INFORMATION-SEEKING PATTERNS AND INFORMATION-PROVIDERS OF AURALLY IMPAIRED SCHOOL-GOING ADOLESCENTS IN THE EASTERN CAPE PROVINCE, SOUTH AFRICA

By

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Submitted in partial fulfilment of the requirements of the degree of Master of Information Studies, School of Human and Social Studies, Faculty of Human Sciences, University of Natal, Pietermaritzburg, 2000.
DECLARATION

I, ZANELE VICTORIA PANTSHWA, hereby declare that the contents of this dissertation is my own work, except where otherwise indicated and that the dissertation has not been submitted for a degree at any other university.

Signed: [Signature]  Date: 08.02.2000
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To all who should have been, but were not singled out by name, special apologies and thanks. Where they have led, I have tried to follow.
DEDICATION

This study is dedicated to my late father, Love Munnick Pantshwa, and my mother, Dorcas Noqwaninga Pantshwa, who set the foundation for my education and who were sources of inspiration, guidance and love to me.
This study is based on the assumption that aurally impaired school-going adolescents also have information needs and that their needs, including school-related needs, are not innately different from those of hearing adolescents. Differences might be found in the way the library and information are accessed, requiring a shift in traditional methods. Libraries, because of the nature of materials they house, have traditionally been formidable places for people with hearing impairments.

The study population, from selected schools in the Eastern Cape consisted of 36 adolescents who were in grade 7 in 1998. They were surveyed by means of an interview schedule. Information requested related to which information providers they accessed in order to satisfy their needs and the perceived level of satisfaction experienced with the information provider.

Some of the findings showed that, for a variety of reasons given by the adolescents, the most helpful provider was the teacher, followed by the television and books.

What gradually became clear, through analysis of the data, was that respondents drew heavily upon interpersonal information providers. Even those respondents with a library relied upon teachers for information. A library constituted a secondary and often unimportant institutional information provider.
The conclusion drawn is that, although teachers are perceived as helpful sources of information for the majority of the aurally impaired school-going adolescents surveyed, teachers do not satisfactorily respond to the needs of aurally impaired school-going adolescents.

Recommendations for possible future services are made in the light of the literature review and the adolescents' responses to the questions.
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THE NEW PROVINCES OF THE REPUBLIC OF SOUTH AFRICA

Northern Province
Mpumalanga
Gauteng
North-West
Free State
KwaZulu-Natal
Northern Cape
Eastern Cape
Western Cape

Matotsi (1996)
SOUTH AFRICA
EDUCATIONAL REGIONS

DEPARTMENTS OF EDUCATION FUNCTIONING IN THE AREA:
1. DEPARTMENT OF EDUCATION FOR INDIANS
2. DEPARTMENT OF EDUCATION FOR KAFIRS
3. DEPARTMENT OF EDUCATION FOR COLOUREDS
4. DEPARTMENT OF EDUCATION FOR BLACKS OUTSIDE THE SELF-GOVERNING AND INDIAN PROVINCES

Item 3
Motsele (1996)
CHAPTER ONE

INTRODUCTION TO THE STUDY

1.1 BACKGROUND TO THE STUDY

1.1.1 Geographic area

Geographically, the study is confined to the province of the Eastern Cape, one of the nine provinces of South Africa. The division of the country into nine provinces came into effect on April 27, 1994 (see item 1, showing the new provinces of South Africa). The Eastern Cape is a fairly large province, 170 616 square kilometres in extent, with a population of approximately seven million people. More than 70% of the population live in rural areas. It is the second poorest of the nine provinces, with a high rate of unemployment, approximately 42% (Matoti 1996:16).

The Eastern Cape is divided into six regions, each with a capital city: Northern region (Queenstown), Southern region (Butterworth), Eastern region (Umtata), East Griqualand (Kokstad), Central region (East London), and Western region (Port Elizabeth). These regions are newly devised administrative entities of the Eastern Cape Department of Education and Culture since 1994 (see map of the Eastern Cape on item 2) showing the six regions. The study was conducted in the Eastern region, Central region and Western region.
1.1.2 **Socio-economic context of the study**

The context of the background of the study is discussed under three sections: socio-economic state of the Eastern Cape province, the state of education and schooling and the state of libraries in the province.

1.1.2.1 **Socio-economic state of the Eastern Cape**

One of the many features of apartheid was a severe under-funding of social and economic services in the former Bantustans and “independent states” (also known as the TBVC states (Transkei, Bophuthatswana, Venda and Ciskei) (South Africa. Office of the Deputy President 1997:6). This had a particularly severe impact on people with disabilities who found themselves in an inhospitable environment, facing poor living conditions and unable to access the help they needed.

As stated, the province of the Eastern Cape covers an area of over 170 616 square kilometres and is the second largest province in South Africa, with a population of approximately seven million people and a current population growth rate of nearly 2.7%. This province includes two of the former Bantustans, the Ciskei and Transkei. Almost 70% of the population is rural, with an economy that is based on government grants, remittances, pensions, informal employment and migrant labour (South Africa. Province of the Eastern Cape 1997:8). The province suffers from being among the poorest in South Africa, with a per capita income of less than half the national average (South Africa. Province of the Eastern Cape 1997:8). The challenges
currently facing the province include a high level of poverty, unemployment and migrancy, exacerbated by skewed racial, social and spatial development, low levels of literacy, education and skills, and inherited government machinery, characterized by fragmentation (South Africa. Province of the Eastern Cape 1997: 4).

The socio-economic difficulties of the province are currently further exacerbated by spatial distortions, which have resulted in certain areas suffering severely from almost total economic isolation. These distortions result from irrational settlement patterns and development policies imposed under the apartheid-era homeland regimes of the then Ciskei and Transkei (South Africa. Province of the Eastern Cape 1997: 8).

1.1.2.2 **Education and schooling in the Eastern Cape**

Before the attainment of independence in April 1994, South Africa was divided into four provinces, the Cape, Natal, the Orange Free State and the Transvaal, and the homelands (see map of the old South Africa in item 3). As a former homeland, and compared with the rest of South Africa, the literacy rate of the adult population in the Eastern Cape (72.3%) is well below the official average of 82.2% (Province of the Eastern Cape 1998/99). Many of the illiterate are aged people and women in rural areas. The quality of schooling is extremely low. The limited capacity of special schools, particularly in rural areas, has resulted in the majority of learners from these areas being excluded from educational opportunities altogether, as the
environment in regular schools does not facilitate integration (South Africa. Office of the Deputy President 1997: 37). It is estimated that almost 70% of children of school-going age who have disabilities are presently out of school. This results in illiteracy and low skills amongst adults with disabilities, contributing significantly to high levels of unemployment.

Disabled children and their parents have very little or no choice as to which option, mainstream or special schooling, they wish to have access. The following problems define the context of schooling in the Eastern Cape: inadequate provision of facilities for early childhood development and barriers to learning and development.

1.1.2.2.1 Inadequate provision of facilities for early childhood and development

Education at the early childhood development phase has been sadly neglected in South Africa. It is vitally important to identify learner needs early, so that intervention can enable learners to sustain effective learning (South Africa. National Commission on Special Needs Education (NCSNET) and National Committee on Education Support Services (NCESS) 1997: 23-4). Other inequalities, such as those resulting from discrimination based on race and gender, as well as urban or rural disparities, are starkly evident in this sector.

It is estimated that about 10% of children in South Africa between the ages of 0 and 6 years receive early intervention services. A recent study conducted
by the Community Child Development Centre, a non-governmental organisation (NGO) operating in the Eastern Cape, revealed that Early Childhood Development (ECD) centres that admitted children with disabilities each have an average of 1.5% disabled children. This constitutes less than 1% of the total number of children admitted to the educare centres included in the survey (South Africa. NCSNET and NCESS 1997: 24). The lack of early intervention services and facilities constitute the most severe barrier to learning and development for this sector in the education system.

1.1.2.2.2 Barriers to learning and development

It is universally recognised that the main objective of any education system in a society is to provide quality education for all learners, so that they will be able to reach their full potential and will be able to contribute meaningfully to, and participate in, that society throughout their lives. The responsibility of the education system to develop and sustain such learning, as viewed by South Africa. NCSNET and NCESS (1997: 11), is premised on the recognition that education is a fundamental right which extends equally to all learners. South Africa. NCSNET and NCESS (1997: 11) further assert that exercising this responsibility involves ensuring that the education system creates equal opportunities for effective learning by all learners. The following are the key barriers to learning and development of aurally impaired school-going adolescents: an inflexible curriculum, inappropriate language of instruction and communication and inappropriate and inadequate provision of support services.
1.1.2.2.1 Inflexible curriculum

One of the most serious barriers to learning and development can be found within the curriculum itself and related primarily to the inflexible nature of the curriculum, which deters it from meeting the diverse needs of learners. When learners are unable to access the curriculum, learning breakdown occurs. The nature of curricula at all phases of education involves a number of components which are all critical in facilitating or undermining effective learning. Key components of the curriculum, as identified by South Africa, NCSNET and NCESS (1997:16), include the style and tempo of teaching and learning, what is taught, the way the classroom is managed and organised and the materials and equipment which are used in the learning and teaching process.

One of the most serious ways in which learners are prevented from accessing the curriculum is through the inadequate provision of materials or equipment they may need for learning to take place. Such barriers often affect learners with disabilities who do not receive the necessary assistive devices which would equip them to participate in the learning process. Lack of provision of assistive devices for learners who require them, as noted by South Africa, NCSNET and NCESS (1997), may impair not only the learning process, but also the learner's functional independence, preventing them from interacting with other learners and participating independently in the learning environment.
1.1.2.2.2.2 Inappropriate language of instruction and communication

A further problem arising from the curriculum is that of the medium of teaching and learning. Teaching and learning of aurally impaired learners often takes place through a language which is not their first language. It is, therefore, imperative to understand what sign language is. The question of language of instruction is closely linked to the problem of quality and use of teachers. Sometimes educators, often through inadequate training, use teaching styles which may not meet the needs of some of the learners.

1.1.2.2.2.1 Sign language and its historical background

According to the Deaf Federation of South Africa (DEAFSA 1998c:1), sign language is a naturally occurring language which develops as a result of the need to communicate among members of aurally impaired communities. Sign language is a language that occurs in the visual-gestural modality. This means it is produced by using the hands, face, head and upper torso and is processed by the eyes. In contrast, spoken languages are produced using the mouth, tongue and vocal-chords and are processed by the ears.

Different sign languages have developed in different countries where aurally impaired communities exist, for instance British Sign Language (BSL), American Sign Language (ASL), Ethiopian Sign Language (ESL), South African Sign Language (SASL), and so on. Sign language is not universal or international, as many people incorrectly believe. Sign languages are made by real people, the aurally impaired, making them dynamic, constantly
changing and developing, like any natural human language which is capable of developing new vocabulary when needed (DEAFSA 1998c: 2). Each country's aurally impaired community develops its own sign language, despite some similarities of grammatical features that are shared by all known signed languages of the world. The way aurally impaired Americans may decide to name the world about them is different from way the aurally impaired South Africans may do. Different sign languages may have handforms which, in some instances, may be culturally unacceptable in other sign languages. Some handforms and combination of movements may be the same in two sign languages, but the meanings could be completely different (DEAFSA 1998c: 5).

Deafness and aurally impaired people are as old as humanity itself, but the earliest communication and education of aurally impaired was in the 16th century. Aurally impaired children of very rich parents in Spain were placed under the care of a monk to be taught how to speak. Speech was required in order to acquire wealth (DEAFSA 1998c: 2). This marked the beginning of the oral versus sign language controversy, which raged on for centuries. The oral method involves teaching or communicating with aurally impaired people through the medium of spoken language (speech). This method was highly developed in Germany and became known as the "German method". The use of sign language was highly developed and was used in schools for the aurally impaired in France, hence the name "French method". In 1880 there was an attempt to eradicate sign language. A conference in Milan, Italy,
which was attended by hearing teachers and educationalists, but which excluded aurally impaired people, passed a resolution which banned the use of sign language in schools of the aurally impaired\(^1\). Sign language became an underground language. Aurally impaired children used sign language outside the classroom situation and so it remained a **living** and natural language.

In 1960 a scientific research report on American Sign Language (ASL) showed that sign language was a natural language with its own grammar, independent of any spoken language. Sign language can be analysed at any of the same levels used for spoken languages in terms of phonology, morphology, syntax, semantics, pragmatics and discourse analysis. In the 1970s, Simultaneous Communication (SIMCOM) or Total Communication (TC) was developed. This is a system adapted by the oralists in an attempt to represent English visually. SIMCOM/TC involves signing and speaking at the same time. English or any spoken language has its own grammar, as does sign language, and when one uses both languages at the same time, one violates the grammar of both languages. The 1980s saw the advent of the bilingual-bicultural approach. According to this approach, aurally impaired people use sign language and written/read/spoken language, such as English, Zulu, Afrikaans and so on. It acknowledges that aurally impaired people live in two cultures, the one being the majority (that is hearing) and the

\(^1\)There is a slogan today which says “nothing about us without us” by the aurally impaired people in South Africa (Anonymous).
other being their own culture (namely aurally impaired culture). Hearing people who come into contact and interact with aurally impaired people, for example parents, siblings, teachers and society in general, also learn to function in two cultures (DEAFSA1998b: 3).

1.1.2.2.2.2 The language issues for an aurally impaired child

The majority of people who are currently of service to the aurally impaired adolescents are not proficient in sign language, which is supposed to be the medium of instruction. The medium of instruction in schools for the aurally impaired in South Africa is English. These adolescents have to learn all the subjects through a foreign language, English. This not only places these learners at a disadvantage but it also leads to linguistic difficulties which contribute to learning breakdown (South Africa, NCSNET and NCESS 1997:17).

South Africa. NCSNET and NCESS (1997:17) further argue that second language learners are often subjected to low expectations, discrimination and lack of cultural peers (see 2.1 on the concept of an aurally impaired culture). Educators, furthermore, often experience difficulties in developing appropriate support mechanisms for second language learners. J.R. Firth, in The tongues of men, originally published in 1937, describes the human being as "Adam, the speaking animal" (1964:19) and later describes language, and particularly speech, as the telephone network, the nervous system of our society, much more than the vehicle for the lyrical outburst of the individual
soul (Firth 1964: 19). It is a network of bonds and obligations. A common language is a sort of social switchboard which commands the power grid of the driving forces of society (Firth 1964: 113). It is the repository and means of articulation of values, beliefs, prejudices, traditions and past achievements. It is the distinguishing characteristic of the human being, it is at the heart of the culture of people, it is what makes people see themselves as different, and it is related to issues of identity, position and power. When it is linked to colour prejudice or class privilege, for example, language can be a highly emotional and political issue, capable of being mobilized as a powerful social instrument.

Because of these considerations, language policies for education are highly charged political issues and seldom, if ever, are decided on educational grounds alone (Hartshorne 1992: 186). When they are made, they are almost invariably subject to mistrust and misunderstanding by some sections of the community. In South Africa these decisions have had to do with issues of political dominance, the protection of power structures, the preservation of privilege and the distribution of economic resources. As with schooling, language policy has been an instrument of social and political control (Hartshorne 1992: 186).

Such barriers can be particularly destructive for aurally impaired learners, whose first language is sign language. The majority of aurally impaired people (90%) are born to hearing parents and therefore do not acquire sign
language as a mother tongue. They acquire sign language at school from their peers. Sign language is the first language of the majority of aurally impaired adolescents. South African Sign Language (SASL), despite regional differences and variations, has the same grammatical structure countrywide. There is not a one-to-one relationship between sign language and English. One sign may be translated into English by more than one word, a phrase or a sentence. Likewise, an English word may be represented by more than one sign (DEAFSA 1998c: 5). For example, in sign language you say, deaf you, whereas in signed English it means, are you deaf? Signed exact spoken languages, that is making a sign for each word in a spoken language such as English, Zulu, Xhosa are not sign languages. They are merely forms of communication because they do not follow the grammatical rules of either spoken or signed language (DEAFSA 1998c: 5). Misconceptions with regards to the morphological, syntactic, discourse, pragmatic, phonological and semantic structures of sign language, which are entirely equal in complexity and richness to that which is found in any spoken language, often lead to aurally impaired learners being forced into learning through the so-called “oral method” (as referred to on page 8), or having to learn through signed spoken languages (for example, signed English or Setswana and so on). Being able to access sign language as the medium of teaching and learning enables these learners to develop bi- and multi-lingualism through sign language as the medium of teaching and learning (South Africa. NCSNET and NCESS 1997: 17). Communication is essential for learning and development in both formal and informal contexts.
The researcher, as a teacher librarian at a school for the aurally impaired from 1992 to 1998, was able to observe closely the problem of teacher proficiency in the language of instruction. The problem still persists and it makes the teachers teach through signed English. As a result, teachers slide to the "rote-note grill-drill" approach in their pedagogy. It also encourages rote learning and crude memorisation of work by the aurally impaired adolescents.

In addition to the problem of the quality of human resources, there is also the one of the poor quality of physical resources and equipment and, in some cases, a serious lack of such facilities. Before discussing the condition of physical resources at the schools for the aurally impaired, it is necessary to comment briefly on the inappropriateness and inadequate provision of support services.

1.1.2.2.3 Inappropriate and inadequate provision of support services

Some particular mechanisms and processes are needed to support diversity and enable the education system, including educators and learners, to minimise, remove and prevent the barriers which may occur. Basic services which may support learners are often lacking or limited in schools for the aurally impaired. This is especially true in South Africa, where access to professional assistance is limited or non-existent.
One of the key contributing factors to inappropriate and inadequate support provision is related to the nature of human resource development of both educators and personnel who provide services to learners and their families (South Africa. NCSNET and NCESS 1997). Not only does poor provision in this area lead to a dearth of necessary skills and knowledge, but it also contributes to a system which is unable to meet a diversity of learner needs and prevent barriers to learning and development.

1.1.2.3 **State of libraries in schools for the aurally impaired**

The problem of inequalities in educational funding and resources in South Africa is well documented (Behr and MacMillan 1971; Nasson 1990; Hartshorne 1992: 186; NEPI 1992). One of the most significant barriers to learning remains the inability of learners to access educational provision, covered below, and their inability to access other services which contribute to the learning process (South Africa. NCSNET and NCESS 1997:12). In most instances the inability to access educational provision results from inadequate and non-existent services and facilities, which are key to participation in the learning process.

Libraries in South Africa are underdeveloped, in fact many schools for the aurally impaired have no libraries at all. The state of librarianship in the Eastern Cape is far from satisfactory. According to Totemeyer (1985:63) and Pholozi (1994: 3) school libraries were, and still are, almost non-existent and the few libraries which do exist are disorganised. For example, out of the five
schools for the aurally impaired in the Eastern Cape, there is only one school, Efata School for the Blind and Deaf, that has a library, but the materials they have are inappropriate for this user group. Most of the materials are donations. According to Totemeyer (1985:60), such donations can be a burden, when they consist of old, shabby, dull and unattractive books which are not suitable for a school library. Materials that would open new doors for the aurally impaired are videotapes, which could become to them what talking books are to the blind. Videotapes capture and store the essence of information in visual form, particularly if material is filmed in sign language with subtitles or even clearer enunciation and close-ups of the speakers for lip-readers. However, what is needed for the aurally impaired is literature especially written and designed for them. At present this is non-existent in South Africa and the same is true of visual materials.

A couple of obstacles, observed by Applin (1999:139), account for the reactive approach. First of all, the specialised equipment necessary for providing adequate services is costly and therefore deemed unaffordable. Applin (1999:139) further argues that libraries are not anxious to purchase expensive items which may only be used for a short time by one or two persons.

Funding of school libraries still seems to be a major problem in the Eastern Cape, the then Transkei (Totemeyer 1985: 60). There is no set policy as to how school libraries in the Eastern Cape are to be funded and this, according
to Totemeyer (1985:61), accounted for the poor state of school libraries in the 1980s. The experience of the researcher as a teacher librarian at Efata School for the Blind and Deaf was that even when funds were allocated to the library, the funds were channelled to other things considered to be “priorities”. A library was not regarded as a priority in the first place. The funds to finance the library come from school funds and some from the Department of Education.

There is no well-documented evidence of library services in the Eastern Cape provided for the aurally impaired, as compared to the blind, and there is no evidence to indicate that there are even plans to incorporate services to this user group into the public library service. Most public library collections are comprised mainly of the output of mainstream publishers, which is easily obtained through the existing channels of library supply, and is largely unsuitable (Coleman 1981:16-20). Books are still the mainstay of most public library collections. Few libraries have investigated the provision of games, worksheets, flashcards, slides, tapes, cassettes, videotapes and so on. Coleman (1981:16-20) envisages greater promotion of audiovisual library services to those sectors who find reading an unattractive pursuit. Therefore, when comparing the services offered to the aurally impaired overseas and the services available in South Africa as a whole, it can be said that South Africa has still a long way to go in developing its services to the aurally impaired.
1.1.3 Background to the study: the situation of the aurally impaired

The National Commission on Special Needs Education and Training (NCSNET) and the National Committee on Education Support Services (NCESS) (NCSNET and NCESS 1997: 21) joint report produced the history of education for learners with special needs and education support services in South Africa. It reflects massive deprivation and lack of provision for the majority of people. These inequities, according to South Africa. NCSNET and NCESS (1997: 21), can be directly attributed to those social, economic and political factors which pervaded the history of South African society during the years of apartheid. These factors have resulted in limited educational opportunities for many learners; inequalities between provision for white and black learners; a highly inefficient and fragmented educational bureaucracy which has separated and marginalised these learners from the mainstream, as well as resulted in the provision of highly specialised services to a limited number of learners only. South Africa. NCSNET and NCESS (1997:21) argue that this system has been supported by legislation and policy which entrenched these inequalities by institutionalising racial segregation, labelling learners with 'special needs' and separating them from their peers.

South Africa. NCSNET and NCESS (1997:21) assert that the history of educational provision for learners with 'special needs' and support services was also characterised by the involvement of non-governmental structures, including churches. As South Africa. NCSNET and NCESS (1997: 21) put it, the lack of provision and the nature of much of the limited provision that
existed led to the development of advocacy groups, alternate practice methods and innovative responses to the limitations of the system. South Africa. NCSNET and NCESS (1997) maintain that, in South Africa, the first schools for learners with disabilities were church schools set up for aurally impaired and blind learners.

Jarvis (1998a) reports that today there are some 34 schools for the aurally impaired in South Africa, with approximately 1,500 educators. He further maintains that, of these, only three are qualified educators for the aurally impaired. According to the National Deaf Resource booklet (1998 :2), in the Eastern Cape there are five schools for the aurally impaired in the Eastern Cape, namely Reuben Birin School for the Hearing Impaired, Greenwood Primary School, Efata School for the Blind and Deaf, St Thomas School for the Deaf and Theodore Blumberg Pre-School for the Deaf (pre-primary).
Table 1: Prevalency figures on deaf and hard-of-hearing people (aurally impaired) in South Africa, based on central statistical services – 1995 mid-year estimates

<table>
<thead>
<tr>
<th>PROVINCE</th>
<th>Total population</th>
<th>Profoundly deaf (1%)</th>
<th>Extremely hard-of-hearing (3%)</th>
<th>TOTAL deaf and hard-of-hearing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Cape</td>
<td>3 721 200</td>
<td>37 212</td>
<td>111 636</td>
<td>148 848</td>
</tr>
<tr>
<td>Eastern Cape</td>
<td>6 481 300</td>
<td>64 813</td>
<td>194 439</td>
<td>259 252</td>
</tr>
<tr>
<td>N. Cape</td>
<td>739 730</td>
<td>7 397</td>
<td>22 192</td>
<td>29 589</td>
</tr>
<tr>
<td>Free State</td>
<td>2 782 470</td>
<td>27 825</td>
<td>83 474</td>
<td>111 299</td>
</tr>
<tr>
<td>KZN</td>
<td>8 713 100</td>
<td>87 131</td>
<td>261 393</td>
<td>348 524</td>
</tr>
<tr>
<td>North West</td>
<td>3 351 790</td>
<td>33 518</td>
<td>100 554</td>
<td>134 072</td>
</tr>
<tr>
<td>Gauteng</td>
<td>7 048 300</td>
<td>70 483</td>
<td>211 449</td>
<td>281 932</td>
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<td>30 070</td>
<td>90 211</td>
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<tr>
<td>N/Province</td>
<td>5 397 200</td>
<td>53 972</td>
<td>161 916</td>
<td>215 888</td>
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<td>TOTAL</td>
<td>41 242 130</td>
<td>412 421</td>
<td>1 237 264</td>
<td>1 649 685</td>
</tr>
</tbody>
</table>

Statistics provided by DEAFSA 1998a

Figures for the number of aurally impaired people in South Africa are difficult
to find as they are a minority and marginalised group. For instance, Table I reflects a total of 1,649,685, whereas Molakeng (1998) reports a total of 500,000. According to Molakeng (1998), in South Africa there are about 500,000 hearing impaired people, the majority being black.

Jarvis (1998b) maintains that the majority of the aurally impaired community in South Africa live in rural and informal settlements, and maintain income and subsistence levels lower than those of their hearing counterparts. Jarvis (1998b) says that aurally impaired learners in South Africa are being educated in their second or third language from pre-school onwards and they are being taught by hearing teachers who cannot converse in a rudimentary way with their learners in a sign language.

According to South Africa, NCSNET and NCESS (1997:39), very few teachers educating aurally impaired learners are presently equipped to teach through the medium of sign language. They further maintain that very few house parents in hostels with aurally impaired learners can communicate through sign language. As South Africa, NCSNET and NCESS (1997:17) put it, teaching and learning for aurally impaired learners takes place through a language which is not their first language. This not only places these learners at a disadvantage, but it also leads to linguistic difficulties which contribute to

\footnote{It has to be noted that signed exact English or signed English is not the same as sign language. Sign language is the first and natural language of the aurally impaired. See background to the study (section 1.1.2.2.2.2.1) for more information on sign language.}
learning breakdown. Barriers arising from the curriculum are those which result from the medium of teaching and learning. Such barriers can be particularly destructive for aurally impaired learners whose first and most favoured language is sign language.

This is echoed by Jarvis (1998b), KwaZulu-Natal Education Superintendent-General, when he says that the aurally impaired in South Africa are mostly educated in their second and third language from pre-school to high school, instead of sign language which would benefit them most. Jarvis (1998b), at the launch of a pre-primary and junior primary education diploma for the aurally impaired and partially deaf in Durban, stated that the language barrier has contributed to the under-achievement of aurally impaired learners. Jarvis (1998b) said that research in developed countries has indicated that aurally impaired persons make excellent teachers and transmit the language and deaf culture more effectively than those who are not deaf.

This is supported by Marschark (1998), when he dispelled widely-held myths that aurally impaired adolescents are mentally retarded. Referring to a 1917 study that was used to prove aurally impaired adolescents have worse memory skills than hearing children, he shows that such tests rarely take into account the fact that deafness is a language issue. He further argued that typical memory tests relying on time restrictions are not accurate in the case of aurally impaired children, because it takes longer for them to communicate the relevant answers in sign language. He also explained that vital early
learning experiences are lost because of communication difficulties between hearing mothers and their aurally impaired babies. All of which, according to him, result in the aurally impaired adolescent having undeveloped memory and language skills. He stresses that attention should be paid to different things and that aurally impaired adolescents should be taught differently. Marschark (1998) advocates special schools for the aurally impaired. He argues that hearing parents should not try to force their aurally impaired adolescents to be "normal" or attend "normal" schools. This statement points to the fact that some parents tend to deny that their children have this handicap.

The profoundly deaf child who has been unable to hear since birth will not develop language skills without some form of special education. The child with average hearing will have developed a vocabulary of around 5,000 words by the age of five and the acquisition of this vocabulary will have been supported by the formation of a body of general knowledge upon which school work can be based. The aurally impaired child, at five years of age, unless s/he has received some preschool teaching, will have a limited vocabulary and poor communication skills. As a result, children read at a far lower level than their hearing counterparts of the same chronological age and the extent of the difference is six to seven years. A more recent premise is that sign language is a true language system for the aurally impaired and that any difficulty they may experience with conceptual tasks is not due to poor language ability itself, but rather to poor or inadequate communication with
those around them (Hallahan and Kauffman 1986: 253).

1.2 PROBLEM STATEMENT

It has taken a long time for there to be recognition of the centrality of the library within the schooling system for aurally impaired adolescents and that at the very least access to a library service is a human right which is fundamental to the future lives of children. The South African government in the apartheid era regarded schooling of aurally impaired adolescents as a charitable exercise best performed by the churches. Any state involvement was grudging and extremely limited and aimed at gaining the maximum amount of control over what the churches were doing, with the minimum expenditure (South Africa, NCSNET and NCESS 1997).

The present study arose as a concern about the lack of effective information provision for aurally impaired and a recognition within the librarianship profession that this is a neglected research area. This is supported by Heeks and Kinnell (1997:144) in the LESSEN (Learning Support for Special Educational Needs) project, undertaken at Loughborough University’s Department of Information and Library Studies, from 1994 to 1996. The project arose from two different sources: concerns in schools about effective resource provision for children with learning difficulties and recognition by the British Library and within the librarianship profession that this was a neglected research area.
A review of related literature reveals that no study which examines the information seeking patterns of aurally impaired school-going adolescents has yet been conducted in South Africa. Their information-seeking patterns, as well as the information providers they access to satisfy their information needs, are not known. This is the reason why the present researcher saw the need to establish where and how aurally impaired school-going adolescents satisfy their information needs.

This investigation into the information-seeking patterns of aurally impaired school-going adolescents proceeds from the assumption that they have their needs and that their needs, including school-related needs, are not different from those of normal hearing school-going adolescents. The only difference may be in the way the library and information services are accessed, requiring a shift in the traditional methods, as suggested by Lenn (1996: 14).

1.3 PURPOSE OF THE STUDY

The study aimed to investigate information-seeking behaviours and information providers of aurally impaired school-going adolescents. This was achieved by surveying a sample of adolescents in selected schools for the aurally impaired in the Eastern Cape. This study is intended to generate the baseline data showing the dimensions of who gets what information from where, why and how. This data relates specifically to the nature of information providers, for example their accessibility and the institutional barriers that make them inaccessible to some information-seekers. Related
literature will also be reviewed and conclusions will be integrated with the findings of the survey.

1.4 **RESEARCH OBJECTIVES**

The following research objectives were identified:

1) to establish whether or not aurally impaired school-going adolescents do seek information to satisfy their needs;

2) to establish the information-seeking and utilization patterns of the aurally impaired adolescents;

3) to establish which information services and/providers are available to satisfy information needs of the aurally impaired;

4) to detect barriers to their information-seeking and use of information providers;

5) to make recommendations on the best way(s) that libraries and information services can better serve aurally impaired adolescents.

1.5 **RESEARCH QUESTIONS**

The research questions arising from the objectives were:

1) Do aurally impaired adolescents seek information to satisfy their information needs?

2) How do they access this information?

3) Where do the aurally impaired adolescents go to find information?

4) Do the aurally impaired succeed in retrieving and using this information?
5) What recommendations can be made to libraries and information services pertaining to the needs of aurally impaired adolescents?

1.6 SIGNIFICANCE OF THE STUDY

Since there is no literature concerning the information-seeking patterns of the aurally impaired in the South African context, this study should fill a significant gap and should have some practical consequences for this particular information user group. Other outcomes are likely to be that library policy-makers and programme-planners will be made conscious of the information needs of the aurally impaired, and made aware of other delivery systems that can be used to deliver information to the aurally impaired.

Taking these facts into consideration, the researcher believes a study of this nature, which investigates the information-seeking patterns and information providers of aurally impaired scholars, would provide an insight into the various sources used by these scholars. This study intends to offer recommendations for school librarians to consider in welcoming aurally impaired adolescents into the library. It is hoped that this would ultimately provide the policy-makers and library-planners with vital information that would assist them in designing school library services for the aurally impaired.

Kinnel and Pain-Lewins (1988:95) see school libraries as significant resources which are often reported to be under-used, to the detriment of pupils. Yet, according to Kinnel and Pain-Lewins (1988:95), well-used school
libraries can be economical sources of learning. Research will help in showing the way; not only demonstrating why school libraries are essential, but indicating other delivery systems that can and should be used (in libraries) to deliver information to the aurally impaired.

1.7 DEFINITIONS OF KEY TERMS

For the purpose of this study, the following definitions were used for the following key terms:

AURALLY IMPAIRED: This is the term which is employed in this study to include both the hard of hearing and the profoundly deaf. It is a comprehensive term in which various degrees of hearing loss in children are accommodated. For the purposes of this study, hard-of-hearing and deaf adolescents were included in the population. The word "deaf" is used by some writers in two senses. In a broad sense, the deaf include all individuals with any degree of hearing loss, but particularly people who cannot understand spoken messages through hearing alone. Additionally, the capitalized word "Deaf" is used by some to refer to profoundly deaf people whose community and culture are based on
common experiences, such as growing up in institutions for the deaf and who share a common language - sign language. In this study, the researcher will consistently use the term aurally impaired, while simultaneously acknowledging and accepting that other writers use different terms, such as hearing impaired and deaf.

DEAF:

Deaf people can be divided into two sub-groups, depending on the time the hearing loss set in:

(a) According to the Deaf Federation of South Africa (DEAFSA 1998c), the word deaf refers to a person who was born deaf or became deaf before the acquisition of the language of the immediate family. Such a person has a moderate-severe to profound hearing loss, belongs to the deaf culture and uses sign language as the prime mode of communication.

(b) Postlingual/deafened: this refers to a person who acquired moderately-severe to profound hearing loss after the acquisition of a spoken language and who is dependent upon the visual sense for additional information for the purpose of spoken communication.
HARD-OF-HEARING: This term refers to a person with a minimum to moderate hearing loss, whose primary mode of communication is the spoken language and who could in most circumstances benefit from the use of a hearing aid. Wright (1979) says hard of hearing may be able to hear some speech but may have difficulty in decoding spoken word.

INFORMATION NEED: Chen and Herman (1982: 37-38) define "information need" as an abstract construct used to represent why people seek, find, and use information. In this context, information is defined as any stimulus that reduces uncertainty and need is defined as a recognition of the existence of this uncertainty in the personal or school-related life of scholars. In this study focus is on personal rather than curriculum-related needs.

INFORMATION-SEEKING: According to Varlejs (1987:2), the term 'information-seeking' has become as generic in its meaning as 'user', embracing the pursuit of facts in answer to simple questions, literature searching as part of the research process, viewing or listening to creative performances and reading for pleasure.
Varlejs (1987) uses the term in a very broad sense, so that the term pertains not only to questions such as who are the users of libraries and formal information systems, and how they use these and for what purpose, but also to more generic questions of how a person goes about finding the "message that satisfies a perceived need." This approach follows Chen's work (1982:6), in which information-seeking patterns are defined as "the paths pursued by individuals in the attempt to resolve a need."

1.8 SUMMARY OF THE CHAPTER

This chapter gives an overview to the background of the study. It also discusses some of the general problems and issues involved in the teaching and the learning of aurally impaired adolescents which place these learners at a disadvantage. The issue of language (English) in teaching and learning has been noted as a barrier and can be particularly destructive for these learners whose first and most favoured language is sign language. Also included in this chapter is the problem statement, purpose, research objectives, research questions, significance of the study and definitions of the key terms used in the study.
CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 Introduction

This chapter reviews related literature on aspects concerning aurally impaired school-going adolescents. It includes the concept of aurally-impaired culture, the learning needs of aurally impaired adolescents, their education, literature and libraries. The literature and research with specific reference to South Africa has also been reviewed.

2.1 THE CONCEPT OF AN AURALLY IMPAIRED CULTURE

According to DEAFSA (1998b: 1), aurally impaired people all over the world view themselves as belonging to a linguistic minority with its own culture. This, according to Hagemeyer (1992:9), is called “deaf world” by aurally impaired people. DEAFSA(1998b: 1) maintains that the aurally impaired community has its own language (sign language) specifically for the South African Deaf Culture - the South African Sign Language (SASL). DEAFSA (1998b: 1) and Hagemeyer (1992:9) agree that the aurally impaired culture is like any other culture; it has its own history, shared values, social norms, customs and technology which are transferred from generation to generation.
DEAFSA (1998b: 2) reported that sign language was the main element that binds aurally impaired people together, but it was suppressed and not accepted in a aurally impaired person’s life, that is at home, school and society in general. DEAFSA (1998b) further argued that aurally impaired people were seen as deviants from general societal norms and therefore in need of rehabilitation. This gave rise to a view of deafness called the clinical or pathological view (DEAFSA 1998b).

KaSonandzi (1998) states that it is important for the community to learn more about the aurally impaired culture, because black communities tend to give the aurally impaired derogatory terms like “isidenge” (those without brains). It is argued by DEAFSA (1998b) that hearing people focus on how aurally impaired people are different from themselves and define the differences negatively. Descriptions of aurally impaired people, especially in intra-personal and interpersonal spheres, often have negative connotations. The aurally impaired population is one about which many less appealing generalisations have been made.

Lane (in Kirkham 1995:2), a major figure in the field of psychology and an expert on the aurally impaired, has reviewed the literature on the psychology of the aurally impaired. He presents lists of social, cognitive, behavioural and emotional traits attributed to aurally impaired people. Social traits include being dependent, immature, morally undeveloped, suggestible and having weak conscience. Cognitive traits ascribed to aurally impaired people include
egocentricism, poor insight, poor language, poor self-awareness and
stubbornness. Emotional traits include being emotionally disturbed/immature,
moody, lacking in empathy, neurotic, temperamental and unfeeling. Although
some traits are at times contradictory, for example aurally impaired people
are described as both aggressive and submissive, trait attribution is
consistent in that it presents a picture of aurally impaired people which is
negative and unfavourable. Lane states that these traits do not represent
objective descriptions or characteristics of aurally impaired people but are
stereotypes imposed upon a cultural minority (the aurally impaired) by a
cultural majority (hearing people). He writes that such stereotypes are born
from a lack of knowledge of the people concerned and serve to perpetuate
the dominance of one group over another. According to Lane, the so-called
"psychology of the aurally impaired" pathologises cultural differences and
interprets difference as deviance.

2.2 LEARNING NEEDS OF AURALLY IMPAIRED

Moores (1991:35) and Odien (1992:94) state that throughout the history of
the education of the aurally impaired there has been a great deal of
controversy and debate. These issues, according to Moores (1991:35) and
Odien (1992:94), may be framed in the form of the questions: where should
aurally impaired adolescents be taught; how should aurally impaired
adolescents be taught; and what should aurally impaired adolescents be
taught? According to Odien (1992:94), 'where' refers to the appropriate
educational placement;
'how' is the means of instruction either oral or manual. Moores (1991:35) sees the second issue (how) as evolving from the traditional oral/manual controversy to the more recent manual/manual controversy which is concerned with the relative merits of instruction using manual communication systems based on spoken languages (such as signed English or signed Swedish) as opposed to sign languages used by aurally impaired adults, which have different structures and vocabularies from the spoken languages of a particular country or area. The third question (what) involved the matter of curriculum. These controversies, according to Odien (1992:94), reflect the ongoing issues in the education of aurally impaired adolescents and, consequently, these are the issues that need to be considered when addressing school library programming.

At the 1990 International Congress on Education of the aurally impaired, Moores (1990, 1991) describes the three central issues in the education of aurally impaired adolescents. He discusses the debates of "where, how and what to teach aurally impaired adolescents". In his discussion of what to teach aurally impaired adolescents, Moores writes that prior to the 1980s the training of teachers and the daily curriculum reflected a special needs orientation. Moores states in 1991 that the inter-relatedness of regular education and aurally impaired education, along with changing placement patterns, would force aurally impaired education to confront the issues of subject matter, curricula and teachers' competencies. Kellerman (1996:10) supports the view by stating that there is evidence that aurally impaired
adolescents benefit from the subject matter expertise of their teachers, regardless of whether the school is mainstream or not.

It is important to note that aurally impaired adolescents are not a homogeneous but a heterogeneous group, as supported by Odien (1992:94) in his assertion that different types and levels, as well as onsets of hearing loss, affect the educational process of these individuals. Among the special learning needs of aurally impaired learners are special language instruction, special speech instruction, aural habilitation instruction, instruction through manual methods, a visual emphasis in instruction, differentiated curricula from different groups and specially created support materials (Bunch 1987: 5). He further argues that the need for visual compensation for auditory limitations places an emphasis on visually oriented instruction, thereby emphasising the use of media to assist in instruction of that population. These include captioned films, television, slides and computers. As Bunch (1987:8) puts it, while such technical materials are not curricular in and of themselves, their role in education of the aurally impaired must receive consideration. This is echoed by Monroe (1986:38) who states that all of the experts in the field emphasize the importance of audiovisual material to ease the aurally impaired adolescents' burden of learning the English language. Captioned filmstrips, movies and slides do this, as well as captioned videos and television programmes.
Odien (1992:88) argues that the unique learning needs of aurally impaired adolescents and, in many instances, their unique educational placement process, point to a need for library standards specific to schools for the aurally impaired. Their school library must look at the full spectrum of the learners and their educational needs within the widest range of placement options.

2.3 **Educating the aurally impaired child**

Kellerman (1996:4) sees education of the aurally impaired, along with sign language, as the golden key to the aurally impaired person's development. Not all schools for the aurally impaired have the same education standards; some schools are much more limited than other schools (Kellerman (1996:4). Kellerman further argues that it is DEAFSA's task to standardise the education of the aurally impaired in all schools. Not only should the schools for the aurally impaired have the same curricula, but also the same curricula as all other schools.

According to Kapp (1991:322), in South Africa it has become an established pattern to distinguish between three categories of children, according to hearing loss, and these determine the education they receive, namely:

* partially hearing children;

* hard-of-hearing children; and

* deaf children.
The provision of education for the above categories, according to Kapp (1991:322) is, briefly\(^3\):

- partially hearing children - These children's loss of hearing is such that they can be educated in an ordinary school.
- hard-of-hearing children. These children's hearing loss is of such a nature that they will probably have to spend their whole school career in a school for the hard of hearing, but they will not require the teaching methods used for the deaf. In South Africa it is currently the practice for hard-of-hearing pupils to be accommodated in schools for the deaf, but in separate divisions or classes.
- deaf children - These children's loss of hearing is of such a serious nature that it is necessary for them to be taught by means of teaching methods used for the deaf, that is special teaching methods mainly making use of the visual sense, augmented by the auditory sense.

Kapp (1991:324) maintains that partially hearing and hard-of-hearing children have some residual hearing (that is, the degree of hearing they have attained) and therefore possess a measure of speech that may differ from child to child. Deaf children probably have so little residual hearing that they

\(^3\) The classification system used in South Africa may differ from those used in other countries.
are unable to interpret speech sounds. Therefore, as Kapp (1991) puts it, the methods of instruction used for deaf children differ radically from those used for partially hearing and hard-of-hearing children.

Differences of opinion exist as to the most effective manner of educating aurally impaired children. Some feel that these children should be integrated into and educated in the mainstream schools. Marshall (1981:54) maintains that without a high degree of specialized support, the child with profound hearing loss is not going to be able to do well in a mainstream school, whilst acknowledging that there are many children with a moderate hearing loss (like partially hearing) who could, with some help, do well. Kellerman (1996:5) sees the placement of the deaf and hard-of-hearing learner in any school together with other hearing learners as not possible. The spoken language medium, in Kellerman’s opinion, is feasible only for a highly gifted, profoundly deaf learner, or the hard-of-hearing learner with adequate hearing residue to put him/her through the fast-paced learning process. The sign language medium in any school, as Kellerman (1996:5) puts it, is feasible only if there are enough interpreters to support the learners through the whole schooling process. According to Kellerman (1996: 5), there are extremely low numbers of interpreters in South Africa; therefore learners should not be considered in any school which is not a specialised school for the aurally impaired.
Du Toit (1991:72) sees mainstream education as having both advantages and disadvantages. The first advantage, in his view, is that mainstreaming eliminates labelling and stigmatization, whereas in separate educational facilities the handicapped child is cut off from the mainstream of the life which s/he is part of and this inevitably leads to a degree of labelling. Secondly, it promotes the socialization of the handicapped. Du Toit (1991:73) alleges that when these children are in separate schools, they are often cut off from the community to a certain extent, thus making it difficult for them to acquire the necessary social skills and hampering their integration into society.

The disadvantages, on the other hand, it is claimed, are that the handicapped child in mainstream education in no way receives the same quality of education as in a school for specialised education; that ordinary class teachers are not qualified to handle problems; that the regular classes are too large for attention to be paid to individuals, and so on. Some writers, such as Haring and McCormick (1986:30), argue that the currently popular model of integration into the mainstream classroom does not necessarily mean better educational opportunities. Although it may remove the stigma of segregated education, it fails to meet the individual needs of the exceptional person and it can also, like the segregated classroom, be detrimental to the student.

Bunch (1987:xi) contends that many children are mainstreamed without sufficient consideration of exactly what is to be achieved in the mainstream situation. According to Bunch, objectives and limitations must be clarified, if
unrealistically high or low expectations are to be avoided. Similarly important are ways to predict suitable candidates for mainstream education, to work with the regular classroom teacher, and to approach the curricula with which the student will deal. All must be considered if the mainstream experience is to be as positive as possible (Bunch 1987: xi).

Bunch (1987:3) maintains that if special curricula are prepared, there must be something about aural impairment that makes these learners different. Bunch further argues that the purposes attached to curricula will reflect the differences implied by this impairment as a deviant perspective. Bunch (1987:3) notes: “Once a curriculum designer has determined that the population of interest has special needs, these needs must be worked into the curriculum”. As Bunch stresses, no professional would deny that certain characteristics of aural impairment demand that specific curricula must be designed to meet special needs. This, according to Bunch (1987), is evident from the fact that many aurally impaired adolescents have insufficient hearing for the normal development of speech. This means that special speech curricula must be designed. The fact that many aurally impaired adolescents require special assistance to maximize their use of residual hearing means that aural habilitation curricula must be designed. Such curricula, in and of themselves, address characteristics and learning needs not shared in a similar fashion by average learners or other groups of exceptional learners. Bunch (1987:4) suggests that curricula designed for the aurally impaired are therefore necessary, because curricula created for the bulk of individuals in
society will not adequately meet the special learning needs of the aurally impaired.

2.4 SHARING LITERATURE WITH AN AURALLY IMPAIRED CHILD

2.4.1 Traditional literature

Bettelheim (1977:43), in the book, The uses of enchantment, maintains that he wrote the book to help adults become aware of the irreplaceable importance of fairy tales. By revealing the true content of such stories, he shows how children may make use of them to cope with their baffling emotions, whether it be the feelings of smallness and helplessness, or the anxieties the child feels about strangers and the mysteries of the outside world. Taking the best-known stories in turn, Bettleheim demonstrates how they work, consciously or unconsciously, to support and free the child.

Cullinan (1981:161-200) places folklore into three main categories: folk and fairytales, fables and myths. Schuler and Meck (1992:65) maintain that when using traditional literature with aurally impaired adolescents, the process, as well as the content, is important. Schuler and Meck (1992:65) go on to say that definite selection criteria should be applied when choosing books to use with any child in any setting. Aurally impaired adolescents are more wedded to analogous conceptual and contextual cues than their hearing counterparts. Therefore, for the aurally impaired, as Schuler and Meck (1992) put it, the case is even stronger for careful selection of appropriate materials. For
starting material, books that have a focussed plot line should be chosen. In addition, a tale should possess a well-paced rhythm for reading aloud, humour, teasing, nicely controlled vocabulary and smooth conceptual transitions (Schuler and Meck 1992).

For aurally impaired audiences vision is a crucial element. Time should be given to the illustrations. Sharing pictures, according to Schuler and Meck (1992), requires a broad visual range, as the teller needs to see the text and pictures and the listener needs to see the teller or interpreter. The listener must also absorb the concepts visually related (signed) and their relationship to the picture.

Schuler and Meck (1992:68) suggest that the full range of this theatrical sharing of literature includes videotaping, storytelling, reading aloud, booktalking, and programmes of shared inquiry - such as Junior Great Books or specific to the aurally impaired community-the addition of the element of sign language. Sign language, argue Schuler and Meck, enables the aurally impaired child not only to share the literature but also to share a culture as it is transmitted, understand the differences in a culture, gain a frame of reference, develop a foundation for future reference, and view the world from a specific point of view.

Yolen (1981:91) sums up the effect of story on all of our lives:

we all need the magic of folktales, the magic of wonder, the magic of
language, or the magic of challenging a waiting mind. It is up to the artist, the writer, the storyteller to reach out and touch that awesome magic, then pass it on.

2.5 **READING AND THE AURALLY IMPAIRED**

Bunch (1987:58) defines reading as the meaningful decoding of a graphic symbol system that is coded to represent language and cognitive structures already possessed by the reader. As Bunch (1987:58) puts it, the individual cannot read and make sense of what has not already been experienced and stored in the form of language. Although the act of reading can result in new learning, as Bunch (1987) notes, that new learning is essentially the result of orderly and, perhaps, new arrangement of ideas presented in the form of words, phrases and sentences already known.

Readers understand what they are reading because they are able to take stimulus beyond its graphic representation to an appropriate group of concepts already stored in their memories. Comprehending the text is dependent not only on perception but also on a combination of life experience, linguistic knowledge and cognitive structures (Machet 1992: 91).

Baker (1994) and Stephens (1992:8) support this view, that the way the reader responds to a text is determined by the reader's personal experience which is brought to the reading. The point that reading depends on previous language development is made in the present study for one fundamental
reason: aurally impaired individuals, in general, as stated by Bunch (1987:58), encounter significant difficulty mastering what we call language. The aurally-impaired population finds it enormously difficult to learn to read with average competence, largely due to impoverished language development. As Bunch (1987:75) noted, aurally impaired adolescents are deficient in language when they enter school. Seldom do they attain the same level of linguistic maturity as their hearing peers. One basic position, as noted by Bunch (1987), is that aurally impaired adolescents do not read well as a result of a basic impoverishment in language ability. Truax (in Bunch 1987:75) recognizes this position when she remarked that too often an aurally impaired child is said to have a reading problem, when in fact the problem is really language based.

Kusche and Greenberg (1983:145-146) find in their study that language deficiency stems from the fact that, while teachers of aurally impaired school-adolescents understand sign language, they do not use it when communicating among themselves. Because of this, these adolescents learn only when language is directed to them and they miss out on the wealth of information that hearing children obtain incidentally by overhearing communications among others in their environment.

Monroe (1986:38) maintains that English is a second language for the aurally impaired and sign language is their first and favoured language. Monroe (1986) observes that, more often than not, sign is not the language spoken at
home or at school. The sense of isolation this lack of shared language creates makes it harder to learn and is complicated by the degree and time of onset of hearing loss.

Bunch (1987:75) sees a need to resolve the problem of language development, as many aurally impaired adolescents will be unable to read well because of lack of strength in lexicon, language patterns and rules and in the semantic relationships of language. Not only the code (printed symbols), but also the language (standard English), are unfamiliar. Thus, according to Coetzee (1997:42), the task of learning to read often becomes a language learning process at the same time. As Coetzee puts it, it is frustrating for any child, no matter how intelligent, to follow a story when struggling with the language it is written in.

2.6 AURALLY IMPAIRED PEOPLE AND LIBRARIES: AN OVERVIEW

McDaniel (1992:132) pointed out that the problems experienced by aurally impaired people in learning to read and write indicate why the aurally impaired should not be treated as ordinary patrons by librarians. According to McDaniel (1992), aurally impaired patrons need special materials that take their reading difficulties into consideration.

Aurally impaired people encounter special problems when dealing with the hearing world. Many hearing people do not realize that aurally impaired
people's greatest problem is not that they cannot hear, but that it is either very
difficult or impossible for them to communicate through the spoken language
(Mularski 1987:477). Mularski further argues that their understanding and
ability to use English (or any language) depends a great deal on their degree
of deafness, the age at which their hearing was lost and the quality of their
residual hearing. It has very little to do with their inherent intelligence.

Because of the communication barrier, aurally impaired adolescents
encounter frustrations in communicating with library staff (Hagemeyer
1992:7). This has been substantiated by research carried out by Cohen
(1986:557), when research findings led him to the conclusion that
communication barriers may have resulted in libraries being under-utilized by
deaf and hard-of-hearing patrons. Cohen (1986) was told by hard-of-hearing
people that librarians who were unaware that they were wearing body-type
hearing aids still whispered to them, making communication much more
difficult. Cohen has also had aurally impaired people tell him that librarians
would not establish eye-to eye contact with them, making it difficult to lip-read.
A majority of librarians were not so highly concerned about having sign
language skills, as long as they were sensitive in terms of how to
communicate, whether it be through lip-reading, writing, or using gestures.
Lip-reading is criticized by Lundstrom (1985:269), McDaniel (1992:132) and
Mularski (1987:478). These authors argue that lip-reading is not a reliable
method of communication. It is estimated that only 30% to 40% of the
English language can be read on the lips. Aurally impaired people were
supposed to lip-read, but many sounds look alike, so one can only be sure of
one third of what is said, the rest being guesswork.

Alice Hagemeyer (1979:142), an aurally impaired librarian, has said:

I tried hard to learn by the oral method in class at a residential
school for the aurally impaired. I said "tried" because it was
difficult to read lips completely. Even now, I probably can
identify only 25 percent of English syllables on the lips and
guess the rest.

2.6.1 **Overcoming communication barriers**

Mularski (1987:482) suggests that library staff should be surveyed for prior
experience in dealing with this special population. The ideal situation,
Mularski argues, would be to have a reference librarian who knows sign
language. Monroe (1986:38) mentions that a knowledge of sign of course is
preferable (perhaps one day all librarians will be required to take a course as
part of library science requirements), but at present even being able to use
three or four signs to indicate interest and concern are better than none.

Schuler and Meck's suggestion (1992 : 75) to anyone interested in sharing
literature with aurally impaired adolescents is that signing should not be
faked. If the teller is not proficient with signs, s/he should admit it. It is,
according to Schuler and Meck (1992), insulting to aurally impaired audiences
and lessens the credibility of the teller in terms of offering any real service to
aurally impaired persons in the library community if the storyteller pretends to
sign to aurally impaired adolescents.
Cohen and the supervisor of the auditory programme planned a joint project where they would visit schools, present story hours and introduce children to new books they may wish to read. Cohen (1986:558) finds that in making this a successful experience, she needed to teach the "consulting" librarian sign language so the children who did sign would feel comfortable in communicating with the librarian when they did visit.

According to Lundstrom (1985:272-273), McDaniel (1992:133) and Day (1992:34) aurally impaired people need interpreters, that is people who can read and sign to translate spoken words into sign language and vice versa. Lundstrom (1985:272) points out that in Sweden, sign language was seen on television in connection with elections. Lundstrom sees this as one way for aurally impaired people to get access to information, that is to get it translated by an interpreter. But this interpreter, as Lundstrom puts it, was in a little 'egg' in one part of the picture. This was inappropriate for 95% of the grown-up aurally impaired who followed this at the last election. Lundstrom (1985:273) observes that aurally impaired people often experience being forgotten or getting information later than others.

It was also observed by Lundstrom (1985:270) that parents of aurally impaired children usually do not know sign language when the child is born (most of the parents have hearing). Lundstrom has urged parents to learn sign language rapidly and use it with the child. Sign language, however, will still not be the parents' best language. The aurally impaired child should be
surrounded by a language that it is possible for him/her to receive and use. It is important that aurally impaired adolescents are given opportunities to meet grown-up aurally impaired people and other aurally impaired adolescents and it is important that they come to pre-schools or schools where everyone can sign (Lundstrom 1985:271). Lundstrom has found that aurally impaired adolescents learn to sign spontaneously among other aurally impaired adolescents and grown-up aurally impaired people.

Day (1992:32) sees guidelines regarding personnel and communication as the most significant and, of those two areas, the most important one is personnel. Day (1992) believes that the guidelines on personnel are the most important because the eventual success or failure of any service to aurally impaired people is directly related to the personnel responsible for its provision. The following are the guidelines:

- Responsibility for the development, implementation, and operation of library services to aurally impaired clientele should be assigned to a professional librarian holding the degrees, certification, and/or training relevant to such professional status (Day 1992: 33).

- Library staff should receive training which focuses on the issues involved in providing services to aurally impaired people (Day 1992: 33).
Training in the special needs of aurally impaired people and in basic communication techniques is very important and should receive serious attention (Day 1992: 33).

When selecting staff to be involved with the provision of services to aurally impaired people, libraries should attempt to employ persons who have or are likely to be able to obtain credibility within the aurally impaired community. This wording attempts to strike a balance between calling for the employment of aurally impaired library professionals and the reality noted by Day (1992: 33) that such persons are mostly not available.

Schools of librarianship should provide training in the provision of services to aurally impaired people as a normal part of their basic curriculum to prepare librarians for their professional qualifications and as a part of their continuing education programmes for all levels of library staff (Day 1992: 33).

Another important aspect of ensuring adequate accommodation is to provide staff with appropriate training. Ignorance about disabilities often causes staff to shy away from helping patrons with special needs or lends to communication difficulties during interactions (Applin 1999: 140). Training, according to Applin (1999: 140), should sensitise staff to the special needs of
people with disabilities\textsuperscript{4} and help staff feel more comfortable interacting with them. Teaching strategies, learning styles and available resources should be covered to assist all staff involved in instructing students formally (in class) or informally (one-on-one).

Since all individuals have different learning styles, library staff should develop a teaching style which naturally incorporates a variety of multi-sensory learning techniques (Applin 1999: 140).

In other words, librarians should incorporate techniques that meet the needs of various individuals, whether these individuals have disabilities or not. The multi-sensory teaching style should include visual aids. Aurally impaired patrons rely a great deal on visual cues and explanations. Therefore any visual aids given should be large and demonstrative.

* Each national library association should establish a group within its structure which would function as that portion of its membership focusing on the provision of library services to aurally impaired people (Day 1992: 34).

\textsuperscript{4}The term “disabled” is used while simultaneously acknowledging the fact that the aurally impaired people do not like this term. They argue that they are “able”; the only thing is that they communicate differently.
* Libraries having responsibilities at the national level or, where applicable, at an appropriate regional level, should establish an office or department responsible for the provision of advisory and consultation services to all libraries within their geographical boundaries in order to assist them in the provision of services to aurally impaired people (Day 1992: 34).

2.6.2 **Materials for the aurally impaired**

Alice Hagemeyer, librarian for the aurally impaired, District of Columbia Public Library, identifies some of the information needs of the aurally impaired: they want information about the law, social services, and other life-coping needs; information on support services to help them cope with their deafness and communication barriers; and information to understand their community and local government (McDaniel 1992: 135).

McDaniel (1992:136) and De Naples (1986:552) suggest films that depend heavily on visual images rather than dialogue as the best for the deaf and hard-of-hearing. Silent films, such as Chaplin, nonverbal films that usually deal with nature or travel, Laurel and Hardy films, cartoons, or foreign films with English subtitles, can be added to the collection to be used by both hearing impaired and hearing patrons.

According to De Naples (1986:552), individuals who are deaf or hard-of-hearing from childhood have different needs from those who lose their
hearing after reaching adulthood. De Naples (1986) suggests that if language development and reading has been effected by a hearing loss then reading materials written in one of four specific formats could be used. The formats are:

1) materials written specifically for aurally impaired people;
2) materials written in a high interest/low vocabulary format;
3) materials written for use in literacy programmes;
4) and materials written for people who have English as a second language.

Monroe (1986:38) states that libraries are in a position to help aurally impaired school-going adolescents, during school and recreational "off hours", by providing audio-visual materials, captioned filmstrips, movies, slides, captioned videos and television programmes.

Lundstrom (1985:269-270) and Cohen (1986:557) identify other types of services that provide access to information resources. These services include: the telecaption adapter and closed captioned video cassettes. The telecaption adapter, when attached to a television set, translates the spoken word into "subtitles", as would be seen in a foreign film. Lundstrom (1985:270) gave an example of Swedish television which had news with subtitles for five to ten minutes every day. But aurally impaired people also stressed the importance of educational television (TV) which has some sign language programmes for aurally impaired children and grown-ups.
(Lundstrom 1985: 273). These authors were of the opinion that deaf and hard-of-hearing people look at television programmes if they have subtitles.

Norton and Kovalik (1992:2) argue that through literature, aurally impaired children can overcome isolation and frustration. Schuler and Meck’s article (1992) shares ideas on stretching and expanding students’ knowledge through literature and books and present ways to select print material which are particularly appropriate for deaf and hard-of-hearing children. Day (1992:35) warns that libraries should be cautious of the subject areas of interest to aurally impaired people and also they should be aware that, especially in the case of deafness prior to speech acquisition, many aurally impaired people have reading difficulties which should be taken into consideration when selecting materials for this group. Libraries should strive to build bias-free collections on deafness, as on all subjects. According to Day (1992) this can be achieved only when librarians are aware of the controversies involved with deafness.

2.6.2.1 **Picture story books**

Gonen (1992:7) mentions that books intended for children requiring special education should be carefully chosen from among the most suitable on the market. He argues that books for such children should preferably contain no text initially. The more pictures of familiar objects, animals or people they contain, as Gonen observes, the more interested the children will be in them. The importance of pictures lies in that telling a story by using pictures will
reinforce images of the actions in the book on the minds of the children. Gonen (1992:7) prefers short sentences. Schuler and Meck (1992:76) consider that it is important that illustrations should be visible on the same page as the text or, in the case of a double-paged spread, as close to the illustration as the turning of the page. The authors stress the point that there is nothing more confusing to a child than to have a teller share a story then show an illustration that does not match the story. Books that work well in this capacity, as Schuler and Meck observe, have pictures match what is revealed in the text and are placed so well in the book that as soon as the teller speaks the words, the visual image reinforces them.

2.6.2.2 Magazines and newspapers

Monroe (1986:38) notices that most aurally impaired students read magazines and newspapers regularly, particularly for sports news. Lundstrom (1985:269) confirms that deaf and hard-of-hearing people do read. Lundstrom gave an example that in Sweden aurally impaired people read newspapers every day, both morning and evening papers, but they prefer the evening papers, probably because those have easier language and shorter articles. The Swedish National Association of the Deaf had started a magazine-programme which is called The video journal. It is a magazine in sign language. There one finds news from the clubs and entertainment information. Sometimes aurally impaired people talk about their younger days and one can see this as a way of starting to write aurally impaired people's history in their own language.
2.6.2.3 Collection of high interest/low reading level

Day argues that in acknowledgement of the reading problems experienced by some aurally impaired people, libraries should assemble and provide access to a collection of high interest/low reading level materials of interest to them. Day (1992:35) and Sharpe (1985:145) suggest that libraries should build and actively maintain a collection of high interest/low vocabulary books, which are heavily illustrated where appropriate, so that they may be easily understood by people who have yet to gain full mastery of the written language. Day (1992:35) refers to these as "easy to read" materials.

Marshall (1981:59) reports conflicting opinions that are opposed to 'simple' editions, on the grounds that the aurally impaired child must learn to cope with normal sentences, concepts, vocabulary and resources. She argues that it is neither logical nor humane to object to the simplification of books that are enjoyed by able readers for leisure reading, if such simplification can produce in the aurally impaired child, pleasure, a sense of achievement in having read a book, and the very important feeling of identification with the hearing child who knows about "Miffy or Ameliaranne".

Marshall (1981:59) believes that the simplified editions of books for older children, including the classics and well-known stories, can give the less able reader at least a taste of a story that s/he will never be able to read in the normal edition. She says "those who can read the normal editions may do so and if they wish to read the simpler editions as well, then why not?" Marshall
(1981: 59) argues that everybody reads below their mental and reading capacity at times, whether in a novel, a magazine or an information book, and gain pleasure in the swift fluency and quick comprehension that this brings.

Bunch (1987:10) presents other views, adding that not all educators accept the need for specially created materials. Those who do, argue that the language limitations of the population in question demand unique support materials. Theirs, Bunch argues, is a philosophy that has much in common with deficit-centered models in other areas of special education. Conversely, others argue for what might be termed a natural model, in which the individual is exposed to the normal wealth of language in the environment.

Monroe (1986:39) concurs with Marshall (1981), asserting that there is no need for specialised materials for just the aurally impaired people because they fall into a larger category of disadvantaged children - that of the slow readers. Monroe (1986) further asserts that purchasing books of high interest to slow readers (without being condescending) is both practical and necessary.

Hagemeyer (1992:7-8) supports the above views, by stating that, in the past two decades, many public libraries around United States of America have started developing services for aurally impaired by using federal monies, such as are provided under the Library Service and Construction Act (LSCA), to install text telephones (TTY), to establish or expand a collection of books and
videotapes about, or for, aurally impaired people, to provide staff sensitivity training, and to make interpreters or storytellers available for library programmes for all ages. When requesting funds, librarians inadvertently refer to "the aurally impaired" as a typical group of signing aurally impaired adults who can see but who read at the fourth grade level or below. Hagemeyer (1992:7-8) warns that in reality the aurally impaired community is made up of individuals with widely varying levels of intellectual achievement, information needs and communication preferences.

2.7 PROGRAMMES FOR THE AURALLY IMPAIRED

McDaniel (1992:136) believes that libraries can make their programmes accessible to the deaf and hard-of-hearing by providing interpreters. It has been found by Cohen (1986:558) that aurally impaired people tend to attend programmes where an interpreter is provided. McDaniel (1992) feels that volunteer interpreters can be found to sign library programmes, adult literacy classes, storyhours, bibliographic instruction lectures or library tours.

In Sweden, according to Lundstrom (1985: 274), aurally impaired people read newspapers but much of the content is difficult to understand fully and most aurally impaired people understand sign language better and can talk about more difficult things in sign language. The Association of the Deaf in Sweden, for instance, decided to make a programme in sign language about such a complex matter as nuclear power (Lundstrom 1985: 274).
Another kind of a programme has been devised for deaf and hard-of-hearing children. Lundstrom (1985:276) states that this programme was for fairy tales and stories, and since parents were usually hearing, and not so good in sign language, the programmes were good for the parents too. They could learn both signing and how to act. Lundstrom mentioned fairy tales that had been told on Video, like Andersen's *The princess and the pea* and Selma Lagerlöf's *The changeling*.

Lundstrom (1985:276) also discovered that it was rather difficult for parents of young deaf and hard-of-hearing people to talk to them about ethics and to explain norms and rules. This difficulty was due to the fact that the parents often do not have sufficient sign language to talk about these abstract issues. Another reason, Lundstrom claims, is that the youngsters often go to a school in another town and only come home over weekends. This is the reason why programmes were made in sign language about issues such as sex and alcohol.

Another programme identified by Cohen (1986:558) in which she was involved was the Pre-School Signed Story Hour Programme. Parents who were totally involved in their deaf and hard-of-hearing child's language development had stated a preference for bringing their children to the programme during summertime, when there was no school.

Cohen (1986:558) stated that while they were continuing to identify more and
more families with deaf and hard-of-hearing children, they co-ordinated plans to "Mainstream" library programmes in the various branches where they might gain the most access to these children. Cohen (1986) described how they first observed programmes presented by children's librarians from the viewpoint of a signing, cued speed, or an oral deaf child who might be in attendance. This observation, as Cohen notes, helped them identify librarians and interpreters who were animated in their presentation style and those who were easiest to lip-read. They also checked for visual aids used in programmes as these were extremely helpful in conveying cues to the information presented. Secondly, they developed a list of those librarians and publicized their programmes within the parent community. Cohen (1986: 558) expressed the hope that more deaf and hard-of-hearing children would attend library programmes.

2.8 LITERATURE AND RESEARCH IN SOUTH AFRICA

No research in South Africa focuses on the information-seeking patterns of aurally impaired school-going adolescents. Most of the information traced was based on library services in the United Kingdom and the United States of America. No information covering library services for the aurally impaired was found in the South African context.
2.9 SUMMARY OF THE CHAPTER

The purposes of this chapter were to review the literature on the aurally impaired culture, to discuss a variety of needs and to offer some information and sources that can help aurally impaired school-going adolescents. The central idea of sharing literature is discussed, along with suggestions for collection development; expanding children's knowledge of stories; book discussions; and physical considerations specific to an aurally impaired audience. Programmes for the aurally impaired are also discussed.
CHAPTER 3

RESEARCH METHODOLOGY

3.0 INTRODUCTION

This chapter presents the methodology used for the study, including the selection of the sample and the designing and the pre-testing of the instrument. The study aimed to explore school-going adolescents' information-seeking patterns and information-providers of aurally impaired grade 7 school-going adolescents.

3.1 POPULATION

This study adopted the survey method. It surveyed grade 7 aurally impaired school-going adolescents in the Eastern Cape province, South Africa, who were registered for the year 1998. Three schools for the aurally impaired, out of a total number of five schools in the Eastern Cape, were selected. These schools are: Efata School for the Blind and Deaf, 10 km north of Umtata (Grades 1-9); St Thomas School for the deaf, 40 km north of King William's Town (Grades 0-9); and Reubin Birin School for the hearing impaired, 20 km east of Port Elizabeth (Grades 0-7). The other two schools were excluded because they were not comparable to the other three in terms of resources such as staff and grades.

The sample of 36 adolescents (out of a total of 71 of adolescents in these
three schools) was selected from Efata School for the blind and deaf, St Thomas School for the deaf and Reubin Birin School for the hearing impaired. The subjects were all the seventh-grade 1998 class and the total number of the population was seventy-one. The reason for choosing grade 7 was uniformity, since Reubin Birin went up to only grade 7, whilst Efata and St Thomas Schools went up to grade 9. Also at this level (Grade 7), it is believed that the adolescents are able to articulate their needs and have used various sources and will be able express their views, notify their preferences adequately and could make their choices of providers independently.

Permission to survey Reubin Birin and St Thomas School was granted by the Principals, but for Efata School permission was granted by the Department of Specialised Services for access to the school, because the Principal of the Efata School was not in favour of the study. Letters of requests for assistance relating to the research were sent to all the schools before implementation of the survey. Before commencement of the survey, the researcher visited the schools, to introduce herself and to explain the nature and purpose of the research.

3.2 **DATA-GATHERING INSTRUMENT**

The primary tool for data collection was an interview schedule developed by the researcher. The instrument consisted of structured and unstructured questions. Due to the low comprehension level of the group surveyed, the researcher reasoned that an interview was required to allow the researcher to
probe and to ensure understanding. This is supported by Babbie (1989:244), who said that the presence of an interviewer generally decreases the number of "don't knows" and "no answers". If minimizing such responses is important to the study the interviewer can be instructed to probe for answers. Babbie (1989:244) maintains that if the respondent clearly misunderstands the intent of a question or indicates that he or she does not understand, the interviewer can clarify matters, thereby obtaining relevant responses. The interview was carried out with the help of class teachers as interpreters from each school because sign language, like spoken language, is different in every region.

The questions in the instrument were divided into four sections: biographical data, information-seeking patterns, sources consulted and perceived usefulness of the information. Students were required to indicate different categories of information they needed and the types of sources that they had consulted. They were also asked to provide opinions about the relative usefulness of various categories of information sources.

3.3 **THE PRE-TEST**

Before the study actually got under way, ten adolescents were selected from the Efata School for the Blind and Deaf to test the research instrument. The interview schedule was used in the pre-test. The school was chosen because it was nearer to where the researcher lived.

From the pre-test conducted by the researcher, it became apparent that interviewing the adolescents was not an easy exercise. Interviewing all
seventy-one students would have taken many days and the researcher could not employ another researcher to assist her, since the task was rather specialised. The researcher decided to take half of the population, owing to financial and time constraints and the difficulties involved in communicating with this group.

The majority of the pre-test group of 18-22 years of age, were deaf. The results of the pre-test for this study confirmed the viability of the survey method, as well as that of the interview. The only difficulty which was encountered by the researcher, as explained earlier, was communication with the group. The results of the pre-test called for changes to the instrument, such as rewording the questions to ensure that they would be understood (see evaluation of methodology). It also became necessary to target half of the population, not the whole class, as the latter option would need more money and time.

3.4 **SAMPLING PROCEDURE**

Simple random sampling, recommended by Gay (1981:88), McMillan and Schumacher (1993:160) and Powell (1991:65), as the best single way that can be used to draw representative, or unbiased samples from a population, was used. McMillan and Schumacher (1993:161) go on to say that, in simple random sampling, subjects are selected from the population so that all members have the same probability of being selected. This method of sampling was employed in the study.
From Efata and St Thomas Schools thirty adolescents, that is fifteen from each school, were selected. There were only six adolescents from Reubin Birin and they comprised the whole class. Of the 36 adolescents, 18 adolescents were male and 18 were female. Twenty-five of the adolescents were deaf and eleven were hard-of-hearing. The majority of all the subjects were between the ages of 15 and 18 years. The second smallest category of subjects was between 19 and 22 years of age.

3.5 **DATA ANALYSIS**

Different approaches were used for the data generated by the different types of questions in the survey. Several open-ended questions were used and these were subject to content analysis. Data analysis consisted mainly of manual (coding sheets), calculation of frequencies and percentages. The data was tabulated and displayed in frequency distributions. Content analysis for unstructured questions was used to portray a variety of characteristics with respect to the variable or variables measured (Powell 1991: 87). A combination of content analysis and qualitative coding was used to interpret the responses. Gay (1976: 137) describes content analysis as the systematic, quantitative description of the composition of the object of the study. He further distinguishes between simple content analysis involving frequency counts and more complex analysis that might be used to investigate bias in the text.
3.6 EVALUATION OF THE METHODOLOGICAL PROCEDURE USED IN THE STUDY

3.6.1 Limitations of the methodological procedure

One of the major problems encountered was the language problem, as the researcher did not sign fluently and an interpreter was essential. In addition, sign language differs from one region to another, as already stated in previous chapters. Therefore, it was necessary to use a teacher from that particular school. Having to test the responses of such a group with low comprehension levels and communication problems as mentioned earlier, had its own limitations. The procedure was extremely time-consuming and exhausting. These considerations led to some changes in the study population (see section 3.3, on the pre-test).

The other problem was that by using an interpreter one introduces an additional constraint into the research interview. Interviewing children is already problematic. Children may be intimidated by the interview process. In addition, aurally impaired adolescents are intimidated by a stranger and become nervous about giving an honest answer. Alternatively, many of them try to give the answer that they think the interviewer (the researcher) wants. For example, some adolescents told the researcher that they used the library as an information provider and yet corroborating questions indicated that they encountered problems in communicating with the librarian.

As suggested in section 3.3, on the changes in the interview schedule, the
researcher had to get advice from the people who were very familiar with the study population in order to formulate meaningful questions that would gain the information required. This resulted in rephrasing and changes in the sequencing.

3.6.2 Advantages of the methodological procedure

Despite the foregoing limitations, the researcher was satisfied with the methodology used in the study because, on the whole, the responses elicited from the study population were relevant to the study and to what it set out to achieve.

The interview schedule is viewed by Babbie (1989: 244) as advantageous because, among other factors, the opportunity to clarify matters, thereby obtaining relevant responses, might be necessary. Open-ended questions facilitated explanation and clarification of questions, where necessary. Another advantage, as confirmed by Babbie (1989: 244), was that if the respondent clearly misunderstood the intent of a question or indicated that he or she did not understand, the interviewer could clarify matters, thereby obtaining relevant responses.

3.7 SUMMARY OF THE CHAPTER

This section described the methodology used for the study. It described the selection of a sample of the school population, the designing of the instrument, the testing procedure and the data analysis.
CHAPTER FOUR

RESULTS OF THE SURVEY

4.0 INTRODUCTION

In this chapter the results of the survey of the aurally impaired school-going adolescents are presented. The data is given under the headings: biographical data, information-seeking patterns, information sources and providers and referral.

4.1 BIOGRAPHICAL DATA

The subjects were grade 7 aurally impaired school-going adolescents. Of the 36 students, 18 (50%) school-going adolescents were male and 18 (50%) were female. Twenty-five of the school-going adolescents were deaf and eleven were hard-of-hearing. The majority 30 (83%) of the subjects were between the ages of 15 and 18 years, whereas six (17%) subjects were between 19 and 22 years of age. The second smallest category of subjects was between 19 and 22 years of age.

4.2 INFORMATION-SEEKING PATTERNS

To determine the school-going adolescents' information-seeking patterns, participating adolescents were probed about whether or not they had ever felt the need to find information for themselves. All the respondents claimed that they had felt the need to find information for themselves.
Regarding the subject on which they needed information, the following were mentioned: health was mentioned 24 times (67%), sport 23 times (64%), family matters 20 times (56%), love 16 times (44%), travel six times (17%), fiction three times (8.3%), politics twice (6%), religion once (3%) sex once (3%), and cooking once (3%).

Table 2: Subjects about which information was sought (n=36)

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Frequency</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>24</td>
<td>67</td>
</tr>
<tr>
<td>Sport</td>
<td>23</td>
<td>64</td>
</tr>
<tr>
<td>Family matters</td>
<td>20</td>
<td>56</td>
</tr>
<tr>
<td>Love</td>
<td>16</td>
<td>44</td>
</tr>
<tr>
<td>Travel</td>
<td>6</td>
<td>17</td>
</tr>
<tr>
<td>Fiction</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Politics</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Cooking</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Sex</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Religion</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>
In response to whether or not the respondents do attempt to find information, 33 (92%) respondents stated that they do attempt to seek information, whereas three (8%) respondents said they do not attempt to find it.

Three respondents who had not attempted to find answers or help gave reasons for not doing anything: one stated that there was nothing for them, and she or he never knows where to go looking for information, three said they do not understand easily because they cannot read; one stated that he thought his/her brain had a problem and s/he was confused in terms of where to go.

4.3 INFORMATION SOURCES AND PROVIDERS

In seeking help, all the respondents used more than one information provider. Just as no significant gender differences in information seeking patterns were identified, there were also no statistically significant differences in the information sources consulted by male and females. This table reflects the number of times (frequency) that each provider was mentioned. More than one provider was mentioned by each respondent.
Table 3: Information providers used by respondents (who attempted to find information) by school

<table>
<thead>
<tr>
<th>Information provider</th>
<th>Efata</th>
<th>Reuben Birin</th>
<th>St Thomas</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher</td>
<td>11</td>
<td>4</td>
<td>10</td>
<td>25</td>
<td>76</td>
</tr>
<tr>
<td>Sibling</td>
<td>5</td>
<td>1</td>
<td>7</td>
<td>13</td>
<td>39</td>
</tr>
<tr>
<td>Book</td>
<td>8</td>
<td>1</td>
<td>3</td>
<td>12</td>
<td>36</td>
</tr>
<tr>
<td>Television</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>12</td>
<td>36</td>
</tr>
<tr>
<td>Deaf friend</td>
<td>7</td>
<td>2</td>
<td>3</td>
<td>12</td>
<td>36</td>
</tr>
<tr>
<td>Deaf adult</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>12</td>
<td>36</td>
</tr>
<tr>
<td>Parent</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>8</td>
<td>24</td>
</tr>
<tr>
<td>Magazine</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>Schoolmate/classmate</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>Library</td>
<td>6</td>
<td>-</td>
<td>-</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>Friend</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Relative</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
</tbody>
</table>
The most heavily used information provider was the teacher, 25 (76%), followed by a sibling, 13 (39%), while book, television, deaf friend and deaf adult were the third most used among all respondents, 12 (36% each). The school library was used by the respondents of Efata School only because they alone had a functioning library. It is noteworthy that out of 15 respondents from Efata, only six (40%) mentioned the library as a provider. Parent followed with eight (24%), then, magazine and schoolmate/classmate with six (18% each). In addition to those pre-identified information providers in the interview schedule, as reflected in Table 3, one respondent used ‘other’ information provider, that is, ‘hearing people at home’ were mentioned. Table 4 presents information sources and providers listed as most important.
Table 4: Information providers listed as most important.

<table>
<thead>
<tr>
<th>Provider</th>
<th>NO 1</th>
<th>NO 2</th>
<th>NO 3</th>
<th>NO 4</th>
<th>NO 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schoolmate/classmate</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>School library</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Book</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Teacher</td>
<td>18</td>
<td>5</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Magazine</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>Television</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Friend</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Relative</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Parent(s)</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Sibling</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Deaf friend</td>
<td>-</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Deaf adult</td>
<td>-</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Hearing people at home</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
</tbody>
</table>

A rating from one to five is displayed in the table and yet in question 9 of the questionnaire a rating from one to thirteen was requested. Also the categories one and two were taken together to indicate "most important."
The respondents were asked to rate the providers in terms of importance on a scale of one (most important) to highest number (least important).

Of the twenty five (25) times that the teacher was mentioned as a provider, 23 times (92%) s/he was identified as the most important provider (rating 1 and 2); followed by television and the book, which were both identified seven times each (58%) as important (rating 1 and 2) out of the 12 times they were both mentioned as providers. It was noted that parents, siblings, relatives and friends were not identified as most important providers.

4.3.1  **Most important providers and sources**

The reasons for labelling an information provider as most important were investigated.

4.3.1.1 **Teacher**

Overwhelmingly, respondents preferred a teacher as their most important source because a teacher knows, tells and clarifies everything and, above all, the teacher tells them the truth; the teacher also helps those who are less intellectual and confused; reads to them and repeats for them. In some cases, where there are difficult words, the teacher interprets. One respondent chose the teachers as the most important but did not know the reason why.
4.3.1.2 **Television**

Television was viewed as one of the next most important source because respondents love to watch programmes for the aurally impaired. At the bottom of the screen, in these programmes, there is an explanation and, most importantly about the programmes, the aurally impaired learn sign language from somebody else. Respondents like watching programmes such as "Days of our lives" because people act emphatically, and they can look at their facial expressions and movements. Respondents look at the television pictures and are able to see what is going on.

Respondents like television because of sport, love stories, political figures (such as President Nelson Mandela) and phenomena such as tornadoes. Housemothers are regarded as helpful because they interpret TV programmes for them.

4.3.1.3 **Book**

The book and television were chosen as equally important sources. In a book there are illustrations and respondents read the book several times and this helps them to remember. Above all, the respondents gain knowledge from books. They also believe that they learn better English from books.

4.3.2 **Less important providers**

4.3.2.1 **siblings**

Another respondent mentioned that the brother is important because he is
also deaf and communicates well with the respondent. Second respondent also said that his brother had learnt sign language.

4.3.2.2 Magazines
They can only obtain enjoyment from pictures which are colourful. For instance, one respondent mentioned that in a magazine people dress nicely and she learns from them; other respondents like pictures relating to soccer, athletics, boxing and politics.

4.3.2.3 Parent
One reported that his/her mother understands Xhosa and it is sometimes easy to communicate with her when she is nearby. The respondents lip-read from their parents. A second respondent said that the mother communicates by writing to him/her and s/he replies by writing back.

4.3.2.4 Deaf adult, deaf friend and schoolmate/classmate
Deaf adults help the respondents with some signs which they do not understand and, above all, they inform them about politics, which they do not discuss with teachers. A deaf adult teaches them hostel duties. One respondent said that a schoolmate helps him because he is more clever than the respondent.
4.3.2.5 Library

One respondent mentioned that s/he goes to the library for a dictionary. Most of them used the library for "Talking to the deaf", which is their dictionary.

Those who did not choose the teacher as the most important information source said that teachers do not understand some of the signs. In the case of television, some respondents complained about the television time, which they said is very short. Some said that they cannot communicate with siblings and parents who are not deaf. The respondents found it difficult to read a book because of long sentences. Friends, relatives and hearing people from home were labelled as least helpful information sources.

4.3.3 Referral

On the question of who advised them to access those sources, results show that 29 (87%) of the 33 respondents (who attempted to get information) went to information sources on their own. Two (6%) of the 33 respondents were advised by the teacher, whilst two (6%) were advised by their siblings.

In terms of how respondents were satisfied with information from those sources, 32 (97%) out of 33 expressed satisfaction, whilst one (3%) was not satisfied with the information sources.

On whether there is a library in a school or not, only one school has a functioning library. When asked whether they used the library to satisfy their
information needs, only six (40%) out of 15 at Efata answered 'yes', whilst nine (60%) answered 'no'.

On the question of whether they do go to the library to find information for the work teachers give them, six (40%) said 'yes', whilst nine (60%) said 'no'.

Once again, reasons for not using the library were investigated. The main reason for this is that they are allowed only one period per week in the library. The other reason is that the teachers do not give them work requiring them to access the library. The respondents also said that when they visit the library, they experience communication problems with the librarian. The librarian understands only a few signs and it was difficult to communicate with her. One respondent mentioned the fact that the librarian does not live with deaf people so does not practice communicating with them all the time.

Another one noted that the library is full of books only, and these are difficult to read as they have long, confusing sentences.

Regarding whether or not they access the library on their own or were sent by teachers, all 15 respondents who had a functioning library at their school (Efata) are sent to the library by teachers during the library period.

On the question of whether they manage to find the information they need in the library, three (27%) respondents said 'yes' whilst three (27%) said 'no'. The respondents were also asked to furnish difficulties they encountered. All the respondents found it difficult to read long English sentences, but they enjoy looking at the pictures because they do not understand the meaning of
the words. Sometimes they look for dictionaries to find definitions. The three respondents who managed to find information in the library, required help and got it from the teacher-librarian.

On whether teachers ever give them work which requires them to find information, all the respondents responded negatively.

The last question asked the respondents to share their needs relating to information. Some respondents stated that they like television and want more animal programmes on television, more deaf television time; that is, subscript titles; they want news and the weather report on television. They also like Deaf Television (DTV), which is their programme, but it is on for only a very short time.

Concerning the question of books, they mentioned difficulty in reading because of long sentences and in the process they lose concentration. They prefer short sentences. Well-illustrated and colourful books were mentioned. Another respondent stated that when s/he reads a book, s/he forgets some words and leaves them so that s/he can ask the teacher for the meaning. Because of the above problems, some respondents go to the library for a dictionary only.
4.4 SUMMARY OF THE CHAPTER

This chapter presents data on the information providers of the aurally impaired school-going adolescents and the sources that they use to meet their information needs. Data is analysed and reported, using tables where appropriate. Information-seeking patterns, information sources and information-providers are reported by frequency of use. Reasons for labelling an information provider as most important are given.
CHAPTER FIVE

INTERPRETATION, CONCLUSIONS AND
RECOMMENDATIONS

5.0 Introduction
This chapter interprets and discusses the survey data acquired from aurally impaired school-going adolescents. The researcher made recommendations based on the findings of the survey.

5.1 Aurally impaired school-going adolescents and the need for information
This study indicates that all respondents had felt the need to find information for themselves. This agrees with the findings of Lenn (1996), that aurally impaired school-going adolescents have their needs and that their needs, including school-related needs, are not different from those of normal hearing children. Lenn (1996) expresses the view that the only difference may be in the way the library and information services are accessed, requiring a shift in traditional methods.

De Naples (1986) argues that individuals who are deaf and hard-of-hearing from childhood have different needs from those who lose their hearing after reaching adulthood. This work confirms the broad conclusion of a previous study by Hagemeyer (1992), who concluded that in reality, the aurally
impaired are made up of individuals with widely varying levels of intellectual achievement, information needs and communication preferences.

The present researcher concludes that the comparison of information needs, according to the onset of loss of hearing of the deaf and the hard-of-hearing, shows no overriding differences between the two groups. Again, the present researcher concludes that information can be made available in a variety of formats, from which the most appropriate format can be selected. These formats and the services provided should not be based on the child's "label", but rather on the child's abilities, as aurally impaired school-going adolescents are not a homogeneous group but a heterogenous group, as supported by Odien (1992).

In terms of the subject on which aurally impaired need information, health information (67%), sport (64%), family matters (56%) and love (44.4%) appeared frequently, for the reasons listed in chapter 4. Some respondents (girls) mentioned critical information on the subject of health, for example on how and why menstruation happens. These responses suggest strongly that school-going adolescents are in dire need of information on health-matters. This relates to Norton and Kovalik's assertion (1992:2) that through literature, aurally impaired adolescents can overcome isolation and frustration.

The researcher agrees with Schuller and Meck (1992: 68), that these adolescents expressed a need to stretch and expand their knowledge through
literature and books.

An intriguing finding of the present study is the almost complete lack of interest in politics. A possible explanation for this lack of interest may be that, for a long time, aurally impaired people were not catered for in television programmes and even in the year 2000 there are seldom interpreters for some items. These findings therefore confirm the broad conclusions of previous studies, by Lundstrom (1985), McDaniel (1992) and Day (1992), that aurally impaired people need interpreters, that is people who can read and sign to translate spoken words into sign language and vice versa. Lundstrom (1985) acknowledges the position in Sweden, which was similar to the South African situation, where sign language was seen on television in connection with elections. Lundstrom saw this as one way for aurally impaired people to get access to information: to get it translated by an interpreter. Lundstrom (1985:273) confirms this when he states that aurally impaired people often experience being forgotten or getting information later than others. This supports the present researcher's conclusion that aurally impaired people had, for a long time, not only been marginalised but forgotten, in South Africa.

5.2 INFORMATION-PROVIDERS AND SOURCES

The findings of this study illuminate the central role played by teachers as information providers. Aurally impaired school-going adolescents relied heavily upon teachers for information. In fact, the interpersonal networks of aurally impaired adolescents appear to determine the framework in which all
information-seeking takes place. Therefore, emphasizing the role of interpersonal interactions in gathering information is a critical component in the instruction process. Because aurally impaired school-going adolescents rely so heavily on teachers as information providers, librarians should seize the opportunity to deepen adolescents' understanding of teachers as information resources. Librarians should promote themselves as accessible and valuable information resources.

The finding concurs with the view of South Africa, NCSNET and NCESS (1997:16) concerning the lack of provision of assistive devices for learners who require them. The dependence of aurally impaired adolescents on a teacher may impair not only their learning process but also their functional independence. This may also prevent them from interacting with other learners and participating independently in the learning environment.

The researcher suggests that librarians can also integrate themselves into adolescents’ interpersonal networks, working hand in hand with teachers to develop and market programmes that focus on adolescents’ needs and the interpersonal aspects of information-seeking behaviour. In this regard, the present study does not support Jarvis (1998) in section 1.1 in his assertion that aurally impaired learners in South Africa were being taught by hearing teachers who could not converse in a rudimentary way with their learners in sign language. On the other hand it is important to note the observation by South Africa, NCSNET and NCESS (1997:39), that very few teachers
educating aurally impaired learners are presently equipped to teach and communicate through sign language. Therefore, teachers as perceived by the researcher, represent a good potential intermediary. However, it is important to caution by adding the observation.

The present study can only conclude that, although teachers are an important information resource, there are other problems related to their preparedness for this task, as with most teachers. For instance, it was reported by all respondents that teachers did not give aurally impaired adolescents work which required them to find information.

Although Efata School had a functioning library, it was the only school with one. This supports previous findings that the education of aurally impaired learners in South Africa reflects massive deprivation and lack of provision (NCESS and NCSNET, 1997). Brown (1971:17) points out that service to the disadvantaged as a whole was not a priority. It is not only a matter of serving those who have not been served before, but it is largely a matter of convincing the non-users that the library has something to offer them and that reading is worthwhile.

These inequities, according to NCESS and NCSNET, can be directly attributed to those social, economic and political factors which characterised the history of South African society during the years of apartheid. This assertion is confirmed by Kellerman (1996), when he reports that not all
schools for aurally impaired people have the same education standards; some are much more limited than others.

The use of a library might also be attributed to the demands for a dictionary as some respondents mentioned that they went to the library to consult 'Talking to the deaf', which is their dictionary. It was found that respondents encountered problems in communicating with the teacher-librarian. This could account for only 40% attempting to access the library for their own information needs. These problems could also be attributed to the fact that the librarian did not have prior experience in dealing with the aurally impaired and did not sign well. This finding supported conclusions of Monroe (1986), namely that a knowledge of sign language is preferable and in future librarians should be required to take a course as part of library science study requirements. These findings also correspond with the suggestion of Lundstrom (1985), McDaniel (1992) and Day (1992), that aurally impaired people need interpreters, that is people who can read and sign to translate spoken words into sign language and vice versa.

The reasons provided by the respondents for the teacher being the most important provider were, one claimed: the teacher reads to them, repeats for them and the teacher helps those who are less intellectual and confused. In some cases, where there are difficult words, the teacher interprets. The responses can be interpreted to suggest that aurally impaired adolescents wished for activities such as storytelling and shared reading. This relates to
Schuller and Meck's finding (1992: 68) that the full range of theatrical sharing of literature includes videotaping, storytelling, reading aloud, book-talking and programmes of shared inquiry specific to the aurally impaired. Amadi (1980: 131) argues strongly for the concept of oral tradition. He feels that the imposition of linear and print-oriented communication modes upon a previously viable oral tradition has intensified misdevelopment and tended to freeze communication among Africans.

Previous studies found that books for aurally impaired school-going adolescents preferably should contain no text initially. The more pictures of familiar objects, animals or people they contain the more these adolescents will be interested in them (Gonen 1992). This, according to Gonen, means that telling a story by using pictures will reinforce images of actions in the book in the minds of the children. The finding of the present study confirms that aurally impaired school-going adolescents prefer short sentences and well-illustrated books.

Another important finding of the present study is that deaf adults, deaf friends and deaf schoolmates help respondents, though to a limited extent, using some signs. The present study also agrees with the finding of Lundstrom (1985) that aurally impaired adolescents learn to sign spontaneously among other aurally impaired adolescents and adults.
Results of the present study support the view that reading in a language which is not the learners' first language is a source of considerable difficulty. This, according to Bunch (1987), is due to impoverished language development. Coetzee (1997:42) supports the finding that the task of learning to read often becomes a language learning process at the same time. Aurally impaired adolescents in the present study mentioned difficulty in reading because of long English sentences and in the process they lose concentration. For the aurally impaired who are learning English as a second language, emphasis on manipulative, audiovisual, captioned or nonverbal films and easy-to-read materials may be important. The question of the language of instruction points to the urgent and pressing need for support and in-service training to enable those who work with aurally impaired adolescents to cope with this problem.

The findings of the present study do have significant implications for the provision of library services to aurally impaired adolescents. Most importantly, libraries need to be equipped to serve aurally impaired adolescents, as it has been confirmed that they do have information needs. The school library should be the chief source of supplementary learning materials. Supporting the curricular needs of all children is a vital function of the school library. The librarian must be prepared to provide materials for both independent research and enrichment in many different formats, to fit many different learning modes.
The library should be a place where aurally impaired adolescents can find materials to meet their personal needs and interests and where they can enjoy picture book hours, storytelling, films, puppet shows and other programmes.

A supportive but challenging atmosphere is especially necessary for aurally impaired adolescents. Even more than other adolescents, they must be encouraged to feel part of the group, capable of relating productively to other adolescents and learning that they are potential friends who should be treated like anyone else, not pitied, feared or ignored. The open, unthreatening atmosphere of a library is an excellent setting for such mutual socialization.

The claim by those respondents who had a library in which they struggled to communicate with the librarian suggests a need to equip librarians with the necessary skills to work with aurally impaired school-going adolescents. Librarians should make a special effort to learn the needs and interests of each child served and to be on the lookout for materials to fit individual interests.

The results of this study, and some comments in the literature, demonstrate that there is both need and support for increased attention to the quality of the curriculum taught and to teachers' and librarians' competencies in schools and programmes for aurally impaired school-going adolescents. In order for achievement to be equal, parts of the curriculum equation must be equal for
both aurally impaired and hearing adolescents.

While the results of this study point to the critical nature of language used with aurally impaired school-going adolescents and the importance of a librarian's communication competence when working with aurally impaired school-going adolescents, it is necessary to look at how librarians communicate. Communication skills and high expectations are two critical variables without which maximum learning cannot occur.

5.3 SUGGESTIONS FOR FURTHER RESEARCH

Various issues were raised in the study, one of which was that teachers were identified as important information providers. This issue needs to be investigated further, in terms of how they can be strengthened and enriched to play the part of viable information providers. The issue of training these teachers needs to be investigated and addressed seriously. The language issue also came up in the study and this is another area which needs to be investigated. Second language specialists need to be employed. The inflexible curriculum of the aurally impaired school-going adolescents was another concern which needs to be examined. The critical issue of what will be taught to the aurally impaired needs to be investigated.
5.4 SUMMARY OF THE CHAPTER

The results of the study were discussed in this chapter. Conclusions were drawn, where possible, and pertinent issues discussed. Guidance with regard to satisfying aurally impaired school-going adolescents’ information needs was provided in the interpretation of the results. The findings do have implications for the provision of library services to aurally impaired school-going adolescents. The findings support the need for information systems to be designed that will be of help to this user group. Suggestions for further research are provided.
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Appendix B

INFORMATION-SEEKING PATTERNS AND INFORMATION-PROVIDERS OF THE AURALLY IMPAIRED SCHOOL-GOING ADOLESCENTS IN THE EASTERN CAPE PROVINCE, SOUTH AFRICA

A. BIOGRAPHICAL DATA

1. 
   (a) Male
   (b) Female

2. How old are you? ........

3. Are you:
   (a) Hard-of-hearing
   (b) Deaf

B. INFORMATION-SEEKING PATTERNS AND INFORMATION-PROVIDERS

4. Do you ever feel the need to find information for yourself?
   YES _ NO _

5. If Yes to 4 above, what subject is your information on?
   (a) Health
   (b) Love
   (c) Sex
6. If Yes to 4 above, do you attempt to find information?
   YES  ___  NO  ___

7. If No to 4 above, why? ..........................................
   ........................................................................

8. If Yes to 6 above, where or from whom do you go to find answers or help?
   (More than one source)

   (a) Schoolmate/classmate  -
   (b) School library  -
   (c) Book  -
   (d) Teacher  -
   (e) Magazine  -
   (f) Television  -
   (g) Friend  -
   (h) Relative (specify)  -
   (i) Parent/s (specify)  -
(j) Sibling -
(k) Deaf Friend -
(l) Deaf Adult -
(m) Other (specify ........................................
...........................................................
...........................................................

9. Rate the sources you chose in 8 above in order of importance (1 to represent most importance, 13 the least importance)

School mate/class mate -
School library -
Book -
Teacher -
Magazine -
Television -
Friend -
Relative -
Parent/s -
Sibling -
Deaf Friend -
Deaf Adult -
Other ......................................................
...........................................................
10. Why are the 'most important' to you, important?

11. Why are the 'least important' of less importance to you?

12. Who advises you to access those sources?
   (a) Self
   (b) Teacher
   (c) Classmates
   (d) Other (specify) ........................................

13. Is your information need satisfied from those sources?
    YES ___ NO ___

14. Is there a library at your school?
    YES ___ NO ___

15. If there is a library at your school, do you go to the library to find information for the work the teachers give you?
    YES ___ NO ___

16. Do you use the library to satisfy your information need?
    YES ___ NO ___

17. If No to 17, why do you not use the library for that purpose?
    ..............................................................................................................
    ..............................................................................................................
    ..............................................................................................................
18. If you do use the library,
   (a) Do your teachers send you, or
   (b) Do you go on your own?

19. Do you manage to find the information you need in the library?
   YES _ NO _

20. If No to 20 above, where are the difficulties?

21. If you do manage to find information in the library,
   (a) do you find it yourself
   (b) require help?

22. Do teachers ever give you work which requires you to find information?
   YES _ NO _

23. Is there anything else you would like to share with me relating to your needs relating to information?

Thank you very much for your time and patience. Enjoy your day!
11 August 1998

TO WHOM IT MAY CONCERN

ZANELE PANTSHWA (962054981) is a registered Masters student in this Department for the year 1998. Any assistance that she receives relating to her research will be greatly appreciated.

[Signature]

PROFESSOR A M. KANIKI
Head
Department of Information Studies
THE PRINCIPAL

EFATA SCHOOL FOR THE BLIND

UMTATA

DEAR Sir

PERMISSION GRANTED TO ZANELE PANTSHWA

ZANELE PANTSHWA HAS BEEN GRANTED PERMISSION TO DO RESEARCH IN YOUR SCHOOL. THE SECTION WRITES THIS LETTER BECAUSE IT HAS BEEN ASKED TO DO SO BY THE PERSONNEL DIVISION.

Yours faithfully,

GRETIA MAZWA

PROVINCE OF THE EASTERN CAPE
DEPARTMENT OF EDUCATION, CULTURE AND SPORT
OFFICE OF THE REGIONAL DIRECTOR
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Faksi No

6 OCTOBER 1998