open to, and responsive to serving all learners in the community. Such a placement option must be available to parents and learners. The point that cannot be stressed enough is that parents must have a right to choice. The philosophy of "education for all" implies equal rights and equal opportunities for all learners, as well as equal access to education within a single education system. However, it is conceded that there may be other placement options that would be needed to serve deaf learners, and this would depend on the needs of the individual learners and families, and the contexts in which they are being educated.

The South African Education Act (November, 1996) states:

“a public school must admit learners and serve their educational requirements without unfairly discriminating in any way”

(clause 5(1), p. 6),

and

“In determining the placement of a learner with special educational needs, the Head of Department and principal must take into account the rights and wishes of the parents of such a learner”.

(clause 5(6), p. 6)

It is clear that the above are very significant and enlightened legislation. They imply that placement options such as the one investigated in this study have been legislated for through the South African Education Act (1996). It is critical that parents are made aware of the choice open to them regarding the education of their deaf children.

5.4 SUGGESTIONS FOR FUTURE RESEARCH

5.4.1 Arising from this study it might be interesting to undertake a similar case study on a pupil of the same age and with hearing loss of a similar range who has been placed in a school for hearing impaired since school entry. The study could focus on the child's development in the areas explored in this study. Furthermore, factors hindering or facilitating the learner's development could be investigated.

5.4.2 Another focus that could prove a contribution is investigating curriculum adjustments needed for hearing impaired learners in different contexts with learners from different home environment experiences.

5.4.3 Documenting other initiatives involving the inclusion of hearing impaired in the country will provide useful comparative data. Comparison with the results of this study, in particular, the themes and critical issues that emerge, will be valuable for policy development on the education of the Deaf.

REFERENCES

- Ainscow, M. (1995). Education for all: Making it happen. *Support for Learning*, 10(4), 147-155.
- Antia, S. (1994). Strategies to Develop Peer Interaction in Young Hearing-Impaired Children. *The Volta Review*, 96(4), 277-290.
- Barton, L. (1995). The Politics of Education for all. *Support for Learning*, 10(4), 156-160.
- Booth, T. (1996). a Perspective on Inclusion from England. *Cambridge Journal of Education*, 26(1), 87-99.
- Brill, G.R. (1978). *Mainstreaming the prelingually deaf child - a study of the Status of Prelingually deaf children in various patterns of mainstreamed education for hearing impaired children*. Gallaudet College, Washington,D.C.: Gallaudet College Press.
- Buckley, S. & Bird, G. (1992). Mainstream or Special School - How do we decide? *Portsmouth Down's Syndrome Trust Newsletter*, 2(2), 3-7.
- Brill, G.R. (1978). *Mainstreaming the prelingually deaf child - a study of the Status of Prelingually deaf children in various patterns of mainstreamed education for the hearing impaired child*. Gallaudet College, Washington,D.C., Gallaudet College Press.
- Cappelli, M., Daniels, T., Durieux-Smith, a., McGrath, P.J., & Neuss, D. (1995). Social Development of Children with Hearing Impairments Who are integrated into General Education Classrooms. *The Volta Review*, 97(3), 197-208.

Chorost, S. (1988). The Hearing -Impaired Child in the Mainstream: a Survey of the Attitudes of Regular Classroom Teachers. *Volta Review*, 90(1), 7-12.

Cleaver, B. (1992). *a Profile of the oral-aural hearing impaired pupil in mainstream education*. Unpublished manuscript. Department of Orthopedagogics and Special Education, Faculty of Education: University of Stellenbosch.

Cohen, L., & Manion, L. (1989). *Research Methods in Education* (3rd ed.). London: Groom Helm.

Cole, B. (1996). April 18. Deaf baby learns sign language, *Daily News*, p.3, Durban: Argus Group.

DEAFSA. (October, 1994). *Proposed Policy document on Education for the Deaf*. Education sub-Committee of the Deaf Federation of South Africa. Unpublished manuscript.

DEAFSA. (May 1996). *Basic Information Document: Inclusive Education*. Unpublished manuscript.

Dean, M., & Nettles, J. (1987). Reverse Mainstreaming: a Successful Model for Interaction. *The Volta Review*, 89(1), 27-33.

De Le Bat, C.A. (1969). *The Effect of Certain Factors on the Speech-Reading Ability of the Deaf Child*. Department of Psychology, University of South Africa.

Donald, D.R. (1993). Reconceptualising the Nature and Extent of Special Educational Need in South Africa. *Perspectives in Education*, 14(2), 139-156.

Du Toit, A.S. (1969). *The Valid Education of Language to the Deaf in South Africa in the Light of the Considerations of Nanninga-Boon*. Department of Psychopedagogics and Sociopedagogics, University of Pretoria, Pretoria.

Du Toit, L. (1990). *Skills Training and the Deaf Young Person: a Career Orientation Perspective*. Department of School Counselling, University of Pretoria, Pretoria.

Fuchs, D. & Fuchs, L.S. (1994). Inclusive Schools Movement and the Radicalization of Special Education Reform. *Exceptional Children*, 60(4), 294-309.

Fulcher, G. (1989). *Disabling policies? a comparative approach to Education policy and disability*. London: Falmer Press.

Garbe, V. & Rodda, M. (1988). Growing in Silence - The Deaf Adolescent. *ACEHI Journal*, 14(2), 59-69.

Geers, a. & Moog, J. (1989). Factors Predictive of the Development of Literacy in Profoundly Hearing Impaired Adolescents. *Volta Review*, 91(2), 69-86.

Giangreco, M.F., Baumgart, M.J., & Doyle, M.B. (1995). How Inclusion can Facilitate Teaching and Learning. *Intervention in School and Clinic*, 30(5), 273-278.

Gjerdingen, D., & Manning, D.F. (1991). Adolescents with Profound Hearing Impairments in Mainstream Education: The Clarke Model. *The Volta Review*, 93(5), 139-148.

GMSA. (1996). August 29. Interview with Fanie de Villiers, Johannesburg: SABC 2.

Golberg, D. (1989). Parent Checklist for Placement of a Hearing-Impaired Child in a Mainstreamed Classroom. *Volta Review*, 91(7), 372-432.

Green, L. (1991). Mainstreaming: the Challenge for teachers in South Africa. *Support for Learning*, 6(2), 84-88.

Hegarty, S. (Ed). (1993). *Meeting Special Needs in Ordinary Schools: An Overview*. New York: Cassell Educational Limited.

Higgins, P.C. (1990) *The Challenge of Educating Together Deaf and Hearing Youth- Making Mainstreaming work*. Illinois: Charles Thomas.

Kisanji, J. (1995). *Supporting sustainable change in developing countries*, Paper presented at the International Special Education Conference (ISEC), Birmingham (April, 1995).

Kluwin, T.N. (1993). Cumulative Effects of Mainstreaming on the Achievement of Deaf Adolescents. *Exceptional Children*, 60(1), 73-81.

Kluwin, T.N. & Moores, D.F. (1989). Mathematics Achievement of Hearing-Impaired Adolescents in Different Placements. *Exceptional Children*, 55(4), 327-335.

Kriegler, S., & Farman, R. (1994). Redistribution of special education resources in South Africa: Beyond mainstreaming towards effective schools. *International Journal of Special Education*, 9(1), 1-12.

Kruger, H.C. (1990). *The Effects of Language on the Realization of Learning on the Deaf Child in the Primary School Phase*. Department of Psychopedagogics and Sociopedagogics, University of Pretoria, Pretoria.

Kwazulu-Natal Forum for Special Needs Education. (1995). Discussion document of the sub-committee. *Discussion document: special needs education policy*. Unpublished manuscript.

Lea, S., & Foster, D. (1990). *Perspectives on Mental Handicap in South Africa*. Butterworths.

Lee, C., & Antia, S. (1992). a Sociological Approach to the Social Integration of Hearing-Impaired and Normally Hearing Students. *The Volta Review*, 95, 4425-434.

Life Long Learning Through a National Qualifications Framework (Discussion Document) (February, 1996). Report of the Ministerial Committee for development work on the NQF, Department of Education, Pretoria.

Lynas, W. (1986). Pupils' Attitudes to Integration. *British Journal of Special Education*, 13(1), 31-33.

MacDonald, B., & Walker, R. (1975). Case Study and the Social Philosophy of Educational Research. *Cambridge Journal of Education*, 5(1), 2-12.

Merriam, B.S. (1988). *Case Study Research in Education*. London: Jossey-Bass Ltd.

Milo, E.Bishop (ed.) (1979). *Mainstreaming-Practical Ideas for Educating Hearing-Impaired Students*. Washington, The Alexander Graham Bell Association for the Deaf.

Mittler, P. (1995). Special needs education: an international perspective, *British Journal of Education*, 22(3), 105-108.

Ministry of Education (1996). Proposed alterations to the rights, powers and functions of public school governing bodies. *Government Gazette*. Notice 502 of 1996, Vol.370, No.17096, pp1-13.

Ministry of Education (1996). South African Schools Bill. *Government Gazette*. Notice 503 of 1996, Vol.370, No.17136, pp 1-144.

Moskos, E. & Mayer, C. (1990). *Process Writing: An Integrated Approach with the Hearing Impaired*. Paper presented at the Annual Convention of the Council for Exceptional Children (68th, Toronto, Canada, April 23-27, 1990).

National Education Policy Investigation (NEPI). (1992). *Support Services Report*. Cape Town: Oxford University Press.

Nieuwenhuis, F.J. (1985). *Vocational Guidance and Vocationally Orientated Education for Deaf Persons at Secondary and Tertiary Education Level*. HSRC Office Report.

Penn, C. (1993). Signs of the Times: Deaf Language and Culture in South Africa. *Die Suid-The South African Journal of Communication Disorders*, 40, 11-23.

Penn, C., & Reagan, T. (1995). On the other hand: Implications of the study of South African sign language for the education of the deaf in South Africa, *South African Journal of Education*, 15(2), 92-95.

Phillip, L., Sapona, R.H., & Lubic, B.L. (1995). Developing Partnerships in Inclusive Education: One School's Approach. *Intervention in School and Clinic*, 30(5), 262-272.

Pucciarelli, C.S. (Ed.). (1987). *a Guide to Developing a Mainstreaming Program for Preschool Children Who Are Hearing Impaired: Project CHIME*, Washington D.C.: Office of Special Education & Rehabilitation Services.

Puren, H.B. (1991). *The Gesture Component as an Integrating Part of the Total Communications Approach in the Teaching of Deaf Children*. Department of Orthopedagogics and Special Education, University of Stellenbosch.

Robbertse, J.H. (1970). *Investigation into the Career Orientation of Deaf Youths*. Department of Psychopedagogics and Sociopedagogics, University of Pretoria, Pretoria.

Schildroth, a., Rawlings, B., & Allen, T. (1991). Deaf Students in Transition: Education and Employment Issues for Deaf Adolescents. *The Volta Review*, 93(5), 41-52.

Schoeman, M. (1995). *Including children with down syndrome into mainstream schools: The South African Experience*. Paper presented at the 3rd European Down Syndrome Conference: Dublin.

Schoeman, M. (1995). *Including children with Down Syndrome in Ordinary Primary School- the Pretoria Experience*. Down Syndrome Association: Pretoria.

Sellers, M., & Palmer, B. (1992). *The Integration of Hearing Impaired Pupils in Ordinary Schools in Berkshire*. Department of Education and Studies: University of Reading.

Smit R.J. (1979). *Careers of Deaf Persons with Post-School Qualifications*, HSRC Office Report.

South African Education Act of November 1996.

Stake, R.E. (1988). Case Study Methods in Educational Research: Seeking Sweet Water. In Jaeger, R.M. (ed.). *Complementary Methods for Research in Education*. Washington, DC: AERA.

Stinson, M.S. & Whitmire, K. (1990). *Self-perceptions of Social Relationships among Hearing-Impaired Adolescents in England*. Paper presented at the International Congress on Education for the Deaf (17th, Rochester, New York, July 29 - Aug 3, 1990).

Storbeck, C. (1994). *a Case Study of Bilingual Education in a School for the Deaf*. Faculty of Education: Rand Afrikaans University.

Teller, H.E. & Lindsey, J.D. (1987). Selected Parent and Program Attributes and Hearing Impaired Children's Mainstream Education Experiences. *ACEHI Journal*, 12(3), 171-177.

The Salamanca Statement. World Conference on Special Needs Education, Salamanca, Spain, July 1994.

The Constitution of South Africa of February 1996.

The South African Schools Act of November 1996.

Van Staden, J.J. (1985). *The Hard-of-Hearing Child with Certain Learning Problems*, Department of Psychology: University of Pretoria, Pretoria.

Vernon, P.E. (1979). Intelligence Testing and the Nature/Nurture Debate, 1928-1978: What Next? *British Journal of Educational Psychology*, 49, 1-14.

Vlachou, a. (1993). Attitudes and the experience of integration. *Down's Syndrome: Research and Practice*, 1(2), 75-79.

Vlachou, a. & Barton, L. (1994). Inclusive Education: Teachers and the Changing Culture of Schooling, *British Journal of Education*, 21(3). 105-107.

Wang, C.W. (1991). *Adaptive Instruction: An Alternative Approach to providing for Student Diversity*. Effective Schools for All, Ainscow, M. (ed.), David Fulton: London.

Watson, L. (1992). Supporting hearing impaired pupils in mainstream classes. *Support for Learning*, 7(2), 82-85.

Whitehead, B.H., & Barefoot, S.M. (1992). Improving Speech Production with Adolescents and Adults. *The Volta Review*, 94(5), 119-134.

Winzer, M. (1993). *The History of special education*. Washington, DC: Gallaudet University Press.

Wood, D., Wood, H., Griffiths, a., & Howarth, I. (1986). *Teaching and Talking with Deaf Children*. Great Britain: John Wiley & Sons.

Zwiebel, a. & Allen, T. (1988). Mathematics Achievement of Hearing-Impaired Students in Different Educational Settings: a Cross-Cultural Perspective. *Volta Review*, 90(6), 287-293.

APPENDIX A



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19 April 1996

The Principal

BONELA PRIMARY
BONELA

Sir/Madam

This is to state that Mrs S. Jairaj is registered as a Masters student in the School of Education in the current academic year. The programme is a two year degree in specialised education which involves course work and a dissertation.

The dissertation would entail students undertaking research in an area of interest to them. Students are encouraged to research issues/projects in special needs education in the community so that their work may be a contribution to the field. Mrs Jairaj has decided to conduct case study research on children with hearing impairment examining how the child and the family experience the disability. She has identified a child at your school whom she would like to research.

Mrs Jairaj's project will be one of the first to be undertaken in the province. The intention is to document how the targeted child, peers, the parents, and staff at the school interact to create an environment responsive to her needs. We believe that documenting this educational initiative will be extremely useful to policy makers, educators, researchers, parents and students in the field of special needs education, especially since internationally (in both developed and in developing countries) there is a move towards a more inclusive education for learners with special needs.

We request your support to enable Mrs Jairaj undertake this study. She would like to conduct the research during the school year 1996. It will be a qualitative study and will involve mainly semi-structured interviews with the principal, teachers, students, and parents, and some informal observation in the school setting.

Thanking you,

Yours sincerely

N. Muthukrishna

Dr Nithi Muthukrishna
Senior Lecturer: Department of Education

INTERVIEW QUESTIONS: semi- and unstructured (when the opportunity arose)

SUBJECT'S PARENTS

Describe in detail the subject's history from the time you realised she was hearing impaired.

Areas to cover/question:

1. Possible cause?
2. At what age was she diagnosed?
3. At what age was she fitted?
4. From what age did she have speech therapy?
-Does she still receive speech therapy? If so, how often?
5. Did she have pre-nursery education?
-Where?
-Why did you place her there?
6. At which school(s) did she receive her education?
-Why did you place her there?
-Did you have problems with placement?
7. How was her performance at school?
8. Do you assist her with her schoolwork?
9. Do you attend school meetings/functions?
10. Have you had complaints from her teachers?
11. How does she get on with her siblings?
12. Does she have many hearing /deaf friends from the community?
13. Do other people understand her when she speaks?
14. Any additional information the parents or siblings wish to add.

PRINCIPAL and MEMBERS OF MANAGEMENT AT BONELA PRIMARY

Describe:

1. the philosophy of your school
2. your pupil population
3. class sizes
4. curriculum offered at the school
5. choice/appointment of teachers in terms of their qualifications
6. the admission policy
7. how pupils are classified/grouped
8. (a) attempts at the school to involve parents
(b) the level of involvement
(c) subject's parents' level of support
9. contact with special/mainstream schools
10. your perceptions regarding 'inclusion' of people with different disabilities in mainstream schools/ in your school.
11. any knowledge you might have of the subject's:
(a) academic performance
(b) behaviour

SUBJECT'S PRESENT AND EX-TEACHERS

1. When did you realize that subject A was hearing impaired?
2. What was your initial reaction?
3. How did you respond to her ?
4. Did it change your teaching style in any way?
5. How did the other pupils react?
6. Is she able to communicate freely with other pupils in and out of class?
7. Does she have many friends?
8. How would you describe her behaviour?
9. How would you describe her academic performance?
10. Have you had any problems with her in your subject?
11. Have you had complaints from any other teachers?
12. Are her parents supportive? Elaborate.
13. Does the school offer any support seeing that she's hearing impaired?
14. Do you offer any extra support?
15. Would you say that she needs to be placed at a special school for any reason?
16. Have you had any experience in a special school?
17. Have you any knowledge of hearing impairment?
18. How many pupils do you have in your class?
19. Is this number manageable?
20. (if the answer is 'no' in 17.) How have you been able to manage with a hearing impaired pupil in your class in spite of these conditions?

OTHER TEACHERS AT SCHOOL

1. What is your opinion of the present class sizes?
2. How would you respond to a children with disabilities in your class, eg. a hearing impaired child?

PUPILS AT SCHOOL

1. Do you know what a hearing aid is?
2. Do you know of anyone in your school who wears a hearing aid at your school?
3. How do you know her?
4. Why do you think she wears a hearing aid?
5. Does it matter to you that she has a hearing problem?

THE SUBJECT

1. How do you feel about being hearing impaired? Does it bother you?
2. Do you experience problems when you try to talk to other people?
 - Do you understand them?
 - Do they understand you?
3. How do you feel about wearing a hearing aid?
 - Do people tease you about it?
 - When they do, how do you respond?
4. Do you like school? Explain.
5. Do you like being around people that can hear 'normally'? Explain.
6. Have you met anyone else who is also hearing impaired?
7. Would you like to go to a school with only hearing impaired children? Explain.

APPENDIX D

NAME: _____ Y- _____

QUESTION ONE:

Read the following passage and answer the questions that follow:

"Hold your voice", cried a terrible voice, as a man started from among the graves at the side of the church porch. "Keep still, you little devil, or I will cut your throat!"

A tearful man, all in coarse grey, with a great iron on his leg, stood there. A man with broken shoes, and with an old rag tied around his head, a man who had been soaked in water, and lamed by stones, and torn by briars, who limped and shivered, and glared and growled, and whose teeth chattered in his head seized me by the chin.

"Oh! Don't cut by throat, Sir," I pleaded in terror. "Pray dont't do it, Sir".

"Tell us your name!" said the man. "Quick!".

"Pip, Sir".

"Once more", said the man, staring at me "Give it mouth".

"Pip, Pip, Sir."

"Show us where you live," said the man. "Point out the place."

I pointed to where our village lay, on the flat in-shore among the alder-trees and poplars, a mile or more from the church. The man, after looking at me for a moment, turned me upside down, and emptied my pockets. There was nothing in them but a piece of bread. He seated me on a high tombstone, while he ate the bread ravenously.

"You young dog," said the man, licking his lips, "what fat cheeks you have got."

- 1.1 The description in paragraph 2 tells that the man was:-
 (a) elegantly dressed
 (b) dirty and untidy ✓
 (c) neat and tidy (1)
- 1.2 The incident took place in the:-
 (a) The grave yard ✓^{1/2}
 (b) The village
 (c) at the sea side (1/2)
- 1.3 "Give it mouth" means:-
 (a) the man wants Pip to give him some food.
 (b) the man wanted Pip to speak loudly. ✓¹
 (c) the man wanted Pip to open his mouth. (1)
- 1.4 What was the boy's name? THE BOY'S NAME WAS ✓^{1/2} (1/2)
- 1.5 How do you know that the man was a convict?
RECALL HE WAS OLD AND
HE IS A TEARFUL MAN. ✓ (1)
- 1.6 Pick out the phrase from paragraph 2 that tells you that the man was feeling cold. THE MAN WAS ✓^{1/2}
LAMED AND SHIVERED AT ALL TIME!
- 1.7 What was the convict looking for? HIS CONVICT
LOOKING IS FOR A MAN'S HOUSE! (1)
- 1.8 Where did he make the boy sit? THE BOY SAT
ON THE TOMBSTONE. ✓¹ (1)
- 1.9 How did the boy feel? THE BOY FELT
BAD. ✓^{1/2} (1)
- 1.10 What does the word "ravenously" tell us about the man?
THE WORD TELLS US HUNGRY HE WAS. ✓¹ (1)
- 1.11 Write down one expression used by the convict which shows that Pip was a young boy.
THE BOY SHOWED HOW FAT CHEEKS (1)
HE HAD ✓ (10)

6/10

LANGUAGE

Write the Plural of the underlined words.

1.1 The lady bought a knife and fork.

LADIES ✓ KNIVES ✓ FORKS ✓

1.2 The leaf fell from the branch of the tree.

LEAVES ✓ BRANCHES ✓ TREES ✓

1.3 The child liked to ride the pony.

CHILDREN ✓ PONIES ✓

1.4 The women caught the mouse.

WOMENS ✓ MICE ✓

4 (5)

2. Write the Past Tense of the underlined words.

2.1 He watches cricket every weekend.

WATCHED ✓

2.2 They play in the rain.

PLAYED ✓

2.3 The water freezes in winter.

FROZE ✓

2.4 The teacher writes on the board.

WROTE ✓

2.5 The naughty boy drops the ball.

DROPPED ✓ (5) 2

3. Underline the correct words from within brackets.

3.1 He (was/were) absent yesterday.

3.2 The children(has/have) many toys.

3.3 The boy (play/plays) with his friend.

3.4 The man and his wife (travels/travel) by bus.

3.5 A fleet of ships (was/were) sailing away.

3.6 The girls (skip/skips).

2 1/2 (3)

Fill in the correct prepositions.

4.1 He travels BY bicycle to school.

4.2 They arrived ON time for the party.

4.3 I prefer fresh juice AND cool drinks.

2 (3)

5. Punctuate the following:

a wolf once swallowed a chicken bone which lodged in his throat quickly he ran to a stork to have it removed the stork put its beak down the wolf's throat

A ✓ WOLF ONCE SWALLOWED A (4)

CHICKEN BONE WHICH LODGED IN HIS

THROAT QUICKLY HE RAN TO A STORK TO

HAVE IT REMOVED THE STORK PUT

ITS BEAK DOWN THE WOLF'S THROAT ✓

12 1/2
20

APPENDIX E

What I would like to become when I grow up.

I would like to be a teacher when I grow up. My reason is, because I like children. I teaching like the best. Children need alot of education. Teaching is easy to do. But one thing is I don't like is children don't do their homework. Many teachers have a very tough time ~~at~~ with the children. Th Teaching is important. There are many people who loves teaching. I don't like hitting children for nothing. But if they don't do their homework, when I take them to the office. The most thing I like is teachers are very friendly.

APPENDIX F1

In the north-east part of Somalia, children often don't go to bed until late in the evening, after the animals have been milked. Then they sit round the fire and listen to a story-teller tell all kinds of stories. Some will be about situations which they might meet in later life, such as the kind of person it might be best to marry.

A question of marriage

There once lived two sisters. One was extremely beautiful but not very intelligent, and the other was very intelligent but not at all beautiful.

A young man came to the village looking for a wife. He spoke to the girls' father and asked permission to speak to them about marriage. From talking to the father he learned about the daughters. Then he went over to talk to them. The beautiful one dazzled him with her shining eyes and hair. She was so beautiful he could hardly think. He just gazed at her, saying hardly anything.

After a while he managed to pull his eyes away from her to talk to her sister. She didn't have the same effect on him, but her voice was quiet and he found himself listening to every word. He left, promising to return in a few days.

He didn't know what to do. In his imagination he saw the beautiful sister looking at him with her



11



12

glistening eyes and smile. He just couldn't stop seeing her eyes and her smile.

Then he remembered the quiet way the other sister had spoken, and found he kept remembering things she had said. He realized he had forgotten everything the beautiful one had said. He wondered why.

A few days passed, and the young man was still confused. He decided to go and see the wise man, Kabacalaf. Perhaps he would have some good advice. So off he went and told Kabacalaf about the two sisters.

Kabacalaf listened to the young man very carefully, and sat thinking for a few minutes. Then he said, 'I have thought of a way you can be sure to choose the sister you will be happiest with. You must ask each sister three questions. The first is, "What do men need for a bedspread?" The second question is, "What is a camel's pen?" And the last question you must ask them is, "What is the best sauce for millet?" Ask both sisters these questions and you will know who to ask to marry.'

The young man was puzzled. 'How will I know?'

'By their answers,' Kabacalaf said. 'But what are ...' the young man started to say. Kabacalaf held up his hand. 'You will know.'

The young man had to be satisfied with that, so off he went, thinking how all wise men liked complicated mysteries. He still didn't know how he would know who to marry, because Kabacalaf hadn't told him the answers. They were such obvious, easy questions there must be riddling answers. Or perhaps not? He was almost as

confused as before.

The day came when he was due to go back to the two sisters. He went first to the father and asked if he could talk again to both sisters and ask them each three questions. The father agreed, but was a bit puzzled.

So the young man asked the two sisters the three questions. Their replies were very different.

The beautiful one said, 'Those are easy questions! For a bedspread men need a mat of fibre and grass. A camel's pen is a high fence to keep them in at night. And the best sauce for a meal of millet is ghee and milk. There!'

But her sister had quite different things to say. 'Men's bedspread is peace. If men have peace they will sleep - wherever they are. The camel's pen is man, because it is man who looks after the camels and herds them together for safety. And the best sauce for a meal of millet is hunger. Without hunger no meal of millet gives its best flavour.'

Listening to the two sisters, the young man knew whose words he would remember, and whose thoughts went deep. He knew who Kabacalaf thought he should marry.

So he asked her to marry him, and she agreed. He was overjoyed. He knew that he would have the protection of her thoughtfulness. It would be like a roof for their marriage.



13

Reference :

Hull, R. (1992).

African Stories, England:

Wayland Ltd., pp 11-13.

APPENDIX F2

QUESTIONS AND ANSWERS BASED ON THE STORY (*A question of marriage*):
(as transcribed from tape)

1. **HOW DID THE MAN FEEL ABOUT THE BEAUTIFUL GIRL WHEN HE SAW HER?** He felt happy.
2. **WAS THE FIRST SISTER AS BEAUTIFUL AS THE FIRST SISTER?** No.
3. **WHAT DID THE MAN LIKE ABOUT THE SECOND SISTER?**
She was very intelligent.
4. **WHAT DID HE DECIDE TO DO BECAUSE HE WAS CONFUSED?**
He went to see a wise man.
5. **WHY WAS THE MAN CONFUSED?**
He didn't know which one to marry.
6. **WHAT DID THE WISE MAN ASK THE MAN TO DO TO CHOOSE THE RIGHT GIRL?** He told the man to ask the girls questions.
7. **DID THE WISE MAN GIVE THE MAN THE ANSWERS TO THE QUESTIONS?**
No.
8. **DO YOU THINK THE MAN LOOKED FOR A WIFE WHO WAS BEAUTIFUL OR A WIFE WHO WAS INTELLIGENT?**
He was looking for a wife who was intelligent.
9. **WHICH SISTER DO YOU THINK HE WOULD MARRY?**
The second sister.

APPENDIX F3

SUBJECT'S SYNOPSIS OF STORY (*A question of marriage*):

A man met two sisters. One was beautiful, but not intelligent. The second one was not beautiful, but intelligent. When the man went away, he was confused. He was confused because he didn't know which one to marry. He decided to go to a wise man called Kabacalaf and the wise man told him to ask them three questions. He asked them the questions. After they answered, he chose the second one.

DIANNE STEWART

Market mischief

ILLUSTRATED BY MEL TODD

"TIME TO GET UP, DEVI!"

Oh, no! Devi thought. It's too early! But then she suddenly remembered it was Saturday. She loved Saturdays, because on Saturdays she helped her mother at the market.

She dressed quickly in her green checked overall, and twisted her hair into a long plait, as dark and shiny as the skin of a brinjil.

She and her mother were at the market before sunrise. Several other stall-holders were already at work, and in the surrounding trees black-and-brown myna birds chattered excitedly. Devi smiled. They too were up early, waiting to see what they could get from the market.

When the lorries arrived to deliver fruit and vegetables to the stall-holders, Devi helped carry boxes of produce into the building. She was just nearing the doorway with a box of plums in her hands when she suddenly tripped. The box slid from her hands - and splash! The ripe purple plums fell to the ground. Soon the cheeky mynas dived down to feast on the spoils. They screeched and squawked each other out of the way as their sharp yellow beaks pecked at the scarlet flesh of the burst plums.

"What a mess!" sighed Devi in dismay, as she tried to shoo them away from the doorway with a sweep of her thin, bangled arms.

Reluctantly, the mynas took to the air, but hovered above the doorway to see if there was any chance of returning to their feast. Devi watched the birds fly into the market building through an open window.

After clearing up the mess she went inside.

The mynas were strutting around the steel girders that support the roof. "Naughty birds," Devi whispered smilingly when she saw them disturbing a sparrow which was trying to build a nest.

At seven the main doors of the market were flung open to let in the daylight and the customers.

"It's the end of the month. There will be a lot of people buying today," said Devi's mother, as she put fresh ginger into packets. "We're going to be busy."

Devi was weighing onions on a large black scale in her mother's stall. When she glanced at Mrs Naidoo's stall right next to her mother's, she saw large white and ochre-coloured pumpkins sitting in neat rows at the back of the stall. Fire-red chillis, bulbous green peppers and ripe tomatoes were neatly arranged in boxes.

Devi quickly rearranged some of the vegetables at the front of her mother's stall. She hoped to attract as many customers as Mrs Naidoo. A myna squawked from above, and when Devi looked up, it nodded its head approvingly at her arrangement.

"Pick out your own tomatoes!" Mrs Naidoo called to her customers. She did not mind if her tomatoes were prodded and poked by many fingers!

On the other side was Mr Maharaj's fruit-stall. All the children loved him as he always gave them fruit to eat. He was well known for his "honey-pot" grapes, as he called them. But Devi had read on the box that they were actually "hanepoot" grapes.

Reference :

Stewart, D. (1992).

Market Mischief. In Bodenstein, C.,

Bodenstein, H. & Rode, L. (Eds)

Stories South of the Sun.

Cape Town : Routledge & Paul,

pp. 25-27.

Mr Maharaj walked across to Mrs Naidoo, leaving his stall unattended. Looking up, Devi saw two mynas fly down from the girders to perch on top of Mr Maharaj's stall. They bobbed their white-tipped tails up and down and fixed their yellow-ringed eyes on his grapes.

"Quick, Mr Maharaj!" shouted Devi. "Those mynas are after your honey-pot grapes!"

She rushed over and helped Mr Maharaj chase the birds away. They flew back towards the roof, protesting noisily.

After she had weighed the onions and put them in kilogram packets, Devi said to her mother: "I'm going across to help Mrs Govender at the spice-stall. She has a long line of customers."

As Devi entered Mrs Govender's stall, she was surrounded by spicy Eastern aromas: the tangy smell of the bright red chilli powder, the marigold-yellow turmeric powder and the sweeter cinnamon smell of the garam masala.

"Hello, Devi," Mrs Govender said. "glad you've come. I need your help. What are these noisy birds doing inside our market hall?" she added in the same breath, glaring up at the mynas which were chattering right above her spice-stall. "Keep an eye on them, Devi!" she added.

Devi had just carefully measured out some turmeric powder for a customer when the chattering of the mynas changed to a high-pitched screech, accompanied by a frantic fluttering of wings. She looked up and saw the mynas harassing the sparrow again. How alike in colour the turmeric powder and the mynas' beaks and legs are, she thought, when - suddenly - there was a thud! Devi jumped back. She could not believe her eyes. There, in the chilli powder right in front of Mrs Govender, lay a half-dead mynal



Atshoo! Atshoo! sneezed Mrs Govender. "Help! Quick! My eyes are burning . . ." Chilli powder flew in all directions. Customers in the queue ducked, laughed and sneezed. The myna got up, shook its feathers vigorously, spreading red powder everywhere. After a while it fluttered about with shut eyes, just missing Mrs Govender's face, and then flew out through the main door of the market.

Devi wiped Mrs Govender's face with a handkerchief. She looked so strange with all that red dust on her hair, tears streaming down her cheeks. But Devi could see how angry she was and so she tried hard not to laugh.

"Those myna birds will have to go!" shouted Mrs Govender. "They've ruined my spices. Out with you! Out, out, out!"

But the mynas remained sitting on the top rafters in a neat, straight line. When Devi looked up they started their concert. What she heard was: "Atshoo . . . Atshoo! Out . . . Out . . . Out!"

The next week Mrs Govender called a meeting of all the stall-holders in the market. Together they arranged for gauze to be put on all the windows in the building to keep out the mynas.

Devi felt rather sorry for the birds. She missed their antics inside the building. But the mynas did not disappear. Every Saturday she saw them strutting around the car-park next to the market building, and whenever she could, she fed them discarded fruit - which they found far more tasty than Mrs Govender's red-hot chilli powder.

SUBJECT'S SYNOPSIS OF STORY (*Market mischief*): (as transcribed from tape)

The story is about this girl called Devi and the mynas. Devi always used to like going to the market every Saturday with her mother to help her. Now one morning, the mother got her up. And then she got up. Every Saturday when she goes to the market she wears this blue dress and she puts a plait in her hair and she goes out with her mother to the market. Now one day when she went to the market, the myna birds were worrying them. They had kinds of spice on the table. The mynas came and worried them. Devi's mother's eyes were burning because of the masalas going all around. They were telling the mynas to get out and the mother was sneezing all the time because of the masala. All the customers were there and they were also sneezing and laughing. Their eyes were also burning. They were trying to get the mynas out.

(WHY WAS THE STORY CALLED 'MARKET MISCHIEF'. WHO WAS CAUSING THE MISCHIEF? WHAT MISCHIEF DID THEY DO?)

The mynas. They were worrying the people all the time at the market.

NAME: Y. STP: Three DIV: D YEAR: 1996

SUBJECTS	No. IN DIV: <u>44</u>			No. IN DIV: <u>44</u>			No. IN DIV: <u>44</u>			No. IN DIV: <u>44</u>		
	POS. IN DIV:			POS. IN DIV: <u>2187</u>			POS. IN DIV:			POS. IN DIV: <u>19TH</u>		
	RESULT:			RESULT:			RESULT:			RESULT: <u>PASSED</u>		
	FIRST QUARTERLY TEST			HALF-YEAR EXAMINATION			THIRD QUARTERLY TEST			FINAL EXAMINATION		
	MAXIMUM MARK	PUPIL'S MARK	MEDIAN MARK	MAXIMUM MARK	PUPIL'S MARK	MEDIAN MARK	MAXIMUM MARK	PUPIL'S MARK	MEDIAN MARK	MAXIMUM MARK	PUPIL'S MARK	MEDIAN MARK
ENGLISH	100	46	61	100	72	65	100	78	58	200	146	128
AFRIKAANS	100	56	46	50	30	24	100	56	44	100	58	41
GENERAL MATHEMATICS	100	76	64	100	59	60	100	58	58	200	127	126
ELEMENTARY SCIENCE	100	60	56	50	27	28	100	48	51	100	56	56
HISTORY	100	70	58	50	38	35	100	60	64	100	69	60
GEOGRAPHY	100	70	66	50	31	26	100	66	62	100	63	57
TOTAL		63%		400	257			61%		800	519	
NUMBER OF DAYS ABSENT				<u>19</u>								
CONDUCT	<u>B.</u>			<u>B.</u>			<u>B.</u>			<u>B.</u>		
EXTRA-CURRICULAR ACTIVITIES												
REMARKS:	has produced a very satisfactory result this term.			Although passed, she is capable of better work. she must be regular at school.			has made steady progress in English. she has produced a satisfactory result.			is a consistent worker. she has produced a good result.		
FORM TEACHER'S SIGNATURE	<u>Johnston</u>			<u>Johnston</u>			<u>Johnston</u>			<u>Johnston</u>		
PRINCIPAL / DP / HOD	<u>D. R. ... (DP)</u>			<u>Shankar</u>			<u>Shankar</u>			<u>Shankar</u>		
TERM BEGINS	<u>2ND 10.04.96</u>			<u>3RD 23.07.96</u>			<u>4TH 07.10.96</u>			<u>1ST 21.01.97</u>		
PARENT/GUARDIAN'S SIGNATURE	<u>Blair</u>			<u>Blair</u>			<u>Blair</u>					

APPENDIX G

APPENDIX H

TRANSCRIPT OF VIDEO

SCIENCE LESSON IN Y'S CLASS AT BONELA PRIMARY

(Topic: GERMINATION OF SEEDS IN DIFFERENT ENVIRONMENTS)

Teacher (T): Now today we're going to complete this worksheet that I have given you. Right. Now we have already done these experiments. Remember when we soaked the bean seeds in the cotton wool and in the water and peeled off the skin and everything... You all remember that? (Y. shakes her head) Now what we are going to do is go through this worksheet step by step and we are going to fill it in. Now look at the first question. (another pupil reads) Thank you. Do you all remember us doing that?

Pupil A: Yes, mam.

T: We planted the bean seeds. Right. Look at the table I have given you. Right now, if you look at the table, I have drawn columns (Y. looks at the worksheet in front of her) one in the classroom, one for the refrigerator and one in the cupboard. Let's look at question one. (Y. looks at the question) Now who wants to read it? (teacher looks at pupil B.) OK, read it.

Pupil B: Have the seeds germinated in the classroom? (Y. turns to look at pupil B, reading).

T: (to pupil C) Right, answer, C.

Pupil C: No.

T: How many of you say 'no'? Right, how many of you say 'yes'? (Y. raises her hand simultaneously with other children—does not look for cues). Can you tell us why you said 'yes'? (to pupil D)

Pupil D: It started growing.

T: Right. Good. It started growing. (looks at Y.) Read experiment 1 on the top, the question that we have there.

Y: Do seeds need warmth to germinate pollen? Collect....(teacher interrupts)

T: No, just that one question. Thank you. Right, so what will be our answer now? Yes? How many of you say 'no'? Put your hands up. How many of you say 'yes'? (Y. raises her hand again with the rest of the class without looking for clues) Who wants to explain to the class why it's 'yes'?

pupil E: Mam because it needs sunshine and sunshine is warmth.

T: Right. Good. OK. We had two sets of cotton wool. One was dry with the bean seed in it. One was wet. The one that was wet grew and the one that was dry... the cotton wool that was dry, the seeds dried up. Now what can you conclude from that... Which one grew?

Y: Mam, the wet cotton wool.

T: Wet cotton wool. So what can you decide from it?

Y: Mam, the wet cotton wool, eh.. will grow quicker and it will take 4 days. (Holds her head, realising that she has expressed her answer incorrectly)

T: Ok, not the wet cotton wool, the seeds that were in the wet cotton wool will grow better. What conclusion can you come to? Where we have the question 'What can you decide?', what will you write? You just said it just now. Try.

- Y:** Mam, the cottonwool will eh.. (teacher helps her along)
- T:** help....
- Y:** will help the seed to grow.
- T:** ...will help the seed to grow. Good. (teacher helps class to fill in worksheet)
- T:** Same one. In question One, experiment Two- 'Have the seeds germinated in the dry cottonwool?' What will you write there? (Y. asks the girl next to her to excuse her whilst she got her pencil. She gets up and moves over to the other end of the class.)
- T:** Write down 'no'. (waits for the pupils to write down the answer) Ok, now we go to the fourth day. Now in the classroom more seeds germinated, you remember? Right, so there you'll write down five. You put five, so you can write down 'five'. Fill in 'five'. Right. This is your block. In the classroom five seeds germinated, so over here you'll write five (points to space on worksheet) (Y. fills in her worksheet and then looks up at the teacher- continues to do so throughout the activity) Ok, in the refrigerator, nothing again, put a dash. And in the cupboard? There were one or two that did germinate, you remember? So, you can put down '2'. Right, now let's look at the question. Read number 'one', Y.
- Y:** Mam, 'have the seeds germinated in the classroom?'
- T:** ...germinated in the classroom. The answer? (Looks at Y.)
- Y:** Yes.
- T:** Right, write down 'yes'.