Sign Language in South Africa: Pedagogic Approaches, Policy Developments and New Directions

by

Mirriam Ganiso

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<u>DECLARATION</u>

The undersigned, hereby declare that except where due acknowledgement has been made in the text to other materials, the entirety of this thesis is my own original work, and I am the sole author, and this thesis has never been submitted at any university for a degree.

Signed.......................................

Dedication

I dedicate this thesis to my late mother, Gertrude Temtem Dlomo and my aunt Nomakula Eslina Tatana who supported me with their prayers and made me realise that I must never give up until I reach my destiny.

Acknowledgements

Abstract

This objective of this thesis is to present and critique sign language-in-education policy and different teaching pedagogies used by teachers in the Eastern and Western Cape Deaf schools. The research was conducted in four Deaf schools in the Eastern and Western Cape Provinces. Data was collected through methods which include interviews, observations and questionnaires. The study results revealed that there was inconsistency of teaching approaches used by teachers in these different schools because some of them lacked knowledge and sign language skills. Additionally, many teachers who are teaching in Deaf schools did not get sign language training. Thus, the study concluded that some teachers lack knowledge of teaching methods. Also Deaf schools' principals and school governing bodies employ teachers who are coming from the mainstream and who are not necessarily aware of Deaf children's needs, forgetting that Deaf learners will struggle without suitable resources.

Furthermore, the study concluded that teachers use different teaching approaches, such as Total Communication, Oral Approach, Signed English, Bilingualism, South African Sign Language (SASL) and other means of communication. Deaf learners were also forced to use Oral Communication although some of them were totally deaf. The research showed that Deaf learners and Deaf teacher assistants were not pleased about the way Deaf learners were being taught. Deaf learners complained about teachers, that they lack sign language communication skills and as a result the learners became the interpreters for the teachers. Teachers in turn complained about the curriculum training which was provided for individual and selected teachers.

The research also offers a comparative study, in the sense that the development of sign language across different countries from Europe and Africa as well as the United States of America, is included. The thesis furthermore explores the development of SASL CAPS Curriculum in the Western Cape Province, i.e. grade R-3 which began in 2014 as opposed to the Eastern Cape teachers who experienced difficulties due to limited curriculum implementation resources. Therefore, this research suggests that, the Language Task Team which worked on the new CAPS curriculum should have involved Deaf teachers and teachers more generally in their team and decisions.

The research sought to find a theoretical or grammatical basis for the development of SASL, while at the same time providing empirical data gathered from the four respective school sites. This data is analysed and presented in the thesis.

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CHAPTER 1

INTRODUCING SIGN LANGUAGE

Introduction

This thesis sets out to present not only the history and origins of South African Sign Language (SASL), but it does so against the backdrop of Language Planning, Policy and Implementation in South Africa, as well as Language-in-Education Policy. This policy informs how sign language is used in our schools. This is the focus of this study.

According to Statistics South Africa there are 383 408 hearing disabled people living in South Africa. However, many parents do not report the fact that their children have a disability and the actual number would be closer to 1 500 000 (Census 2011). A large number of people have therefore never filled in a census form. Of the recorded Deaf population, 68% live in informal settlements; 70% are unemployed; 40% attend school and 66% are illiterate, the latter being a shocking statistic which speaks to the lack of quality, access and throughput of Deaf learners. Most Deaf people work as labourers with an average education of Grade 7. The total Deaf workforce that have Grade 12 amounts to only about 20% of the population (www.signgenius.com). These statistics no doubt further contribute to the possible discrimination that Deaf people encounter within the educational system in South Africa and within our society more generally. In fact, many are simply excluded from the system. This research also shows that the system leaves much to be desired and that there is no uniformity when it comes to the access, retention and throughput of Deaf learners in the education system.

Context of Research

South African Sign Language is a distinct language which is the sign language used by Deaf people in South Africa. Furthermore, it is not a derivational pidgin, but a recognised language in its own right (Reagan, 2007:28). It is a rule-governed, grammatical, communication system similar in nature to other natural languages. It should be noted that SASL is not the only sign language used in South Africa, but is the language that is promoted to be used by all Deaf people (Reagan, 2007:28). There is a common distinction made in writing about deafness between "deaf" and "Deaf". The lower case refers to the deafness as an audio logical condition and the upper case refers to Deafness as a cultural condition (Reagan, 2007:27). For

the purposes of this thesis, Deafness is seen as a cultural condition as the thesis is analysing issues pertaining to education and the culture associated with Deaf learning. Before the 1960s and early 1970s sign languages were not seen as proper languages, but as a crude system of mime and gestures (Gregory, 1996). SASL was first originally documented in residential schools for the Deaf. Some form of sign language existed in Deaf groups well before this time. In 1816, five sisters from the Dominican convent in Ireland founded a school for the Deaf in Cape Town known as the Grimley Institute for the Deaf. German Dominican sisters also started a school for the Deaf in King Williams Town and in 1881 the Dutch Reformed Church in Worcester opened the De la Bat School for the Deaf (Reagan *et al.*, 2006:190).

In 1994, language planning and policy played a crucial role in transforming South African society. SASL has been recognised constitutionally and legally in ways that would appear to indicate consideration of the language rights of the Deaf in South Africa. SASL is however not an official language in South Africa and this will be reflected upon in this thesis. However, multilingualism has been taken seriously at the policy level in the protection and promotion of SASL, though not officially, but SASL is mentioned in the Constitution. The Constitution of the Republic of South Africa identifies a total of eleven official languages. As mentioned above, although SASL is not among the eleven, it is nevertheless directly mentioned in the Constitution. In Chapter 1 (6) 5, the Constitution created the Pan South African Language Board (PanSALB) which is empowered to promote and create conditions for the development and use of (i) all official languages, (ii) the Khoi, Nama and San languages, and (iii) sign language. PanSALB supports SASL as well as having two specific objectives: firstly to initiate and implement strategic projects aimed at creating awareness and promoting SASL, and secondly, identifying and funding projects aimed to develop SASL (Republic of South Africa 1996 b).

Furthermore, The South African Schools Act refers to SASL in the section devoted to language policy in government schools. The South African Schools Act takes this constitutional right further in that a recognised sign language has an official language status for the purpose of learning at a public school. This point is entrenched further and reinforced in the Department of Education's language-in-education policy (1997) as well as the new Curriculum Assessment Policy Statement (CAPS). However, although this is a largely enabling policy environment, there are certain challenges which will form the focus of this research, for example the lack of a structured national curriculum.

Deaf learners in South Africa experience challenges in educational and information access due to the fact that the relevant provision of the Constitution and the South African Schools Act are not actively being implemented. Most teachers do not have necessary signing skills in order to prepare this language to be effectively in use as medium of instruction in the teaching of Deaf learners. The Minister of Basic Education, Angie Motshekga approved the Curriculum and Assessment Policy Statements (CAPS) for Grade R to Grade 12 at Home Language level on the 13 August 2014 [www.groundup.org.za/article/state-south-african-sign-language]. For the first time, Deaf children were given an opportunity to study SASL as a Home Language subject. The curriculum was rolled out from 2015 in South African schools for the Deaf. Initially, the focus was on the Foundation Phase. SASL is to be introduced as a subject for example in the Western Cape from Grades R-3. The Department of Basic Education announced that teacher training had already begun with the intention of introducing the curriculum across the grades by 2018. There are various pedagogic approaches that have been used in Deaf schools as outlined in what follows.

Firstly, the Oral Approach believes that Deaf children are best served by instruction in lip-reading and improving speech by using language therapy. Secondly, at the beginning of apartheid in 1948 a manually coded form of English approach for spoken language was used in schools for Black Deaf children. The manually coded English approach involves a variety of visual communication methods expressed through the hands, which attempt to represent the English language (Reagan *et al.*, 2006:191). Thirdly, towards the end of apartheid, a Total Communication approach was introduced which involved the simultaneous use of spoken and sign language. Fourthly, what has now emerged is a Bilingual Approach for Deaf education for all students which emphasises the use of both SASL and spoken language. Reagan *et al.* (2006:192) views this as compatible with government educational language policy in general. The Bilingual Approach encourages the involvement of, and interaction between Deaf and hearing people and the recognition of Deaf culture. Early research on the development of literacy skills in Deaf children, demonstrated that Deaf children of Deaf families tended to be successful readers and writers and were more socially and culturally knowledgeable than Deaf children of hearing families. These children are more successful because they have a secure first language in which to learn before trying to learn a second language (Humphries, 2013:13).

My research assesses which approaches are being used in the respective schools. Often it seems that a combination of the above approaches is used with an emphasis on the Bilingual Approach. My research particularly assesses the value of this Bilingual-Bicultural Approach.

In terms of international best practice, with regard to the African continent, there is some progress being made with sign language-in-education policy. Zambia, for instance stresses the need for equality of educational opportunities for children with special needs, including the Deaf. The Zambia Institute for Special Education (ZAMISE) and the University of Zambia (UNZA) have developed a sign language training course for teachers using sign language, (Owu-Ewie, 2006:80). This will be explored in later chapters. In Europe, one can consider the example of Sweden where there was a decision of the Swedish Parliament in 1981 to acknowledge Swedish Sign Language as a language in its own right, as well as the right of Deaf people to become bilingual (Svartholm, 1984:36). The assumption was based on allowing Deaf children to have sign language as their first language. The developmental work within the schools was supported by Swedish linguistic research about similarities and differences between Deaf and hearing children's second language acquisition. In Swedish schools for the Deaf, sign language is officially the language of instruction in all subjects, including Swedish. Because of the official curriculum, Swedish sign language is regarded as the first language of Deaf learners. These are just two countries where best practices have been implemented. These practices will be analysed in later chapters, particularly chapter 3, in order to inform the literature review of the thesis.

It is my conviction as a researcher, based on personal experience as a teacher for Deaf children, that language planners should encourage the use of bilingualism in all educational settings in South Africa, in order to improve the quality of teaching and learning for hearing impaired and Deaf children. Furthermore, that SASL should be the medium of instruction in all Deaf schools. It should be taught as a subject and used to teach content subjects where appropriate, alongside developing skills in English and/or isiXhosa as part of a bilingual approach, in line with the findings of my research. In my experience, Deaf learners use sign language as home language and English as their first additional language. As a result, Deaf learners struggle to read and write English and that leads to high failure rates where English is being used in the classroom. It is my strong conviction that they need to be given a chance to prove themselves. This can possibly be achieved by learning sign language as their first language at schools and expressing their knowledge in sign language so that they can improve their results.

The goals of the research

This research undertakes a global and comparative contextual approach to the development of policies regarding sign language and the use of pedagogies, before concentrating on the South African educational context where policies are in the process of being drafted, both provincially (for example in the Western Cape) and nationally. The specific research questions and goals of the research were:

- To establish what theoretical approaches in education for Deaf learners exist and what insights they can offer to improve South African policy and practise in Deaf education.
- To provide a comparative analysis of how sign language has been developed and used in selected countries such as Sweden and Zambia. This will include a literature review on the development of selected sign language policy globally, specifically within the educational context.
- To provide case studies of sign language practice in education by exploring teaching pedagogies in different South African schools for the Deaf, particularly in the Eastern and Western Cape.
- To specifically document policy developments in the Western Cape Education Department, where such policies are already in place from 2014.
- To investigate what it will take to implement effective Bilingual-Bicultural education in every South African Deaf school.

Chapter Summaries

Chapter one of this thesis sets out a general introduction, while chapter two presents a literature review which supports the various chapters in this thesis. Chapter three provides a comparative analysis of Sign Language models internationally and continentally, including case studies of Zimbabwe, Kenya, Zambia, Britain, Denmark and the United States of America. Chapter four provides the pure linguistic background of the development of Sign Language, in other words the syntactic and morphological development of Sign Language in relation to language more generally. Chapter five contains the research methods that are used in the thesis. Chapter six presents the empirical data based on research at selected schools for the Deaf, whereas chapter seven provides an analysis of this data. Chapter eight of the thesis contains a general summary and conclusion as well as specific recommendations regarding

the use of sign language within the educational system in South Africa. The chapter that follows provides a general literature review for this thesis.

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CHAPTER 2

LITERATURE REVIEW

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Introduction: Development of sign language

Reagan, *et al.* (2006:187) provide different perspectives on South African Sign Language. The perspectives are presented with respect to issues of deafness and sign language based on pathological and sociocultural approaches. According to Reagan *et al.* (2006:188), there are various ways to view deafness: the dominant perspective is based on the view that deafness is a medical condition characterised by an auditory deficit. Thus Deaf people are people, who are hearing impaired. The above perspective has been labelled as a pathological view of deafness. In a physiological sense, Deaf people are not only different from hearing people, but they are often seen as inferior (Reagan, *et al.* 2006:188). This is because the pathological or medical perspective emphasises deafness as a disability. Deafness is also viewed as a socio-cultural condition. The socio-cultural aspect focuses on civil rights and ways to assist the Deaf in order to function fully in the dominant culture. The socio-cultural perspective has implications for issues of language policy (Kuhn 1996:43-51 cited in Ganiso and Kaschula (2013:39). In terms of advocacy the Deaf would prefer not to be classified as individuals with disabilities, but rather individuals who are members of other oppressed linguistic and cultural groups (Reagan, *et al.* 2006:189). The existence of general consensus among linguists, anthropologists, sociologists and educators working in Deaf studies has to do with researching the nature and characteristics of the Deaf community. In this regard an important distinction is made between audio logical deafness and cultural deafness: audio logical refers to hearing loss whereas cultural deafness refers to membership in the deaf cultural community (Reagan, *et al.* 2006:189). Lane (cited in Reagan *et al.*, 2006:189) explains that most people who are hearing impaired are not members of the Deaf community because their first language was a spoken one and they became hard of hearing. In the Deaf cultural community, a certain degree of hearing loss is required for membership (Reagan *et al.*, 2006:189). Lane (cited in Reagan *et al.*, 2006:189) suggests that members of a community,

who are hearing impaired develop the use of a natural sign language as their vernacular language.

Another perspective as suggested by Reagan *et al.* (2006:190) is a socio-economic one, which is a challenge for Deaf people in South Africa. In contemporary South African society, access to the economic and social infrastructure that is necessary for hearing impaired people to be meaningful and to lead meaningful lives is often not available (Reagan *et al.*, 2006:190). This means that, instead of an individual's socio-economic choice being driven by belief or ideology, it is driven by poverty and economic constraints. Reagan *et al.* (2007:27) make a common distinction between 'deaf' and 'Deaf'. As indicated above and for the purposes of emphasis, the former refers to deafness as an audio logical condition and the latter refers to Deafness as a cultural condition. That means that when one is writing about cultural groups, the upper-case is employed with the letter 'D' and the lower case letter 'd' is employed in the case of an older person, who gradually loses his or her hearing. According to Reagan (2007:27), 'deafness is not only socially and individually constructed, but is complex and multi layered'.

Reagan, (2006:201) avers that in the South African context, 'Deaf identity and language choice' does not have to do with historically meaningful choice, but instead with the politics of economics and access. Thus the economy of a developing society may be neither reasonable nor defendable to attempt to accommodate, for example, highly costly technology such as hearing aids for poor children who cannot afford them. There should, however, be a 'meaningful' choice for all Deaf people. Furthermore, language choice which is fundamental must be included as a human right. Thus the implementation of language policy in South Africa, especially in spoken languages has been hampered by a lack of resources, slow attitudinal change, appropriate applied linguistics research and a lack of significant systematic and appropriate linguistic research. The socio-cultural view of deafness, according to Reagan, *et al.* (2006:189) operates from an anthropological perspective rather than a medical perspective. The suggestion is in the sense that deafness is not understood as a handicapped condition, but as an essentially cultural condition.

Historical development of South African Sign Language schools for the Deaf

SASL was first originally documented in residential schools for the Deaf. Some form of sign language existed in Deaf groups well before this time. In 1816, five sisters from the Dominican convent Cabra in Ireland, founded a school for the Deaf in Cape Town known as

the Grimley Institute for the Deaf. German Dominican sisters also started a deaf school in King Williams Town. In 1881 the Dutch Reformed church in Worcester started De la Bat School for the Deaf (Reagan. *et al.* 2006:191). Earlier in the century, signing was formally encouraged in schools for the Deaf, but was only used outside the classroom and not used as a medium of instruction until 1948. In 1948, the beginning of apartheid, the manual sign codes for spoken language were used in schools for the black Deaf. The schools serving the white population remained in oral orientation, trying to get Deaf learners to actually speak instead of signing. Signing was only allowed outside of the classroom. Thus oral education consisted of expensive hearing aids as well as language and speech therapy. In Black schools those working with Deaf adults and Deaf children became aware that the signing used in the classroom seldom matched the sign language which was used for the purpose of socialising by the Deaf community, as various varieties were constantly emerging. The Deaf community has its own signs which differed from the classroom signing. Black schools' signing comprised of signs that were used to replace or represent spoken language and they were extracted from a book entitled *Talk to the deaf/Praat met die dowes* (Reagan, *et al.* 2006:191).

The nature of South African Sign Language

According to Reagan (1997:4), the study of sign language in linguistics dates from the 1960s publication of William Stokoe's *Sign Language Structure in the United States.* In South Africa the scientific study of SASL dates back to the early 1980s. A growing body of literature which deals with different SASL aspects is operating although it is clear that there is a need for additional formal studies of SASL (Reagan *et al.* 1997:4). There is natural South African sign language, which is a language that is used by the Deaf in Deaf communicative interactions. SASL functions as Deaf primary vernacular language for substantial numbers of Deaf people. SASL remains a stigmatised language variety in the South African context; hence there are many misunderstandings amongst many linguistic educators and policy makers (Reagan, *et al.* 1997:4). The natural sign language must be taken into account in discussions that are related to language such as language diversity and language and educational policy in South Africa.

In educational settings, there is inconsistency regarding the status of sign language (Reagan, *et al.* 1997:4). One can argue that SASL is the natural language of a Deaf child and may also be the first language the child acquires, but it is not necessarily a variety which can be

considered the child's native language or mother tongue. In most cases Deaf children learn SASL from their peers in educational settings such as playgrounds, residences and cafeterias (Reagan, *et al.* 1997:7). Sign language is an established field in linguistics and it is a fully and completely developed human language that meets all descriptive language criteria (Ganiso & Kaschula 2013:33). Signing does not always take the form of the same sign language and its diversity is significant. There are natural sign languages, which are commonly used by both Deaf and hearing people when interacting. Deaf educators and learners for example use manual sign codes for spoken languages, which are used in educational settings (Ganiso & Kaschula 2013:33).

SASL is a unique language which is unrelated linguistically to any of the spoken languages in South Africa. Penn (1992:277-284) contends that SASL is 'rule-governed, grammatical, systematic and amounts to a non-arbitrary communication system, which is similar in nature to other natural sign languages.' According to Ganiso & Kaschula (2013:3), SASL provides evidence which suggests that sign language may have universal characteristics. The difference from families with spoken languages is that there are only ten percent of Deaf children who are born from Deaf parents. They learn sign language from other Deaf children, and adults. Sign language is then not written down. Geographically signed languages are then not related to the spoken languages where they occur.

The meaning of South African Sign Language

SASL is a fully-fledged language equivalent in all respects to all other natural languages, (Aarons *et al.* 2002:49,). SASL is functionally capable as a language of expression and can be acquired naturally by Deaf children in the same way that spoken languages are acquired i.e. when the child is exposed to SASL at an early age. According to Van Zijl (2003), SASL has its own syntax and grammar rules like all other languages. South African Sign Language is a distinct language on its own; it is not a derivational pidgin. It is a rule governed, grammatical, communication system similar in nature to other natural sign languages. It is the official sign language used by Deaf people in South Africa.

SASL is not the only sign language used in South Africa, but is the language that is promoted to be used by all Deaf people in South Africa. Sign language is made through the medium of spaces, not sound (Mesthrie, 2002: 128). Deaf people use their hands, face, head and body for their communication. There is no universal sign language. Sign languages develop and evolve over time from one generation to another. In South Africa there are eleven official languages;

sign language is not an official language. Before the 1960s and early 1970s sign languages were not seen as proper languages, but as a crude system of mime and gestures (Gregory, 1996).

The users of SASL

According to Mesthrie (2002:127), Deaf people in South Africa are a linguistic minority with their own language and their own culture. The Deaf community is composed of different cultural groups. Language use is different within these groups (Baker, 1980:93). Due to a number of factors such as religion, lifestyle, daily practices, politically beliefs as well as education, Deaf people have different membership in many cultures. There are approximately 500 000 South Africans, who use sign language daily (Stellenbosch Papers, 1998). The majority of these people are Deaf. However, there is a small number of hearing people, usually children of Deaf adults and professionals who are working closely with the Deaf community, who use sign language regularly (Stellenbosch Papers, 1998). According to Baker (1980:93), Deaf people can move from one geographical location to another and enter into a new community in order to make friends easy. The knowledge of Deaf culture helps them learn specific issues and operations of the new communities and to establish new community relationships. South African Deaf people prefer to use SASL in public speaking situations and interpreters are always provided for them.

Deaf people are involved in community activities, which include hearing people using English and they prefer the use of a variety of Signed English (Baker, 1980:94). Language use becomes flexible within the cultural group. Baker (1980:94) states that the primary goal of the Deaf community is to achieve public acceptance in terms of being recognised and also in the use of sign language as a means of communication. In addition to recognition, they advocate for sign Language to be published in the media in order to be recognised and accepted by the community.

The status of sign languages

Although SASL is not one of the eleven official languages of South Africa, it is mentioned in the Constitution of the Republic of South Africa as one of the languages of South Africa that must be promoted. The *South African Schools Act* of 1996 states that South African Sign Language should be the medium of instruction in schools for the Deaf and it is now known as the language of learning in schools for the Deaf (Republic of South Africa). Ricento (2002)

states that in recent years sign languages have been the focus of both status-planning and corpus-planning efforts. The Deaf Association of South Africa (DeafSA) viewed the recognition of sign language as the beginning of a new era in this country. Furthermore, sign language has moved from a position of relative anonymity and oppression to a position of status and recognition. In addition, sign language became assimilated in the country's new constitution and in the White Paper on Education.

Existing SASL education policy

In 1994, language planning and policy played a crucial role in South African society. SASL has been recognised constitutionally and legally in ways that would appear to indicate consideration of the language rights of the Deaf in South Africa. Thus multilingualism has been taken seriously at policy level in the protection and promotion of SASL. Although SASL is not among the eleven official languages, it is nevertheless, directly mentioned in the Constitution. In Chapter 1 (6) 5, the Constitution created the Pan South African Language Board (PanSALB) which is empowered to promote and create conditions for the development and use of (i) all official languages, (ii) the Khoi, Nama and San languages, and (iii) sign language. PanSALB must promote SASL as well as pursue two specific objectives: initiating and implementing strategic projects aimed at creating awareness, identifying needs and promoting SASL as well as identifying and funding projects aimed at developing SASL (Republic of South Africa 1996 b).

SASL policy and the Deaf, social and educational implications

Sign language policy developments have been an ongoing concern for the South African government and have been characterised by on-going discussions and widespread debate throughout the country (Reagan, *et al.* 1995). Furthermore, since democracy in 1994 there have been a number of separate committees involved in making recommendations pertaining to the implementation and development of national policy in South Africa.

In 1996, the Minister of Arts, Culture, Science and Technology established the Language Plan Task Group (LANGTAG) for the purpose of providing him with direction on the logical South African National Language Development Plan. In addition, eight sub-committees were appointed over a period of four months (Reagan, *et al.* 1995), a variety of stakeholders were contacted and a number of meetings and workshops were held.

Furthermore, a report based on LANGTAG findings was prepared by each subcommittee. SASL was one of the languages which received attention and appeared as a point of discussion during the meetings.

Inclusive education in South Africa

The centrality of languages in Deaf students' education and reports on progressive policy changes in the areas of language education and disability in South Africa have been revisited by Glasser & Van Pletzen (2012). A survey was done on classroom discourse and literacy practices in the mainstream FET (now TVET) classroom. Furthermore, the focus was mainly on students' acquisition of text literacy skills in Business English (Glasser & Van Pletzen 2012). There is great potential for establishing inclusive education in the mainstream classroom for Deaf students, but there are many challenges and difficulties in the provision of fully inclusive education for Deaf students. Teacher and interpreter training in forms of language and pedagogy that would benefit all students in the classroom was also needed (Glasser & Van PLetzen 2012).

SA School's Act

The South African Schools Act No. 84 of 1996 also mentions SASL in the section on language policy in government schools. The South African Schools Act takes this right further, considering that a recognised sign language has official language status for the purpose of learning at a public school. This point is illuminated further and reinforced in the Department of Education's language-in-education policy (1997). The Department of Education identified cultural diversity as a 'national asset' - hence the work of committees was on the promotion and development of multilingualism of official languages in the country including the language of Deaf people, i.e. sign language and other languages were included in the South African Constitution.

CAPS Curriculum

Deaf learners in South Africa experience challenges in educational and information access due to the fact that the relevant provision of the Constitution and the South African Schools Act (No. 84 of 1996) are not actively implemented. Most teachers do not have necessary signing skills in order to prepare this language to be in use as a medium of instruction in the teaching of Deaf learners. The Minister of Basic Education, Angie Motshekga, approved the Curriculum and Assessment Policy Statements (CAPS) for Grade R to Grade 12 at Home

Language level on 13 August 2014 as outlined in Appendix C. For the first time provision was made for deaf children to study SASL as a Home Language subject, in the same way as other languages can be studies as Home Language. The curriculum was rolled out in 2015 in South African schools for the deaf. The focus was initially on the Foundation Phase and then bridging Grade 9 in order to be prepared for Grade 12, to be implemented in 2018. SASL was introduced as a subject in the Western Cape from Grade R to Grade 3. The Department of Basic Education announced that teacher training had already started and the plan intends to introduce the curriculum across all the grades by 2018.

Given the current status of sign language, the Pietermaritzburg High Court heard the case No 4846/2009 of *Springate and others*, on 19 August 2009, regarding the non-recognition of the SASL as a subject in the schooling system (http//www.deafsa.co.za/documents/SASL). Although special needs learners fall under the same CAPS policy and learning areas as their mainstream counterparts, the end focus is different. Covering all learning areas, there is an adaptation of the content in such a way as to make it manageable for all learners. The individual Educational Plan for each learner gets adapted on a regular basis according to the development stage of each learner. Furthermore, The Curriculum Assessment Policy Statement states that the attainment of the improved implementation was amended 'with the amendments coming into effect in January 2012'. Thus a single comprehensive Curriculum and Assessment Policy document was developed for each subject to replace Subject Statements, Learning Programme Guidelines and Subject Assessment Guidelines from Grade R up to Grade 12 (Basic Education Department). The Curriculum and Assessment Policy Statement (CAPS) document states that the National Curriculum Statement for Grades R to 12 provides a clear direction regarding what type of knowledge and skills should be developed in South African schools.

Development of Deaf Education

Akach (2010) states that a SASL historical perspective reflects that many approaches were developed to cater for the education of the Deaf. The most pivotal approaches in Deaf education were the oral method which was based on speech, the manual approach based on the visual method or signed modality, and inclusive, mainstreaming or integration policy.

Oral Approach

In September 1880, there was an International conference of Deaf educators, which was held in Milan. At this meeting it was decided to emphasise the Oral Approach and sign language was consequently not encouraged. In fact, those supporting the Oral Approach voted for the banning of sign language. They declared that oral education was a better educational method than manual education. The Oral Approach supports the view that Deaf children are best served by instruction in lip-reading and improving speech by using language therapy. However, in South Africa the oral orientation remained strictly for the White population and also involved expensive hearing aids. This oral method was a challenge to Deaf learners and adults. There was no use of sign language and the teachers taught them how to lip-read and speak. The fact that Deaf learners did not understand what the teachers said in class resulted in learning difficulties that were experienced by Deaf learners. The use of an oral only approach had an impact on learners in the sense that they were not able to gain effective cognition in content subjects. Educational outputs and throughput among Deaf learners remained poor (Ganiso & Kaschula 2013:67). The oral approach is still applicable in some Deaf schools but Deaf children use SASL freely to communicate on the playground and in the hostels. It is good for the hearing impaired learners and partially Deaf learners who can lip-read, but for totally Deaf learners it does not work as they cannot hear or lip-read.

The development of the oral approach can then be traced to the Milan Conference of 1880 (Akach, 2010). Though there were delegates and stakeholders from European countries and the United States, Deaf people themselves were ironically not invited or represented. Thus the Deaf were excluded from the voting session of the conference. Furthermore, at the conclusion of the conference a resolution was adopted in favour of 'oralism' rather than 'manualism'. The Milan Conference invited hearing educators only. The policy that arose from the conference is still implemented in many parts of the world despite the lack of Deaf constituency representation (Akach, 2010). In addition, according to Akach (2010), Americans voted to entrench oralism in Deaf education and disqualified the minority sign language.

Furthermore, the simultaneous use of signs and speech was considered as harmful to the development of speech and lip-reading. Thus the oral method was preferred. Though there was no strategy for implementation, through the resolutions the delegates declared the death of signed language. In addition, this had an effect on the schools' staffing which resulted in

the firing of Deaf teachers and the exclusion of pupils who were already contaminated by signed languages (Akach, 2010). The retained Deaf teachers were restricted to menial work in schools. Thus Deaf people were not allowed to be educated to the level of teachers because of the language education policy.

In the 19th century, Thomas Arnold was the first oral teacher of the Deaf in the UK. His sign language training was at Doncaster where he set up his own school in 1868 using the Oral approach. According to Kyle *et al.*, (1985:41), an Association for the Oral Instruction of the Deaf and Dumb began to train teachers in 1872. According to Kyle *et al.*, (1985:41), in 1870, there was a significant change whereby many schools began to employ oral teachers. The schools tried the method with selected children. Kyle *et al.*, (1985:41) points out that the influence moved further across Europe to France, as a result there were no strong advocates of sign usage in school. The USA, however, still supported the importance of the use of sign language

Manual Code Approach

In 1948, as part of the South African apartheid education system, a manually coded form of English approach for spoken language was used in schools for black Deaf. Manually coded English is a variety of visual communication methods expressed through the hands which attempt to represent the English language. Hearing people speak and sign at the same time. The signing that was utilized in schools for the Deaf was not signed language at all, but rather a manually coded form of English. Different forms of manually coded English in the education of Deaf children were originally developed as part of acquiring literacy in written English. Contemporary Deaf education can then favour either sign language, the oral approach or total communication where both signing and oral language is used. Furthermore, a common approach by teachers of the Deaf is that they use Total Communication (TC) for communication (Akach, 2010). Manually coded communicative English as an artificial form of code and a development tool to teach English and other spoken languages to the Deaf arose from Total Communication. Thus manually coded English has expanded to include Manually Coded Kiswahili, IsiZulu etc. and there is still an attempt to 'map the grammar of English' (Signed Exact English).

Total Communication

Towards the end of apartheid Total Communication was introduced. It involved the simultaneous use of spoken language and signing. As an educational philosophy, it was adopted by most schools for the Deaf in the country. In contemporary Deaf education, Total Communication is advantageous for hearing teachers as it allows for the best communication with their learners. However, for the Deaf learners and adults it does not meet their needs hence their culture does not accept it because they believe that when one uses sign language he or she is not allowed to use the mouth or lips. In addition, Total Communication refers to Simultaneous Communication (SimCom). Ganiso & Kaschula (2012:45) state that Total Communication was proposed by Roy Holcomb in the United States in order to recognise and promote the right of a Deaf child to use all forms of communication available to develop language competence. Thus the Total Communication approach was followed when there was a sudden and uncontrollable increase in the development of artificial codes for representing English. Total Communication, in much the same way as the former oral policy, has proved to be a way to easily implement the policy. Furthermore, its easy implementation has been proven by the proponents of oralism including the Milan resolution of speech which appealed only to the majority of hearing people in Deaf education.

According to Kyle *et al.*, (1985:251), Total Communication involves simultaneous use of signs together with oral language. Total Communication was first adopted by Denton (1970) to describe the Maryland School for the Deaf practice in the United States (Kyle *et al.*, 1985:251). Kyle *et al.* (1985:32) argue that the philosophy of Total Communication which specifies the use of signs and speech together in classroom activities predominated in most countries. Total Communication requires signs that are used in spoken word order and serves as a powerful tool in achieving a learning environment in school. Kyle *et al.* (1985:32) highlight that the simultaneous use of signs and speech opens up possibilities for educators and allows for participation in group activities by Deaf and hearing people together. However, a UK study of social workers for the Deaf indicated the weaknesses in the knowledge of BSL carried over into simultaneous sign and speech. Furthermore, what is reflecting in other countries, especially Sweden, is that educators used Total Communication without a SL background. They ended up requesting courses to get fuller understanding of the language. However in the end their target form for teaching is a signed English variety (Kyle *et al.* 1985:33). There is therefore, though Total Communication, an inter-connection

between BSL, signed English and speech requirements to teach the language of the hearing community.

Bilingual\Bicultural Approach

Bilingualism is defined as the 'regular use of more than one language' (Lucas, 2001:41). Deaf people could be bilingual in two ways. Firstly, in order for bilingualism to exist, there must be two languages (Lucas, 2001:42). Hearing people around Deaf people might not consider Deaf people who sign natural sign language and know a spoken language as bilingual. Secondly, there is a view that when a person feels equally comfortable in both languages that particular person is bilingual. Furthermore, most bilinguals always have a dominant language and a non-dominant language (Lucas, 2001:42). Both languages function differently during their lives. In addition, a hearing person who might be fluent in Mandarin Chinese and use English at work, but cannot discuss or read academic English articles, would be considered bilingual. Also this kind of bilingualism is considered from a societal point of view.

However, an individual phenomenon is considered at this point in time. Thus, in individual bilingualism, among hearing people the knowledge of the non-native language is unpredictable. Things become less predictable for individuals who learn a second language (Lucas, 2001:42). These second language individuals can be at different levels. Such levels can vary based on age, reasons for learning the second language, the type of training in second language, functions that the second language will play in an individual's life, reasons for preserving first language in the production of the second, and motivation to learn the second language. Thus, in the hearing world bilingualism produces various kinds of language and in the Deaf world things are more predictable. Grosjean *et al.* (1992) explain what it means to be a Deaf bilingual. They state that in experience and behaviour among the Deaf community, there is great range of diversity. Furthermore, there are native signers who are fluent in a spoken language in reading, writing and speaking. Also there are native signers who read and write a spoken language fluently but cannot speak it. Additionally, there are native signers who are fluent to various degrees in reading, writing and spoken language. There are also Deaf signers who read and write a spoken language as a second language fluently but do not speak it. Others are second language signers who first learned a signed version of a spoken language. Also there are native signers who learned another sign language as a second language. Lastly, there are first or second language signers who speak a

spoken language (Grosjean *et al.* 1992). Bilingualism is a common and natural phenomenon in many places in the world. Grosjean *et al.* (1992) highlight that being bilingual is part of life.

There was then an emergency bilingual approach to Deaf education for all students which emphasised the use of both SASL and spoken language. Reagan *et al.* (2006:192) views this as compatible with government educational language policy in general. The bilingual approach encourages the involvement of Deaf and hearing people and the recognition of Deaf culture. Early research on the development of literacy skills in Deaf children demonstrated that Deaf children of Deaf families tended to be successful readers and writers and were more socially and culturally knowledgeable than the Deaf children of hearing families. These children are more successful because they have a secure first language in which to learn before trying to learn a second language (Humphries, 2013:13). Glaser & Van Pletzen (2012:27) contend that the Bilingual-Bicultural Approach is an approach that is well documented in the teaching of younger Deaf learners. The bilingual approach is primarily based on the 'Linguistic Interdependence Principle' where a positive transfer will be allowed to occur from the first to second language, especially when there is exposure to, and motivation for the learning of the second language.

Furthermore, Glaser & Van Pletzen (2012:27) state that there are bilingual models which suggest that if a Deaf student achieves high levels of competence in the basics of natural signed language as their first language, a positive transfer occurs when learning a second language.

<u>Inclusive Mainstreaming or Integration Policy in Deaf education</u>

Inclusive education was developed from the early 1970s onwards (Akach, 2010). A number of Deaf schools were closed in favour of educating the Deaf within the mainstream schools. Countries such as the United States and some European countries led this policy. The event which formed this movement in 1948 was the United Nations Declaration of Human Rights (UN 1948). The United Nations Standard Rules on the Equalisation of Opportunities for Persons with Disabilities (UN 1993) and the Salamanca Statement and Framework for Action on Special Needs Education (UNESCO 1994) confirmed that 'every child has a fundamental right to education, and must be given the opportunity to achieve and maintain an acceptable level of learning' (Aarons & Akach, 1999:1). The approach was easy to carry out without much planning as the Deaf child was to be sent to the neighbourhood school. Thus the

inclusive approach appealed to parents because they would not be separated from their children who might have been sent away to boarding schools far away because of special education needs.

However, there were challenges caused by the inclusive approach (Akach, 2010). In many instances, inclusion turned to be exclusion in terms of education. The Oral Approach was not the aim of inclusion, but particular cases occurred where there were no interpreters in classes of 40 hearing students with one or two Deaf learners. Deaf learners also required powerful hearing aids and had to sit in the centre of the front row to be able to lip read the teacher. Akach (2001) points out that the success of the inclusive approach is still debatable. He observed over 70 learners in Northern Uganda who were packed in a classroom with few desks and some learners sitting on the floor. Also four of them were profoundly Deaf with no interpreter. Akach (2001) felt that an environment with common negative attitudes towards the Deaf does not serve Deaf learners' needs, instead the Deaf learners are traumatised, with little beneficial effect to their learning needs.

Curriculum and Inclusive Education

Vayrynen (2003:4) maintains that the attainment of inclusion relates to the curriculum, since the curricula regularly generates substantial barriers to learning. Thus there is a relationship between the barriers to a number of interconnected parts of the curriculum such as content, classroom management, language of teaching, learning styles and pace of learning, materials and equipment available for teaching and learning, timeframes and assessment methods and techniques. A narrow definition of the curriculum refers to planned teaching and learning opportunities which are available in the classroom and also in school. The core of the curriculum is the formal curriculum, i.e. the Revised National Curriculum where educators are given direction. Educators use the framework for their planning in terms of content, methods, assessment and outcomes.

An illustration of different curriculum layers of the informal curriculum is shown below:

Informal

Background   Barriers   Interests

Profile
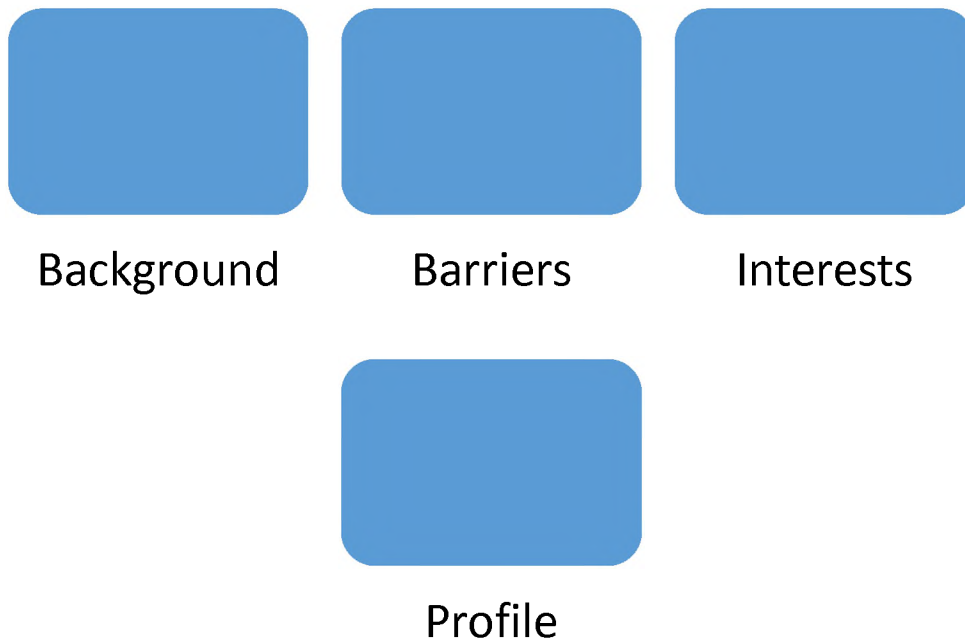
Formal curriculum 'planned' outcomes method assessment (Vayrynen, 2003)

Formal Curriculum

The formal curriculum framework was traditionally exposed to conservative practices of learning and teaching theories (Vayrynen, 2003:4). Thus learning was a set of content which had to be learnt in a certain time and order. In addition, there was limited time for questioning and critical thinking. Most educators were trained in order to fit into the framework. Also as a result of systemic factors such as poverty and second language issues or other barriers, children were excluded especially if they did not fit into the prescribed scheme. Vayrynen (2003:5) also argues that there were contemporary theories which did not assume that, 'knowledge' is a package that can be delivered the same way to all learners. He asserts that, knowledge is constructed and developed by learners individually and collectively. Thus there are no fixed facts and inflexible principles. Also educators encourage knowledge construction instead of knowledge reproduction; a new pedagogy was required in terms of developing independent citizens who were reflective thinkers. It was based on a new understanding of the nature of knowledge and learning including different barriers that may obstruct learning.

Furthermore, Curriculum 2005, the Revised National Curriculum Statement guidelines and the Education White Paper 6 (2001) highlighted the principle that any practice should be constant, i.e. all learners should be given the necessary support to support Outcome-Based

Education as a learner-based educational environment (Vayrynen, 2003:5). Schools should create successful conditions for learners to overcome individual barriers to learning and to development, rather than categorising learners in terms of abilities and disabilities. Thus inclusive practices need to consider the relative degrees of difficulty or ease with which different learners succeed in school. Many learners experience difficulties with learning, however others learn quicker and easier than their peers. In addition, the education system should take responsibility for creating conditions of success. The Education White Paper 6 includes the factors below as having an impact on learning: the 'negative attitude towards difference, inflexible curriculum, inappropriate language of learning and teaching, inappropriate communication, inaccessible and unsafe built environment, inadequate support and irresponsive teaching\learning practices', (Vayrynen, 2003:5). Furthermore, learners may experience barriers to learning because of impairments, various psycho-social factors and particular life experiences. Thus pedagogy should be found in order to ensure that all learners have the same opportunities to learn and to address individual needs in the best of learners. Learners need to be creative and imaginative in order to be ready to attend to the mainstream economic, social, and political South African life. Thus a classroom should become a thinking space that creates possibilities for all educators and learners.

New pedagogical thinking emphasises that learning should be active; there should be a focus on critical thinking, reasoning, reflection and action. Furthermore, knowledge should be integrated into real-life situations. The educator should be aware of his or her facilitation role for learning and be vigilant that it is relevant and connected to real life situations. The educator is a facilitator for learning and learning goes beyond memorisation. Thus learning programmes are viewed as guidelines which educators can use in order to design creative and responsive activities for every learner to achieve his or her potential. Furthermore, emphasis should be on flexible time frames in order to allow learners to work at their own pace to accommodate their respective learning difficulties. Input from the community should also be sought and encouraged regarding the learning process and curriculum (Vayrynen, 2003:6).

These new approaches are also intertwined with old approaches and theorists. In the 1920s and 1930s, Vygotsky (1926) and his collaborators systematised and applied socio-cultural approaches to learning and development. Thus the approaches are based on the concept that human activities take place in cultural contexts, and can be best understood when investigated in the context of their historical development and mediated by language and other symbol systems. This is true too of sign language. Psychologists developed simple explanations of

human behaviour, however, Vygotsky developed a rich 'multifaceted theory' through the examination of a range of subjects including the psychology of art, learning and development, and language and thought, including a focus on the education of students with special needs (John-Steiner, 1990). Furthermore, socio-cultural approaches gained increasing recognition in the late fifties and early sixties. Thus they have been further developed by scholars in many countries. Vygotsky's (1926) ideas are fully developed even though he died at a young age. Much of his work remained un-translated into English, though his theories are highly influential in Western countries. Vygotsky's ideas have been increasingly influential in the United States. Moreover, the power of his ideas depends on the vibrant interdependence of individual and social processes.

Vygotsky (1926) analysed the crisis in psychology where everyone claimed to 'possess an explanatory system adequate to become the basis of general psychology' (John-Steiner, 1990). Vygotsky conceptualised the development of socially shared activities as transformation into internalized processes. The interdependence between individual and social processes can be clarified by examining major themes in his writing. This includes individual development, which comprises higher mental functioning in its social sources of origin, human action on both individual and social planes, which are mediated by tools and signs. The first two themes are best examined through genetic or developmental analysis. Vygotsky's work can also then inform sign language theory both from an individual and social perspective based on the needs of the community.

John-Steiner, (1990) argues that dependence on caregivers has been started by human development. In addition, the vast pool of the transmitted experiences of others produces developing individuals. Moreover, the 'genetic law of development' emphasizes human development in the primacy of social interaction: 'Every function in the cultural development of a child comes on the stage twice…first in the social, later in the psychological…higher psychological functions are internalized relationships of the social kind, and constitute a social structure of personality' (John-Steiner, 1990).

According to Vygotsky, when the learners begin an activity they depend on each other and those with more experience. Thus they take their responsibility for their own learning and participation as a joint activity. Furthermore, the interaction and routine between children and their caregivers and companions provides them with many opportunities in order to observe and participate in the activities of their culture. The same can be said of hearing impaired or

Deaf learners, hence the need for an appropriate learning environment which is inclusive in nature as outlined below and in the case studies presented in chapter 3 of this thesis.

Special needs education for hearing impaired learners

Webster *et al.* (1989: viii) states that ordinary schools should accept children who come from special schools and that this should involve a radical re-examination of what schools have to offer for all children. There should be integration of children from special schools. In other words, children should not be excluded from the mainstream schooling process based on disability. This calls for a more integrated approach which would also accommodate hearing impaired and Deaf learners within the system.

Matters of language, language diversity and language rights in multilingual contexts are then complicated matters (Reagan, 2007:162). Language policy has often been recognised to be oppressive, empowering or disempowering in nature when it comes to sign language and its use in education. Deaf users of sign languages often received little attention. In addition, a small body of research that dealt with language policy and language planning for sign language in education was not concerned with the issues of multilingualism and the Deaf. Thus concern was based on individual bilingualism and multilingualism in signed and spoken languages with respect to social, economic, political and education challenges of the inclusion of the Deaf in the broader multilingual community. Furthermore, the challenges associated with inclusion and exclusion of sign language users in multilingual settings are explored (Reagan, 2007:162) in order to bring learners with special needs into the mainstream education.

Language Orientation which has shaped Deaf Education

In terms of language as a problem of orientation, Reagan, (1995) *et al.* argue that pathologically, deafness has been seen as an auditory deficiency and handicap; thus a medical problem that needs to be remedied in order for a Deaf person to become like a hearing person as much as possible. The means that efforts have been made in teaching speech, requiring hearing aids, cochlear implants and lip-reading as indicated earlier in this chapter (CAEBER Institute, 2014). Furthermore, language as a resource orientation has been viewed from a sociocultural perspective which views the Deaf as a sociocultural minority which shares characteristics with other Deaf minorities. In addition, where Deaf people face problems they can be seen as human rights problems. In other words sign language usage in education

should be seen as a right in the same way as other languages have rights, for example as set out in the South African constitution.

Conclusion

This chapter outlined the development of sign language against the background of deafness, a medical condition characterised by auditory deficit. The chapter furthermore takes into account the socio-cultural aspects, which focus on civil rights and ways to assist the Deaf in order to function fully in the dominant culture. The origin of SASL which began in the residential schools for the Deaf was discussed. These include the Dominican School and Mary Khin, Cape Town; St Thomas School for the Deaf in King William's Town, and EFATA School for the Blind and Deaf. In this chapter the importance of sign language recognition is put forward. It is pointed out that users of sign language are estimated to be around 500 000 in South Africa. However, SASL is not one of the eleven official languages of South Africa. It is, however, mentioned in the Constitution of the Republic of South Africa as one of the languages of South Africa that must be promoted and in that way it is constitutionally recognised. The chapter also discusses examples of different teaching approaches used in Deaf schools. A literature review regarding the historical development of SASL is presented through a summary of authors such as Reagan *et al.* (2006) who have written on this topic. The chapter that follows presents an international comparative approach to best practices in relation to sign language teaching and learning.

CHAPTER 3
A COMPARATIVE STUDY OF INTERNATIONAL SIGN LANGUAGE BEST PRACTICE

Introduction

This chapter seeks to highlight best practices in a number of countries across the world. The purpose of this is to show in a comparative way how sign language has developed and how it is regarded across different continents. Sign language usage in Zimbabwe, Kenya, Zambia,

and with reference to South Africa, as well as in selected European countries such as Britain and Denmark, and in the United States of America is analysed in this chapter.

Sign Language in an African Context

With regard to the African continent, there is some progress being made concerning sign language-in-education policy. Zimbabwe, Kenya and Zambia for instance stress the need for equality of educational opportunities for children with special needs, including the Deaf.

Zimbabwean Sign Language (ZSL)

Mutswanga *et al.* (2014), point out that 'ZSL is a visual language which uses manual communication and varied body signs to give meaning.' This meaning involves the combination of movement of the arms, hand shapes, as well as facial and body expression to express communication through mouthing. ZSL is a visual gestural language which is the first language used by Deaf people. Sign languages are not universal, though some signs are universal. Deaf people use different means of communication, (Mutswanga *et al.*, 2014).Like many sign languages, ZSL uses some non-manual features such as the mouth, eyes and facial expression at the face-to-face level of communication. Most grammatical expressions are explained through non-manual features (Mutswanga *et al.*, 2014).

According to Mutswanga *et al.*, (2004), ZSL gained legal status in 2013 when it was officially recognised as a natural language of Deaf people by the 2013 Constitution. The Zimbabwean Constitution Amendment (No.20) (2013:17) Chapter 1 Section 6, sub-section (1) states that: 'The following languages namely Chewa, Chibarwe, English, Kalanga, Koisan, Nambya, Ndau, Ndebele, Shangani, Shona, Sign Language, Sotho, Tonga, Tswana, Venda and Xhosa are the officially recognised languages of Zimbabwe.' Sub-section (3a) ensures that officially recognised languages are treated equitably and (b) takes into account the language preferences of people affected by governmental measures or communications. Sub-section (4) states that the state must promote and advance the use of all languages used in Zimbabwe, including sign language and must create conditions for the development of those languages (Mutswanga *et al.*, 2014). However, Mutswanga *et al.*, (2014) are concerned about the question of the conditions that are in place in order to contribute to the development of ZSL.

Engelbrecht *et al.*, (2007:108) considered the missionary mainstream primary schools in rural areas in Zimbabwe. According to Engelbrecht (*Ibid.*), in the past children with disabilities

were believed to be inferior to the able children. As a result they were taught in separate special schools in order to receive specialist services and to avoid disturbance by, and of other learners. Engelbrecht *et al.* (2007:108) observed that 'special education developed as a system parallel to mainstream', and those with disabilities are conceptualized as 'abnormal and in need of specialist attention.' According Engelbrecht (*Ibid.*), inclusive education is the celebration of differences and the support of all learners; the idea is not to separate those with disabilities from the mainstream or even society.

This led to a paradigm shift which was called the expression and promotion of 'egalitarian societal values of equal opportunities' and access to the resources which were necessary for the skills that enable meaningful societal participation and acquisition of abilities. Furthermore, there was a perception that disabled children only had special education needs, which needed to be accommodated in the restrictive environments (Engelbrecht, *Ibid.*). This paved the way for disabled children's education to come together with abled peers in ordinary schools, rather than in specialized institutions which had been founded by the missionaries. In Zimbabwe, already in the 1980s special education needs Deaf children began to be educated together with hearing children, like all other groups of children with special educational needs. However, Deaf learners participated only outside the classroom activities with hearing peers. Deaf learners were therefore academically excluded and socially included due to lack of linguistic access to the academic curriculum in primary school (Engelbrecht, *Ibid.*).

Engelbrecht (*Ibid.*), observed that inclusive education was one of many ways of enhancing citizenship rights for people with disabilities through the Zimbabwean education authorities. Furthermore, the emphasis was on universal access and the promotion of equity for the disadvantaged groups, with special attention on the removal of educational disparities. In addition, the provision of inclusive education is emphasised within the mainstream school environment. Thus the conditions and support should enable diverse individuals to achieve specific educational outcomes, which might or might not be understood to be the same for all learners.

Engelbrecht (*Ibid.*) viewed inclusion as fostering a learning environment for all children regarding their norms, values and beliefs. In addition, they argue that inclusion may be viewed as a cultural cultivation of social values in Deaf peers and hearing children. Furthermore, all students should be accommodated in the nearest regular schools. Deaf students therefore have the right to learn with their hearing peers in an inclusive setting in

Zimbabwe (Engelbrecht, *Ibid.*). It is also recognised that Deaf learners may need Sign Language use as a medium of communication, although educators of Deaf children in sub-Saharan Africa do not view sign language as a complete language and many cannot sign. Engelbrecht (*Ibid.*) states that a school environment which offers opportunities to Deaf people to participate fully may be considered less restrictive. There have therefore been considerable efforts made in Zimbabwe to create a more inclusive and less restricted learning environment for Deaf and hearing impaired learners. This is not the case in most other African countries, including South Africa.

Kenyan Sign Language (KSL)

From the period when the country was still under British colonial rule, there have been specific language policies in Kenya. The current sociolinguistic situation of the country has shown that English has a 'hegemonic edge' over Kiswahili, though English is not widely spoken in places such as rural areas where the mother tongue flourishes (Kibui, 2014).

Like in Zimbabwe and South Africa, in Kenyan society, the mother tongue holds a strong influence since it is used for informal communication and neighbourhood conversations (Kibui, 2014). The Kenyan Constitution provides for various languages, but mainly for the recognition of Kiswahili as a national language of the country while both Kiswahili and English have official status. There is also recognition of Sign Language, Braille and other indigenous languages of Kenya (Kibui, 2014).

A historical perspective regarding language development in Kenya is based on the understanding of the country's language policy, as well as the current sociolinguistic situation. Kenya's present language policy was adopted following independence in 1963. The colonial language policy had a great influence on the post-colonial language scenario and hence English retains an important status in Kenya (Kibui, 2014). According to Kibui, (2014), these different shifts in governmental education policies created the current language situation in Kenya where English is still enjoying superiority above all other dialects and languages. Kibui, (2014) asserts that the country's new constitution served as a beginning towards the achievement of a cohesive 'legal backing' on language by acknowledging Kiswahili as an official language and the recognition of other languages such as Kenyan Sign Language and Braille. However, according to Kibui, (2014) Kenya's constitutional provisions on language are not expanded to the extent of other multilingual republics such as South Africa. South Africa is an example of a multilingual nation which has managed to

address language diversity, at least in regard to policy, though sign language is not officially recognised as indicated elsewhere in this thesis. Likewise, the language policy in Kenya and the New Constitution for Vision 2030 states that the state shall promote and protect the diversity of the people of Kenya, and promote the development and use of indigenous languages, Kenyan Sign Language, Braille and other communication formats and technologies. These must also be made accessible to persons with disabilities (Kibui, 2014).

Furthermore, Chapter Eight of the constitution contains provisions on language. Regarding language use in parliament it states under Sub-Section (1) that 'The official languages of the Parliament shall be Kiswahili, English and Kenyan Sign Language...' Similarly to South Africa, Kenyan Sign Language still lacks the formal legal recognition afforded to Kiswahili and English under the new Constitution, though Article 54 of the Constitution complements these under sub-section (1) of the law that is tailored to promote equality for persons with disabilities (Kibui, 2014). The sub-section states that a person with a disability is entitled to use Sign Language, Braille or other appropriate means of communication, and he or she is entitled to access materials and devices to overcome constraints arising from the person's disability (Kibui, 2014). In 2009 the Kenyan Census confirmed that out of a population of 40 million, there were 1.3 million people with disabilities.

Unlike in Zimbabwe, and similarly to South Africa, Kenyan Deaf education is offered in special residential schools. Regarding the institutions' exact number for Deaf learners, these remain unknown (Kimani, 2012:6). Furthermore, Deaf learners are older and enter school later than their hearing children counterparts. In addition, they spend more years in school than hearing learners. Furthermore, some Deaf learners in Kenya leave the system as they grow older or if they are kept back and fail continuously.

KSL was recognised as an official language of instruction in 2004 (Kimani, 2012:11) and it is used in schools. However, when the learners join school, they have already obtained signs from home. Learners in Kenya were taught the manual alphabet in order to fingerspell 'written words'. Also in order for them to be able to communicate with the teachers and amongst themselves, they learnt new signs for new concepts. Furthermore, KSL is currently taught as a subject simultaneously with English (Kimani, 2012:11).

In terms of assessment the only examining body which conducted the national examinations for Deaf schools and Colleges in Kenya was the Kenya National Examinations Council (KNEC). Since the introduction of Deaf education in the 1960s in Kenya, Deaf children were

not allowed to 'sit' for national examinations (Kimani, 2012:11). Thus after Deaf learners completed seven years in primary school, which was at the same level and number of years as hearing learners, this was followed by an extra year with a focus on vocational skills learning. This resulted in few learners who would be able to gain access to special secondary schools as the Deaf learners had followed a different programme.

Furthermore, they would leave the school with a certificate that is graded on vocational skills. The certificate would not be an academic certificate (Kimani, 2012:12). Additionally, the certificates would have been obtained from that particular school. Therefore, Deaf learners never had the opportunity to sit for the primary national examinations before 1980. Deaf learners who did join secondary schools later sat for the Kenyan Certificate of Education (KCE) in 1984.

With regard to the training of sign language teachers, the Kenya Institute of Special Education (KISE) co-ordinated this endeavour. The criteria for acceptance was that teachers needed to have received general training and teaching experience in normal schools and they required a diploma or certificate program (Kimani, 2012:12). Also teachers were trained through distance learning 'modes' fulltime or part-time. Teachers learnt and are still learning sign language skills. KSL is currently offered as a certificate course. Thus teachers had to enrol for specialisation of one area for the whole period during the first year for the Diploma program. As there was a scarcity of required trained teachers for the Deaf learners, the Institute continuously accepted teachers in order to avoid large teacher to student ratios in classes (Kimani, 2012:12). Although far from ideal, there have also been positive changes when it comes to sign language usage in Kenya. Let us now turn to Zambia as another African country where strides have been made regarding the implementation of sign language policies in education.

Zambian Sign Language (ZASL)

According to Sylvester (2003:1), Deaf and hard of hearing special needs education in Zambia began as early as 1955. The Magwero School for the Deaf was founded by a Dutch Reformed Church missionary nurse and teacher, Dr Ella S. Botes. The school was located in the Eastern Province of Zambia, in the Chipata District. Dr Botes, who was the principal and a business manager in relation to the school, in turn received support from Mr Shenard K. Chitsala, a Zambian man. Deaf and hard of hearing academic classes were organized by Mr Chitsala. The school was supported with a grant by the Zambian Government department of Social

Welfare (Sylvester, 2003:1). There were many children from all over neighbouring Malawi as well as Zambia who attended the school. Furthermore, the children's transport to and from school was sponsored by the Department of Social Welfare in a coordinated attempt to improve education for Deaf learners. Additionally, in 1968 at Kitwe Valley View Primary School, a section was opened for the Deaf children. Here the children were included in the mainstream school, but were delegated to their own class. This system is somewhat different from both Zimbabwe and South Africa. Until 1971, when Malawi created its own Deaf school, Magwero remained an international school, accommodating children from both Zambia and Malawi.

The responsibility of Deaf and hard of hearing children was formally taken over by the Zambian Education Ministry in 1971 (Sylvester, 2003:1). Thereafter, the educational facilities increased and as a result, at the present time there are thirty mainstream facilities which include the following well-known institutions: Senanga School in the Western Province; Magwero Mission in the Eastern Province; St Mulumba's, Choma in the Southern Province; and St Joseph's Mission, Kalulushi.

Deaf and hard of hearing children attending these mainstream facilities are also provided with boarding facilities, returning home on weekends to visit their parents in the villages and coming back on Sunday evenings.

Sylvester (2003) points out that the number of educational facilities catering for Deaf learners in Zambia has increased dramatically since the Government of Zambia took over the administration of the schools from colonial and missionary administrators. The type of facilities and the total number are listed below.

Educational facilities

Type of Institution	Number
Day junior and night school	1
Residential junior and high school	1
Weekly boarding schools	1
Inclusive education centres	2
Segregated residential based schools	4

Day units throughout the country	30
Total	39

(Sylvester, 2003:2)

Deaf and hard of hearing children attended a number of different facilities, as well as vocational and technical skills training facilities in the mainstream, for example Luanshya Trade Training Institute. Residential schools and colleges encouraged Deaf people to live in the mainstream community within the institution. It is clear from the number of institutions that Zambia seems to be ahead of Zimbabwe and South Africa in providing access to education for Deaf learners. Even in terms of ZASL teacher training it can be argued that Zambia is progressing well.

In the academic year between 1969 and 1970, the University of Zambia started the first official training course for teachers. Nine in-service students received special needs training from a Danish expert, Mr Skamris (Sylvester, 2003:3). They were moved to the Zambia Institute of Special Education (ZAMISE) which was established in 1971. Furthermore, the work of training was handed over to another Danish expert, Mr Sparrhevon and his wife. Additionally, ZAMISE produced teachers who gained trainee skills in the Education of hard of hearing and Deaf learners (Sylvester, 2003:3). Grade 12 hard of hearing and Deaf school leavers obtained training from the Kitwe Training College for Teachers, which was meant for pre-service training, thereby adding to the pool of teachers. In addition, in 1989 Lizzy Kapansa was the first Grade 12 school leaver who registered in the College. Also in 1997 she received another in-service teacher's training diploma from a Vocational Teachers College which was known as Luanshya Technical and Vocational Teachers College (Sylvester, 2003:3). Zambia has, therefore, excelled in creating a throughput not only of Deaf and hearing impaired learners but of educators as well.

Deaf teachers furthermore attended in-service teacher training from 1997 at ZAMISE special needs education and Nkruma Teachers College. The University of Zambia offered Deaf and Hard of Hearing school leavers the opportunity of attending in-service and pre-service teacher training which led them to the Bachelor of Education, Bachelor of Science with Education degree and Bachelor of Arts (Sylvester, 2003:3). The first Deaf student who obtained a BA with Education, McKenzie Mbewe, began studying in 1974 and graduated in 1978, majoring in Geography and Political Science. Deaf and Hard of Hearing students were successful and some of them graduated from the University and became role models for the

younger generation. Thus the Zambian government played a pivotal role in the lives of Deaf and Hard of Hearing students, as well as the community, allowing for them to attend inclusive institutions.

In terms of medium of instruction, the Zambian educational system sued the Oral Approach or Oralism. According to Sylvester (2003:3), sign language was repressed in Deaf and Hard of Hearing schools. However, teachers found sign language to be a suitable medium of instruction and used it as an expression for guidance and counselling. There were also those teachers who wanted sign language training to be part of their in-service training, but they could not receive training due to the lack of college resources, such as sufficient sign language lecturers at in-service colleges. There were therefore certain challenges to be faced.

The Zambia National Association of the Deaf (ZNAD) brought a solution to the situation. From 1998 to 2000, four Ministry of Education teachers were recruited by ZNAD and collaborated with the Danish Deaf Association in Denmark to train sign language teachers in East Africa, located in Uganda. In addition, they used instructors to supervise two years teaching practice and to manage course work. Sylvester (2003:4) avers that this collaboration was a good development but that upon completion of their training, the Ministry of Education did not place the four teachers because of certain restructuring that was taking place.

It does seem however that one lesson that African countries can learn from the case studies presented above, is that political will in the implementation of educational sign language usage, is both necessary and desirable. Although many challenges exist, perhaps the Zambian model presents the fullest response to the needs of Deaf and hearing impaired citizens.

Let us now turn to Europe where the development of sign language in Denmark can be juxtaposed against the African experience. As already pointed out above, collaboration between continents can indeed benefit sign language speakers when it comes to the development of educational pedagogies as well as status development of sign language through appropriate cross-continental advocacy work.

Danish Sign Language (DSL)

In the late 1960s the Total Communication philosophy, as commented on in chapter 2, introduced a flexible approach to communicate with Deaf children in Kindergartens in Denmark (Kyle, 1987:81). Schools for the Deaf in Denmark support the use of sign language as well as written and spoken Danish language as part of an approach called "simultaneous

communication". According to Kyle (1987), educational experiments are conducted whereby the language policy is defined as an attempt to make children bilingual. Danish sign language is considered as their first language and Danish as their second language. Experimental classes, which Kyle (1987:81) had an opportunity to follow in 1982 included observing nine children ranging from 5-6 years of age. Although these learners developed, there were still problems that were experienced in the use of DSL as the primary language of Deaf children (Kyle, 1987:87).

The project was initially started by the parents of seven Deaf children and two hard of hearing children who joined a children's clinic programme. The children then ranged between 2 and 4 years of age. One set of parents was also Deaf and another was hearing (Kyle, 1987:81). The children of the deaf parents were native signers because their parents were Deaf. Parents claimed DSL as their children's first language especially when they started in school and Danish was their second language (Kyle, 1987:82). The parents wanted the two languages to have equal status. Kastelsvei School for the Deaf in Copenhagen accepted the demands and four teachers were appointed. Three teachers were hearing and one was Deaf.

Kyle, (1987:82) argues that children with DSL signing parents mastered DSL to the same standard of hearing children of the same age using Danish spoken language (Kyle, 1987:82). DSL and Danish children code-switched to signed Danish when communicating with hearing adults and with some other Deaf friends who were bilingual. Other children communicated by means of Spoken Danish supported by signs with the use of the simultaneous approach as their means of communication with their hearing parents (Kyle, 1987:82). Some of them did not know Danish, therefore they could not communicate very well in the use of the simultaneous approach and furthermore they did not sign DSL at an appropriate age level. Both parents and children recognised that they all wanted DSL. Parents concluded that the use of DSL in the classroom would support children's education, cognitive development and social skills (Kyle, 1987:82).

According to Kyle (1987:82), hearing teachers were involved in sign language research. In teaching situations they used Danish and DSL separately to make children aware of the differences in the functioning and usage of the two languages (Kyle, 1987:83). The assigning of equal status to the two languages and acknowledgement of the children's expression in the use of DSL was creative and precise. Videotapes of their signing were presented to the Centre

for Total Communication in order to learn more. Kyle, (1987:83) contends that these evaluations resulted in the teaching of DSL to the teachers.

Parents are not a homogeneous group, but they all agreed to the same idea (Kyle, 1987:83). They wanted their children to master written and spoken Danish. Many parents used simultaneous communication in their homes because it was easy for them. Other parents changed their style of communication slowly towards DSL (Kyle, 1987:83). The researcher prefers Denmark's simultaneous approach, which is a bilingual approach as it involves the use of sign language, written and spoken language. Thus Deaf children with DSL signing parents mastered DSL to the same standard of hearing children of the same age, using Danish spoken language because DSL was their first language. The attainment of this approach was through parental support and involvement, as a result, Deaf children communicated much easier in their homes with their parents.

There are important lessons to be learned from the Danish approach, not least of which is that a simultaneous bilingual approach using both sign language and an important national language seems to yield positive results. Let us now turn to the situation in Britain.

British Sign Language (BSL)

According to Kyle *et al.*, (1985:37), the systematic education of Deaf people began in the 16th century in Britain. During the 17th century this systematic education became a subject for discussion in England. Lip-reading began to be recognised as an international communication system. Kyle *et al.*, (1985:37) cite John Bulwer and George Dalgarno as two writers of the 17th century who have shown the greatest understanding of the basis of sign language. In 1661 Dalgarno was one of the most important figures during the period compared to others whose interest was only focusing on whether language might exist without speech. Dalgarno invented a means of communication through fingerspelling which was a way to teach and to reach Deaf people. These ideas were revived later by Dugald Stewart, a Scottish philosopher who again began to debate the virtues of fingerspelling and the development of sign language in 1815 (Kyle *et al.*, 1985:38).

Stewart compared Dalgarno's work to the work of Sicard in France whose theories of sign language and education had a profound influence on Deaf education (Kyle *et al.*, 1985:38). The first two teachers of speech to the Deaf were Wallis and Holder. Holder preferred a pure articulated method; a measure of disagreement between the two teachers took place, in terms

of who the most effective teacher was between the two of them. According to Kyle *et al.*, (1985:38) the debate around sign language really began in the 18th century. In 1720, Baker followed Wallis's chronology but there was no major progress until 1760 when Thomas Braidwood began to teach Deaf children in Scotland. At the same time de l'Epee began to teach through sign language in Paris (Kyle *at al.*, 1985:38).

Heinicke, a researcher into Deaf language, emphasised the strict oral approach. This caused conflict between Heinicke and de l'Epee because Heinicke stated that all other methods were useless and wicked (Kyle *et al.*, 1985:38). Braidwood was famous because of his successful speech development in his children who were not all Deaf. Braidwood used the English method which was an intermediate between the German and French method. In 1889 the Royal Commission set out the history of deafness. In 1760 Braidwood in Edinburgh started the first school for the Deaf and dumb in Great Britain (Kyle *et al.*, 1985:38). This combination system used both English speech and signs and was perhaps the beginning of a bilingual approach. In 1783 Braidwood moved to London and his nephew, Watson, was in charge of the opening of a charitable school for the Deaf in 1792. In 1810, one of Braidwood's grandsons was in charge as head in the Edinburgh school, whereas another grandson opened a school in Birmingham and served as a head teacher (Kyle *et al.*, 1985:39). According to Kyle (*Ibid.*) Watson used signs to describe the teaching of spoken and written language. Watson claimed that Deaf people could understand each other from a distance through the use of signs.

Although BSL can be traced back to the 1600s, it was recognised formally as a language as recently as in March 2003 i.e. by the United Kingdom (UK) and by the Scottish government in March 2011 (Kinsman, *et al.*, 2014). Before Dame Mary Warnock's report on special education in 1978, children who were three years old living in the north of Scotland who experienced hearing loss were sent away to Deaf schools, for example in Aberdeen and Edinburgh. The research was conducted on many Deaf adults who grew up throughout the Highlands; it was clear that through their experience it was a common practice for Deaf children to be sent away (Kinsman, *et al.* 2014). This is similar to South Africa, bearing in mind also that the British colonized South Africa, bringing with them their own colonial heritage. Ministers, local priests and school teachers in the United Kingdom then assisted the families by finding suitable schools for these children. The practice was sustained until 1980 in line with the Warnock report whereby Deaf children's parents decided that they did not

want to send their children away; they decided to teach them from their homes (Kinsman, *et al.* 2014) and a new era began.

Due to pressure from parents living in and around the area of Dingwall, the support from experienced mainstream primary educators and the local social worker for the Deaf, there was a primary school unit which was opened in the early 1980s (Kinsman, *et al.* 2014). In August 1983, because of a strong and supportive rector of special education, Sandy Glass, the secondary unit was opened. Sandy Glass believed that all children could be educated in the same class and in the same building except those who have profound multiple disabilities. Kinsman *et al.* (2014) point out that at that time BSL was not viewed as a language but 'as a means of communicating with Deaf people'. Furthermore, the parents and teachers of the Deaf promoted communication strategies which resulted in a basic Deaf studies course offered to senior hearing children. The Qualification Authority which accredited the course was the Scottish Qualification Authority (SQA). The course was mainly taught by hearing people; however a Deaf adults' visit was included in the content of the course in an attempt to reach out to deaf parents (Kinsman *et al.* 2014).

Before the Curriculum for Excellence was introduced in 2010, the Dingwall Academy continued to offer Deaf Studies to senior hearing and a few Deaf children. The course contained several units such as Deaf Awareness, Fingerspelling and Introduction to BSL (Kinsman *et al.* 2014). The course changed over the years according to the SQA unit changes. Its primary aim was to improve communication between hearing and Deaf children. The introduction of the Curriculum for Excellence was based on several members of the Deaf community who approached the rector with a proposal for the introduction of BSL as a language option sitting together with traditional languages such as French, German and Gaelic (Kinsman *et al.* 2014), thereby suggesting the development of a more multilingual approach. Qualified teachers of the Deaf who had additional sign language qualifications wrote and taught the new S1 BSL course and one was a registered BSL\English interpreter with the Scottish Association of Sign Language interpreters. In terms of course content and delivery of the lessons, a qualified BSL Deaf tutor worked collaboratively with mainstream staff. Again, this speaks to the importance of bi- and multilingual approaches to the teaching of sign language.

Signs have been considered then by the philosophers of the 18th century as a possible basis for an international language of communication (Kyle *et al.*, 1985:24). UK signs vary

dramatically from town to town and also from place to place, much like in South Africa. Sign language has been viewed by educators as variable from place to place in one local area. Sign languages are not the same across cultures because the vocabulary is different though strong spoken language and cultural similarities exist between for example BSL and American Sign Language (Kyle *et al*. 1985:24). Nevertheless, Deaf people's communication is effective in international meetings across the language boundaries and they are easily able to find common ground, in the same way as speakers of different dialects would do as explicated in chapter 4 of this thesis. Furthermore, Deaf people claimed that they simply used mime, but hearing people did not follow this inter language very well. It can be concluded that some grammatical processes used in the visual medium are shared across cultures despite differences in vocabulary (Kyle *et al*. 1985:25). BSL is a visual-gestural language used by Deaf people in Britain as their native language.

However, it is more accurate to describe BSL as the language of the Deaf community in Britain since there are many Deaf people who do not use BSL. There are also many people who use BSL who are not Deaf. Also through lack of contact with the Deaf community many of those who became Deaf after learning to speak, especially those who became Deaf as adults, and those who were born Deaf never had the opportunity to learn BSL (Ganiso *et al*., *Ibid*). Deaf children who have never been 'signed to' by adults develop their own sign system when a communication system is needed between two or more people. Thus when they come together in groups they have developed BSL collectively, especially if the language was needed primarily for communication purposes. Also Deaf families use some kind of 'home sign' system, however, not more than 10% of Deaf people have Deaf parents. Before the formalisation of sign language, Deaf children with Deaf parents had to develop their own family sign system, which unless they were in contact with other Deaf families may have been   different from the sign systems of other families (Ganiso *et al*. *Ibid*). In addition, Deaf children with hearing parents may have a more limited visual system of communication for the family. This is true in relation to the Deaf community across the world.

Kinsman *et al*. (2014) contend that an upper case 'D' indicates that a person is a member of the Deaf community and uses BSL as a preferred language. Deaf children and children who came from hearing impaired backgrounds were given educational priority. Furthermore, for Deaf children to become successful children, effective contributors, confident individuals and responsible citizens, they need to learn how their language works (Kinsman, *et al*. 2014). In

BSL when the learner learns new alphabets in the letters of English, they use both hands unlike other sign languages which use one hand.

Kyle *et al.* (1985:31) state that in the UK sign language was never accepted as a method in their classrooms. Sign language was not considered as a method but as a means of communication. However, education does not see the use of sign language as a problem or solution in the education of children. Thus BSL opens up a channel of communication and provides a vehicle for the curriculum. Also a fundamental principle of all education is that teachers and children should share a means of communication which should be equally accessible to both of them. Education begins when communication exists between the educator and the pupil. Furthermore, sign language can be a shared language especially when the skill of the teacher is provided; hence it is required in order to develop a child's growth (Kyle *et al.*, 1985:32).

In cases where the teachers do not use signs, a recognisable form of BSL is in any event used by the children (Kyle *et al.*, 1985:32). There is talk of 'school signing' which is the style that should be governed by the necessity of the teacher's detection of avoidance of the use of hands or 'school signs' of the children in the absence of contact with adult BSL users. If there is no detailed examination of Deaf children BSL there will be no determination of how 'school signing' relates to the forms of BSL in adults. Signs can be used within teaching methods in specific skills such as speech training and teaching reading. Systems of signing have been developed for a specific purpose, to allow a presentation of speech and sign (Kyle *et al.*, 1985:32). In UK education for Deaf children did not become free and compulsory until 1893, for example in Scotland with the passing of the Blind and Deaf Children's Act.

Sutton-Spence, (2010), contends that Deaf children learn crucial lessons and values from stories told in sign language by Deaf adults. Thus the teaching style of creative language can be used to deliver facts. In addition, storytelling shows the elements of language and culture that adults believe should be passed on to the next generation of Deaf people. Through signed stories they are introduced to linguistic and cultural traditions that are present in mainstream British society and also in the Deaf community (Sutton-Spence, 2010). It is crucial to understand that the majority of Deaf children are born into hearing families who do not have deafness or sign language experience. Therefore, in many instances exposure to sign language does not occur before attending school.

Storytelling in schools by Deaf teachers plays a pivotal role in Deaf children's development of identity. Furthermore, storytelling is an 'important way of passing on linguistic and cultural heritage to the next generation' (Sutton-Spence, 2010). In many countries signed stories have been recognized within Deaf communities as a cornerstone of Deaf culture, including in the UK. Thus types of signed narratives presented to Deaf children in the classroom are considered. Moreover, the identification of elements which are Deaf adult's beliefs should be included to help students to develop their personal linguistic and social identities. However, the focus is on the importance of sign language narratives in the development of identity in children. For Deaf adults, signed storytelling and other forms of signed folklore are essential for enculturation. In addition, many Deaf people are not members of a Deaf community and also do not acquire knowledge of the Deaf world naturally from their families. Thus these children's social and cultural experiences are similar to those of most hearing children (Sutton-Spence, 2010). Sutton-Spence (2010) states that Deaf children learn crucial lessons and values from the stories which are told in sign language especially by Deaf adults. In addition, Deaf children gain a sense of belonging in the Deaf community. Children also learn their language heritage which often provides good educational reasons for introducing children's narratives. These stories are key tools for developing the decontextualized thought needed for literacy. Thus Deaf children require the expectations and understanding of the Deaf and hearing world. Also signed stories become essential sources of 'explicit and implicit' information about Deaf children's cultural heritage. BSL skills used in stories demonstrate the rich potential of children's language (Sutton-Spence, 2010).

Kyle *et al.* (1985:35) argue that a major stumbling block to the encouragement of the use of BSL in young Deaf people is that the language was not understood by the general community. Therefore, it was not possible for hearing people to learn the language. A local television company had an idea to have sign language interpretation of the news. A positive response came from the hearing community as they favoured the idea because while they watched television they also learnt signs. Kyle *et al.*, (1985:35) assert that: 'Access to deaf people in the learning stage is essential to fluent use of sign language'. However, there is a general problem towards Deaf people's signing attitude which is similar to the attitude of other sub-cultures where people often look down on their own languages in favour of English. Almost all the principles of learning a foreign language apply to signing learning (Kyle, *et al.*, 1985:35).

American Sign Language (ASL)

In 1815, Thomas Hopkins Gallaudet, a minister of religion in Hartford, had a young Deaf neighbour named Alice Cogswell. Gallaudet started to teach her alphabets and the father intervened by raising money to send Gallaudet to Europe where he heard that Deaf children were formally educated. In Paris Gallaudet studied French Sign Language (FSL) and other teaching methods of other schools. In 1817 Gallaudet and the Deaf teacher who returned with him opened the American Asylum for the Deaf and Dumb in Hartford (Poor, 2003).

By the end of the year, they had 31 students from 10 states. The students' 'home signs' were merged with method signs which were developed for instructional purposes and FSL (Poor, 2003). This language developed into what is called ASL. Poor, (2003) states that graduates and the representatives of the school spread ASL and further standardization in schools was established in other states. The Hartford school is still in operation and is now called the American School for the Deaf. In 1861, another institution for the Deaf was established by Abraham Lincoln in Washington DC. Edward Miner Gallaudet who was Gallaudet' son became the first president of Gallaudet College which is now called Gallaudet University (Poor, 2003).

In the United States of America there was a lack of a clearly defined language policy which led to the ineffective use of unscientifically-based English manual systems as the most dominant artificial and unnatural language systems in the education of the Deaf and hard of hearing children. This was made problematic by Deaf education management (CAEBER Summer Institute, 2014). Thus ASL/English bilingual education for Deaf and hard of hearing students did not have well-developed written policies. Furthermore, clear and carefully formulated policies could assist in providing support, direction, parameters and guidelines which were needed for implementation of an effective ASL/English bilingual program.

Stokoe, (1980:138) avers that in the late 60s and early 70s in USA the Total Communication approach, as explained in chapter 2, was embraced by educational programs for Deaf students. The aim was to improve student success and the recognition of the right of the Deaf child to use all forms of communication available in order to develop language competency. However, Total Communication can be problematic in relation to the following: The responsibility of teachers to improve their own communication abilities was overlooked as well as the recognition of the rights of the Deaf child. Additionally, most educators emphasised the development of language competence in the English language which resulted

in a false interpretation of Total Communication. The general view of Total Communication according to Stokoe, (1980:138) was used to 'justify or rationalize' what had been done by the teachers in the classroom.

Thus Total Communication urged the teachers to access some level of skill in the use of manual communication. Also the best description of teachers and adults of communicative behaviour in educational settings was the use of simultaneous communication such as spoken English accompanied by some manual coding of English. However, the philosophy of Deaf students was viewed and discussed as a method of education. Many educators never viewed Total Communication as a philosophy which is 'a set of attitudes and beliefs which encourages teachers to accept the communicative efforts of their students and which acknowledges and accepts American Sign Language as a vital and valued fact in the education of Deaf students' (Stokoe, 1980:139).

The legal status of ASL was granted by 35 of the 50 states because of its predominance at state level (Ricento, 2000). The need for language policy which accepted signed languages' recognition was in order to emphasise the maximisation of knowledge, expertise and full participation in the political and socio-economic domains by the Deaf and hearing impaired (CAEBER Summer Institute, 2014). The CAEBER Summer Institute, (2014), developed a two-year professional development package for Deaf teachers and hard of hearing students which focused on the implementation of ASL/English bilingual strategies in the classroom. It focussed on developing current knowledge and language/teaching pedagogies, learning strategies, and the translation of a format for teachers to read about, discuss and experiment with pedagogies within the classroom and to report on their effectiveness. The CAEBER Institute, (2014) furthermore states that, 'Signacy refers to the expressive ability to create and modify signed responses of varying lengths and complexity for various purposes'. However, Deaf students need to know how to produce ASL structures in their own signing not only understanding the operation of these structures, but understanding ASL. Deaf students need an opportunity to think and manipulate knowledge in different ways through the process of signing. Moreover, different structures of ASL exist to assist Deaf students to accomplish their goals for time order, to compare and contrast, problem solving, for cause and effect and development of ideas.

Oracy is regarded in America as the ability to use the oral/aural medium of linguistic transmission in the form of speaking and listening skills (CAEBER Institute, 2014). Thus

literacy is the ability of visual/graphic medium use in the form of reading and writing. In addition, the term 'signacy' is originated from oracy and literacy. However, it is used specifically to indicate ability in a signed language. Furthermore, language planning in Deaf education takes place in three domains: oracy, literacy and signacy. However, Deaf education emphasises the use of signing and types of signing such as ASL. In terms of a language planning framework, this would therefore need to take in account oracy, literacy and signacy against the backdrop of the standard language planning strategies of status, corpus and acquisition planning.

Conclusion

This chapter provided a comparative view of the development of sign language across a number of countries, including best sign language-in-education policy practises in Denmark, Britain and America. Furthermore, countries in Africa such as Zimbabwe, Kenya and Zambia and the policy practices at play in those countries were highlighted. In essence, a bilingual approach to the teaching of Deaf and hearing impaired learners seems to be accepted as the most beneficial approach across the various countries. It is also clear that South Africa could benefit from a more integrated schooling system which includes Deaf learners. This is presently not the case and separate Schools for the Deaf exist as indicated in chapters 6 and 7 of this thesis. In the chapter that follows, sign language development is seen against the backdrop of pure linguistics and English as part of gaining a better understanding of a bilingual sign language approach to education.

CHAPTER 4
GENERAL THEORY OF LANGUAGE AND SIGN LANGUAGE

Introduction to the study of language and sign language

This chapter discusses general theory of English and other languages such as Kiswahili in a comparative way with sign language. Spoken language is structured in specific ways (Yule, 2006). Speaking involves the mouth, tongue and lips in a controlled way. Likewise, sign language is a structured language just like all other languages. However the theoretical underpinnings are very different as articulated in this chapter.

Types of spoken language developed many years ago. Furthermore there is no evidence related to the speech of our ancestors which tells us about how language was structured when humans first began to speak. However there are many theories regarding the origins of human speech. Yule (1985) avers that it is not certain how language originated. There is no direct evidence related to our distant ancestor's speech. Yule (*Ibid.*) furthermore suggests that the first communication may not have been speech as we know it, but rather a form of sign language, a structured type of language in its own right. Mufwene (2016:4) supports this when they state that: 'Spoken languages are not the only kind of languages... There are signed languages, produced by the co-option of hands and facial expressions. It is significant to ask why humans settled on spoken rather than signed languages...although signed languages are just as adequate... Thinking about language as a high-fidelity communication technology makes it possible to address these questions...' In other words Mufwene sees all communication as a technologised process. It is therefore important to see this process against the backdrop of the structure of language and the various technologies which underpin it, including the art of writing. Mufwene (*Ibid.*) concludes that 'Experts have also speculated about whether the architecture of signed languages are fundamentally the same as those of spoken languages. This does not seem to be the case.'

The development of writing

Considering the development of writing, Yule (2006:9), makes the point that many languages found in today's world are still only used in spoken form. Thus a written form does not appear, more especially for many African languages which have no orthography or written form. Writing systems within languages are then a relatively recent phenomenon related to the development of writing. One can go back to drawings associated with early human attempts to represent visual information in cave drawings which were made 20 000 years ago. In addition there are clay tokens which appear to be an early attempt at bookkeeping and counting. Writing based on other types of alphabetical scripts can also be traced back to

'inscription' some 3 000 years ago. Thus evidence of ancient writing systems comes from the stones or tablet 'inscriptions' found on the stones retrieved from ancient ruins of cities, (Yule, 2006:9). The ancients began to use other 'elaborate scripts on leather, wood or other perishable materials' (Yule, *Ibid.*). They allow one to trace the development of traditional writing from a few thousand years ago when humans created more permanent records of what had been thought and said. It is impossible to know whether humans were also using sign language at this time, but it is highly likely as suggested by Mufwene (*Ibid.*).

The sound patterns of language

The study of Phonology

Yule (2006:43) defines phonology as 'the description of the systems and patterns of speech sounds in a language.' Phonology is concerned with the abstract nature of the sounds in the language more so than the physical articulation of speech sound. The use of phonological knowledge of English sound combinations is crucial in order to overcome unusual spellings of the words. In addition phonology is the blueprint of each sound which serves as the basis of all the variations in different physical vocalisations of the type of sound in different contexts. Thus [t] would be represented in the same way in English phonology e.g. tar, star, eighth and writer. However in the speech all the sounds are different. Furthermore, the articulations differences of the sounds are less important than the distinction between [t], [k], [f] or [b] sounds because there are meaningful significances which are related to the use of each other. Thus these sounds are meaningful because they are what make the words, tar, car, far and bar meaningfully distinct. It is important to understand general linguistic theory against the backdrop of sign language where such linguistic aspects become lost as there is no necessary articulation of sound in sign language.

The study of Phonemes

Phonemes are distinguished meaning of sounds in a language (Yule, 2006:44). Thus the concept of the phoneme as a single sound type is represented by a single written symbol. Therefore, the phoneme [t] is described as a sound type. In addition there are two phonemes in English, i.e. [f] and [v]. These phonemes are the basis of the 'contrast in meaning' between *fat* and *vat* or *fine* and *vine*. Also the property serves as the basic operational test for the determination of phonemes existing in a language. Furthermore, the meaning changes if one sound is substituted for another in a word. There is a consonant and vowel chart which lists

basics English phonemes. For the technological use of charts, the technical terms used in creating the charts can be considered, i.e. features that distinguish each phoneme. For instance, if there is a presence of features, the mark should show a plus sign (+) and if not present the use of minus sign (-) is shown. Thus /p/ can be considered as '[-voice, + bilabial, +stop] and /k/ as [-voice, + velar, + stop' (Yule, 2006:45). However both sounds share some features and they are sometimes described as 'members of the natural class of sounds'. Thus sounds which have common features would be expected to behave phonologically in some other similar ways. Of course, hearing impaired or Deaf people who use sign language would not necessarily be able to distinguish these phonemes, hence the importance of using signs and body language to express meaning related to phonemic variation. A further important point is to make speakers of a language aware of the need to accommodate sign language speakers in this regard and not, for example to expect them to lip-read phonemic variations. As indicated in the previous chapter, lip-reading is only one aspect of successful usage of sign language.

Phones and allophones

Yule (2006:45) describes phones as many different versions of sound type which are commonly formed in the mouth, i.e. actual speech. In addition, phones are phonetic units appearing to be in square brackets. Allophones appear to be a group of several phones with the addition of prefix 'allo- (=as one of the closely related sets and referred to as allophones of that particular phoneme). For instance the [t] sound from the word *tar* is pronounced with the strong puff of air than [t] sound in the word *star*. Thus placing the back of your hand in front of your mouth as you say *tar* and *star* you should be able to feel some physical aspirational evidence, i.e. the puff of the air which accompany the [t] sound between the vowels at the beginning of *tar*. Thus more variations of sound such as [th], [D] and [t] can be represented in a detailed precise way or 'narrow phonetic transcription'. Thus what is important with a distinction between phonemes and allophones is that when substituting one phoneme for another, the results will be a different meaning as well as different pronunciation. Substituting allophones differs from the results by unusual pronunciation of the same word, (Yule, 2006:45).

Again, variations such as these are complex for hearing impaired people or those that use sign language. It is important that assumptions are not made by speakers of a language that all individuals can differentiate types of sound.

Minimal pairs and set

Distinctions of phonemes can be tested in pairs and sets of words in a language, (Yule, 2006:46). A minimal pair is when two words are identical in form in one phoneme, e.g. *pat* and *bat*. Thus in the phonology of English these are classified as a minimal pair. There are more English minimal pair examples such as *fan-van, site-side, bet-bat* etc. Furthermore these pairs have been used in the teaching and testing of English as second or foreign language in order to assist students' ability development to understand the contrast in the meaning that is based on the minimal sound contrast. A minimal set is when the group of words are different from each other and one phone changes, e.g. *fat-fate, feat, fit, fought, foot.* Other examples of consonant phones are, *big; pig, rig, fig, dig, wig,* (Yule, 2006:46). The complexity of English when it comes to the structure and sound of words is therefore lost on sign language speakers and the complexity as described above is important in creating awareness of the challenges facing sign language speakers in any language, whether it be English or isiXhosa which is a tonal language. A bilingual approach to teaching sign language therefore needs to take such factors into account.

Morphology

Yule (2006:62) views languages as single forms which contain a large number of 'word-like' elements. Thus in Kiswahili for instance which is used throughout East Africa, the form *nitakupenda* is represented by *I will love you* in English. Therefore, this example shows a form of single word with an English example, i.e. Swahili: ni - ta - ku - penda

<div align="center">English: I   will   you love</div>

In addition this example shows us that the Kiswahili word is not as different from English as we think. Therefore there are similarities between the languages in that, looking at the whole message you will find out that there are similar elements that can be found in both languages. In order to look for linguistic forms in different languages one need not to depend on the notion of elements rather than identification of words only. Morphology according to Yule, (2006:62) means the 'study of forms'. Morphology was originally used in biology in the middle of the nineteenth century, however it has been used to describe the type of investigation that analyses all elements basically used in language. Thus elements described in the form of a linguistic message are technically known as morphemes. Again, when using sign language such variation in form will need to be reflected differently as shown in other parts of this thesis.

Morphemes

A minimal unit of meaning or grammatical function is called a morpheme (Yule, 2006:63). These grammatical units include forms used to specify past tense or plural. For example, from this sentence: *The police reopened the investigation,* the word *reopened* consists of three morphemes, i.e. open, re- and –ed, these is are three separate minimal units of meanings of grammatical function. Thus another example *'tourists'* also have three morphemes. Minimal units of meaning are, tour, -ist, and the minimal unit of grammatical function is –s. Within sign language usage such morphemes would be replaced by signing individual words or forms of words rather than actual morphemes.

Free and bound morphemes

Free morphemes are morphemes that can 'stand by themselves as single words', e.g. *tour* and *open,* (Yule, 2006:63). However, bound morphemes are forms that cannot stand alone and attached to another form, e.g. *re-, -ist, - ed, -s.* In addition English affixes, prefixes and suffixes are bound morphemes. Thus identification of free morphemes is based on the set of separate English word forms such as verbs, nouns, adjectives etc. When bound morphemes are attached the basic words are 'technically' known as stems, e.g. *Undressed carelessness*

Un-	*dress*	*-ed*	*care*	*-less*	*-ness*
Prefix	stem	suffix	stem	suffix	suffix
(bound)	(free)	(bound)	(free)	(bound)	(bound)

The above description is the simplification of English morphological facts, (Yule, 2006:63). Also other examples of bound morphemes from, receive   -re   at the beginning   -ceive, reduce   -duce repeat   -peat. Thus these morphemes are not separated because they cannot be free morphemes. Again with regard to sign language such free and bound morphemes have to be reflected through appropriate signing of bound morphemes underpinning words and semantic meaning.

Lexical and functional morphemes

As described above, free morphemes fall into two categories i.e. a set of ordinary nouns, and adjectives and verbs. Thus these are the words that carry the content of the conveyed messages. Thus these free morphemes are called **lexical morphemes.** Examples of lexical morphemes are: *man, girl, house, tiger, sad, break, look, follow, yellow, sincere, long* etc. New lexical morphemes can be added easily to the language as to be treated as an 'open' class of words, (Yules, 2006:64). Furthermore the second types of free morphemes are called **functional morphemes**. Examples are: *are, but, when, near, above, because, in, the, that, them, it, and, on.* Also this type consists of the functional words in the language such as prepositions, conjunctions, pronouns and articles. Functional morphemes are described as a 'closed' class of words because the new functional morphemes were nearly not added to the language. In any event, when signing such morphemes they have specific and individual signs.

Derivational and inflectional morphemes

Yule (2006:64) contends that the set of affixes is divided into two types. Thus these affixes can make up a category of bound morphemes. Bound morphemes are used to make new words or words of a different grammatical category from the stem, e.g. the addition of a derivational morpheme which is *–ness* and the adjective changes to the noun – *goodness.* In addition the noun *care* can change to an adjective *careful* or *careless* when there is a derivational morpheme of *–ful* or *-less.* Also the list of derivational morphemes includes suffixes such as: *-ly* for quickly, *-ish* for foolish, *-ment* for *payment.* Prefixes are also included in the list such as *–pre-re-mis-ex-co-un* etc. In addition the second type or set of bound morphemes are called **inflectional morphemes**. Thus these morphemes indicate aspects of grammatical function of a word and are not used to produce new words in the language, (Yule, 2006:64). Also another function of inflectional morphemes is to show whether a word is in plural or singular or past tense or not, or comparative or possessive form. There are only eight inflectional morphemes in English. Below are the illustrations of examples of inflections:

'Jim's two sisters are really different'.

'One likes to have fun and is always laughing'.

'The other liked to read as a child and has always taken things seriously'.

'One is the loudest person in the house the other is quieter than a mouse'.

What we can see from the above examples is that, two of the inflections, '*-s* (possessive) and *–s* (plural), are attached to the nouns. Secondly there are four inflections which are attached to the verbs, *-s* (3rd person singular), -ing (present participle), *-ed* (past tense) and *–en* (past participle). Thus two inflections are attached to adjectives: *-est* (superlative) and –er (comparative). Furthermore, all the inflectional morphemes in English are suffixes, i.e.

Noun + - *'s, -s*

Verb + - s, *-ing, -ed, -en*

Adjective + *-est, -er*

From the above examples, there is variation in the form of morphemes, e.g. sometimes possessive appears as *–s'* (those boy**s'** bags) then the past participle as *–ed* (they have finish**ed**), (Yule, 2006:65).

Again, in relation to sign language it would be nearly impossible to depict them through signing. These derivational or inflectional morphemes are therefore nuanced in favour of spoken discourse. One can assume that they are more recent developments in the evolution of language as suggested by Mufwene (*Ibid.*) Again, when using a bilingual approach to teaching Deaf learners such factors need to be carefully considered and understood.

<u>Morphological description</u>

Comparing the inflectional morphemes to derivational morphemes it is clear that inflectional morphemes never changes the grammatical word category, (Yule, 2006:65). For instance both '*old*' and '*older*' are adjectives. Thus the *-er* inflection creates a different version of the adjective. In addition derivational morphemes can change grammatical word category. For instance, the verb '*teach*' becomes a noun '*teacher*' when we add the derivational morpheme-*er*. When looking at suffixes, the suffix *-er* can be part of an adjective i.e. inflectional morpheme and also a 'distinct derivational morpheme such as a noun. The same look on *–er* does not mean that they do the same kind of work. Furthermore when an inflectional and derivational morpheme suffixes is attached to the same word they continually appear in the same order. Also the derivational *-er* is devoted to *teach* and inflectional *–s* is enlarged to produce *teachers*. For example, in the following sentence we can identify eleven morphemes:

'The child's wildness shocked the teachers'.

i.e. *The*-**functional** *child*- **lexical** –'*s* – **inflectional** *wild*- **lexical** *–ness*- **derivational**

shock **–lexical** *-ed* – **inflectional** *the* – **functional** *teach*- **lexical** *-er* – **derivational** *-s* – **inflectional**

	free	lexical (*child, teach*)
morphemes		functional (*and, the*)
		derivational (*re-, -ness*)
	bound	
		inflectional *(-'s, -ed)*

To conclude the discussion on morphemes in relation to sign language, such morphemes would be difficult to depict. It, therefore, remains very important for sign language users to make use of extralinguistic features to accentuate variation based on morphemes and how these change, add to and create meaning in words. This would include body language and gesture related particularly to the use of one's eyes and mouth, for example as part of a smile or the forming of a serious or sad face.

Syntax

Yule (2006:86) avers that, the word syntax originally comes from Greek and it literally means the 'arrangement' or 'putting together'. Thus more recent syntactic work has taken on different approaches which attempt to be accountable for the types of arrangement in the structure of sentences. Sign language has its own syntax and ways of putting symbols together to make sentences.

Generative grammar

Noam Chomsky, a linguist, attempted to produce a 'particular' type of grammar, which had explicit system of rules specifying the combination of basic elements that would result in well-formed sentences. This proposed explicit system of rules would have a lot in common with many mathematical rules. Yule (2006:86) considered a language to be a set of sentences. He argues that the mathematical perspective assists to explain the meaning of the term 'generative'. In addition the term 'generative' is used to describe 'Generative Grammar'. Furthermore, when the sentences of a language can be seen as a comparable set, a set of explicit rules, which can produce all those sentences, must be applicable. Thus the set of

explicit rules sentences is a generative grammar. Again, with regard to sign language these sets of rules may vary from one variety of sign language to another, in the same way the Generative Grammar would apply to any spoken language.

Deep and surface structure

Yule (2006:87) has given two examples which are based on traditional grammar. Examples are as follows: "Charlie broke the window"; "The window was broken by Charlie".

Thus the first sentence is an 'active sentence' specifying on what Charlie did. The second is a 'passive sentence' thus focusing on 'The window' and what has happened to it. The difference between the two is in their **surface structure,** i.e. in the different forms of the syntax have as English individual sentences.

Deep structure is "an abstract level of structural organization in which all the elements determining structural interpretation are represented". i.e. deep structure is where the noun phrase +verb + noun phrase which are the basic components shared by the two sentences, (Yule, 2006:88). In addition deep structure according to Yule can be the source of many surface structures such as:

"It was Charlie who broke the window and Was the window broken by Charlie?"

In relation to sign language these surface and deep structures are represented though appropriate signing. The set of structures would be interpreted though signs that depict either surface or deeper meaning.

Any form of tree diagram or any symbols used in syntactic description such as 'S' for = sentence, 'NP' for = noun phrase, 'N' for = noun, 'Art' for = article etc. would have no real relevance when signing and only come into play in understanding written language. Transformational and lexical rules that come into play in spoken language may also differ in sign language.

Semantics

Yule (2006:100) describes semantics as 'the study of the meaning of words, phrases and sentences'. Thus semantics focuses on what the word 'conventionally' means. The focus is not on what an individual speaker might want the words to mean on a particular occasion. Linguistic semantic according to Yule deals with conventional meaning which are being conveyed by the words, phrases and sentences of a language usage. In sign language such

meaning can only be conveyed through appropriate signing. It is also commonly accepted that such semantics can occur across different varieties of sign language – in other words the semantics of sign language seems to hold common core values and sign language users across cultures and regions can achieve meaning even though they have never met before or formally studied sign language.

Semantic roles

Semantic role depends on a situation. For instance in the case of 'send' we refer to the participants by terms like 'sender' or 'sent'. Therefore all these terms are specific to the situation of 'sending' (Jackson, 1990:24). In addition a set of semantic role labels which are generalised to all types of situations are needed. Also different linguists proposed a number of semantic role labels however there is no generally agreed set of labels. Thus there are 'word-classes in grammar'. Furthermore the proposed semantic role labels that will be used are in: 'A Comprehensive Grammar of the English Language'. In relation to the semantics of sign language it is through the signs that appropriate meaning can be garnered. These signs are also structured and taught in order to achieve levels of semantic meaning.

Semantic features

Semantics might be helpful in the study of language as a means of accounting for the 'oddness'. Thus oddness is experienced when reading sentences such as the following:

'The hamburger ate the boy'.

'The table listens to the radio'.

'The horse is reading the newspaper'.

Furthermore, the oddness of the above sentences does not obtain from their syntactic structure. Thus there are well- formed structures based on the basic syntactic rules for English formation sentences. Examples:

NP   V   NP

'The hamburger   ate   the boy

The syntax of the above sentence is good but it is semantically odd. The perfect sentence would be: '*The boy ate the hamburger*'. Therefore, the source of the problem would be identified. Thus *hamburger* must be different from the noun *boy*, and also not being used as

the subject of the verb *ate*. The meaning analysis of semantic features is illustrated below: i.e. to describe part of the meaning of words as having plus (+) or minus (-) for a particular feature. For instance the noun *boy* is '+animate' i.e. 'denotes an animate being' and the noun hamburger has 'is '-animate' i.e. 'does not denote an animate being'. Features such as '+ animate, - animate, - animate, '+ human, -human, '+ female can be treated as basic elements that are involved in differentiating the meaning of each word from every other word' language. Semantic features illustration:

	table	horse	boy	man	girl woman
Animate	-	+	+	+	+ +
Human	-	-	+	+	+ +
Female	-	-	-	-	+ +
Adult	-	+	-	+	- +

Thus from the above analysis part of the meaning of the word *girl* in English includes the elements such as '[+human, + female, - adult]'. Noun features could also be characterised in order to appear as a subject of a particular verb. Example:

'The _____ is reading the newspaper'.

    N [+human]

Furthermore, the approach will enable us to be able to predict which noun makes the sentence semantically odd. In addition more examples would be hamburger, table, and horse because they do not have the required feature '[+human]' (Yule, 2006:102).

Likewise, in sign language if incorrect signs are used to depict for example, 'hamburger'; 'boy' and 'eat' then meaning can easily be lost – semantic meaning depends entirely on the set of symbols and signs that is used while expressing thought. Semantic roles, as well as expressing agency and theme depicting semantic roles (normally taken on by the noun doing something in English) must be appropriately signed when using sign language.

Agent and theme

Referring back to our sentence one role is taken by the noun phrase. Therefore, the *boy* performs the action and is known as the **agent.** Thus the *ball* takes another role as involved entity which is called the **theme** (Yule, 2006:102). Furthermore, themes and agents are the most familiar semantic roles. However the agents are human, e.g. (*The boy*), they can also cause actions as non-human entities in the noun phrases, i.e. '(*The wind*)', a machine' (*A car*), or a creature '(*The dog*) of which all affected the ball as theme. Examples:

'*The boy kicked the ball*'.

'*The wind blew the ball away*'.

'*A car ran over the ball*'.

'*The dog caught the ball*'.

Thus the theme is non-human, but can also be human (*the boy*), from, '*The dog chased the boy*'. Another example is: '*The boy cut himself*' which describes, '*The boy* as an agent and *himself* as a theme (Yule, 2006:103). Again, in sign language each noun would have its own sign and agency or action would be expressed with a separate set of signs.

Instrument and experiencer

The semantic role of the agent performing is highlighted though the use if an **instrument** in the following example: '*The boy cut the rope with an old razor and He drew the picture with a crayon*'. Therefore from the sentence the semantic role of instrument is a noun phrase- '*an old razor*' and '*a crayon*' (Yule, 2006:103). The semantic role of **experiencer** is when a noun phrase is used to elect an object as the person having a feeling, state or perception. Example: '*The boy feels sad*', i.e. the experiencer is '(*The boy*)'which is the only semantic role. Another example: '*Did you hear that noise?*' the experiencer is '*you*' and the theme is '*that noise*'. A separate set of signs would be used in sign language to differentiate the noun from the emotion or action that is being portrayed.

Location, source and goal

Furthermore, when an object is in the description of an event a number of other semantic roles are being elected. Therefore when an object is *in the room or on the table* it fills the **location** role. In addition when an object moves from a particular place it is a **source** and to

another place it is the **goal**. E.g. *'We drove from Chicago to New Orleans'*. The source is (*from Chicago*) and the goal is (*New Orleans*), (Yule, 2006:103). Below are the semantic role illustrations:

Mary	saw	a fly	on the wall.
EXPERIENCER		THEME	LOCATION
She	borrowed	a magazine	from George.
AGENT		THEME	SOURCE
She	squashed	the bug	with the magazine.
AGENT		THEME	INSTRUMENT
She	handed	the magazine	back to George.
AGENT		THEME	GOAL

'Gee thanks, "said   George

               AGENT

In terms of location, theme and so on it would be true to say that specific locations or goals are individually signed when making use of sign language.

Synonymy

Synonyms are two or more closely related meanings (Yule, 2006:104). They can also be substituted from one another in the sentence. For instance we can substitute *answer* by *reply*. E.g. *'What was his answer?'* Or *'What was his reply?'* The meanings are the same. More examples of synonyms are: *'almost/nearly, broad/wide, big/large, buy/purchase, freedom/liberty, cab/taxi, car/automobile, and couch/sofa'*. However, we need to remember that one word could be appropriate in a sentence but its synonym would be odd. For example: *Sandy had only one correct answer on the test*, the word *answer* fits in the sentence but the word *reply* would sound odd. In addition synonym forms differ in terms of formal and informal uses, e.g. 'My father purchased a large automobile. This sentence has the same meaning as, 'My dad bought a big car'. Therefore there are four synonyms replaced however the second sentence sounds more casual (informal) than the first one (Yule, 2006:104).

Again, synonyms in sign language would need to be individually signed for different meaning and there would be no necessary similarities as with spoken language.

Antonyms

Antonyms are two forms with opposite meanings. Examples of antonyms are: *'alive/dead, fast/slow, happy/sad, hot/cold, big/small, male/female, long/short, married/single, old/new, rich/poor, true/false*. There are two types of antonyms, i.e. 'gradable' '(opposite along the scale)' and 'non-gradable' '(direct opposites)' (Yule, 2006:104). Thus gradable antonyms can be used in comparable construction, e.g. 'big/smaller'- 'I'm bigger than you and a pony is smaller than a horse'. In non-gradable antonyms there are no comparable construction used. Someone cannot be described as deader or more dead than other. The negativity of a non-gradable member implies connection with the other member i.e. 'My grandparents aren't alive means that 'My grandparents are dead. *Undress* can be treated as the opposite of dress however it does not mean 'not dress'. Thus the meaning is a dress reversal. The types of these antonyms are called '**reversives**'. More examples of common antonyms are: 'enter/exit, tie/untie, raise/lower, pack/unpack, lengthen/shorten (Yule, 2006:105). Again, these antonyms would be individually signed when using sign language.

Hyponymy

Hyponymy is when the meaning of one form is involved and related to the meaning of another. Some examples of hyponymy are: *flower/rose, animal/dog, dog/poodle, tree/banyan, vegetable /carrot*. The inclusion of concept added in this relationship is that if an object is a *rose* that means it is a *flower*. Therefore, the meaning of flower is involved in the meaning of rose. That means that the rose is the hyponymy of flower.

A 'horse' can be described as a hyponym of animal and the cockroach as an 'insect' hyponym. Both animal and insect are called as "**superordinate**". Therefore two or more words that share the same superordinate term are called "**co-hyponyms**". Thus dog and horse are 'co-hyponymy' and animal is the 'superordinate' term, (Yule, 2006:106). In terms of sign language there is a general sign, which for example depicts the word 'flower', but an individual sign for a specific flower such as a rose. In this way sign language may be deemed as more explicit and less confusing than a spoken language such as English. The benefits of teaching Deaf learners bilingually, using sign language and English therefore becomes self-evident.

Prototypes

According to Yule, (2006:106) there are words which are all equally 'co-hyponyms' of the 'superordinate such as: *flamingo, parrot, pelican, canary, cormorant, dove and duck.* However, they are not all considered equally good examples of category 'bird'. Some researchers considered the most 'characteristic instance' of the category 'bird' as 'robin'. Thus the characteristic instance of a category idea is called '**prototype**'. Prototype helps in the explanation of certain words meanings such as 'bird' in terms of appearance to clear example but not specifically in terms of component features, i.e. because of having feathers and wings. In terms of a category label the furniture is recognised as 'chair' as the better example than bench or stool. The general pattern involved in prototype determines the interpretation of word meaning (Yule, 2006:106). Again, in sign language prototypes would be individually signed in order not to cause confusion.

Homophones and homonyms

Homophones are described as two or more different forms that have the same pronunciation (Yule, 2006:106). Examples: meat/meet, to/too/two, bare/bear, flour/flower, pail/pale, right/write and sew/so. Thus when one written or spoken form has two or more words that have no related meanings we use the term homonyms. Below are examples of homonyms:

(a) 'Bank (of river)- bank (financial institution)'
(b) 'Race (contest of speed)- race (ethnic group)'
(c) 'Bat (flying creature)- bat (used in sports)'
(d) 'Mole (on skin)-mole (small animal)'
(e) 'Pupil (at school) – pupil (in the eye)'

Homonyms would then not occur in sign language. The reason for this is that it would not be possible to depict them so closely – each one would again be individually signed thereby depicting their meaning rather than their similarity as in the spoken word for 'bat' as in a creature or a 'bat' as in a cricket bat. These would be individually signed so as to enhance meaning in sign language.

Polysemy

Polysemy is when two or more words have the same form and related meanings. In addition the written or spoken forms are all related by extension and have multiple meanings.

Examples from the word 'head'- which is on the top of one's body-on top of a glass of water-person who is at the top in a company or department etc. Another example is, 'foot' – of a person-of bed- of mountain. 'Run'- person –water-colours. Also another good way of looking for different polysemy and homonymy examples is to look in a dictionary. In most dictionaries the following words are treated as homonyms: mail, bank, mole and sole. However, foot, face, head, get and run are treated as polysemy (Yule, 2006:107). Again, such polysemy would not take place in sign language. For all intents and purposes, sign language seems far clearer in relating meaning than written or spoken English.

Metonymy

Metonymy refers to another type of relationship between the words, which are based on everyday close connection experience. Thus close connection can be referred to a 'container-content- relation, e.g. bottle/water/juice/can. There is also a 'whole part relation e.g. 'car/wheels/house/roof and 'representative-symbol relationship' i.e. 'king/crown, the President/the White House'. Furthermore, when we are familiar with metonymy it will be possible for us to understand sentences. e.g. the following sentence sounds literally strange: 'He drank the whole bottle'- i.e. 'he drank the liquid not the bottle'. Another example is: 'The White House has announced…or Downing Street protested…' i.e. without thinking that the building talks. Metonymy can be used when one talks about 'filling up the car', 'answering the door', 'boiling a kettle', 'giving someone a hand or needing some wheels' (Yule, 2006:108). In sign language clarity would be gained though signing that reflects metonymy, for example the liquid and the bottle would be signed separately and differently. There would be no way of confusing the consumption of the liquid with the swallowing of the bottle.

Second language acquisition/learning

Second language learning distinction is made between learning a language that is not spoken in the surrounding society i.e. a foreign language and a language that is spoken in the surrounding society, i.e. second language setting (Yule, 2006:162). This would include the second language acquisition of sign language signed in a particular society. For instance, in Japan, China or South Korea, students learn English as a foreign (EFL) language. Therefore, if the same students were in an American English class, they would learn English as a second language (ESL). Thus second language learning is used to describe foreign and second language situation. In terms of sign language, it would refer to when a hearing person acquires sign language as a second language through appropriate acquisition learning of sign

language. Although not common in South Africa, there is a growing demand for the recognition of sign language both as a mother tongue and a second language.

Acquisition and learning

Yule (*Ibid.*) contends that, a significant distinction is made between 'acquisition' and 'learning'. In addition, 'acquisition' refers to the ability of regular development in a language by using it 'naturally in communicative situations' with those people who know the language. The same would be said of learning sign language. However, 'learning' applies to the conscious process of gathering knowledge of the features in an institutional setting, i.e. vocabulary and grammar of a language except Mathematics which is only learned and not acquired. Furthermore, activities associated with acquisition are being experienced by young children especially those who pick up a second language and using the language through interaction for long periods and constantly using the language with native language speakers, (Yule, 2006:162). In terms of sign language it can also be acquired naturally, for example by rural children who have no formal access to learning the language or it can be learned as a second language by say a hearing person.

Acquisition barriers

The experience of learning L2 is different from L1 experience for most people. Thus typically people encounter L2 in their teenage and adulthood stages for a few hours of school per week with lots of things happening in their childhood and with existing knowledge of the language for their daily communicative requirements. Therefore, some individuals are able to overcome difficulties and they are able to use L2 effectively, however, perhaps not sounding like a native speaker. In addition, some individuals are experts in the written language and not in the spoken language. The very same can also be said of sign language. There is a formal learned or 'official' SASL as opposed to a naturally acquired dialect or variety.

Affective factors

During this L2 stage there might be an acquisition barrier of different kinds. Teenagers for example are much confident than younger children. Furthermore, if there is an element of reluctance of producing sounds of another language there might be a physical or cognitive disability in the learner. It is at this point that sign language could be of relevance, in other words when there are difficulties in acquiring spoken language. Therefore, if there is a lack of empathy with other cultures accompanied by self-consciousness then the indirect effects of

not sounding like a Russian or German or American may hinder the learning process (Yule, 2006:164). Thus the effects of this emotional reaction may be caused by dull textbooks, exhausting schedules of study or work and unpleasant surroundings in classrooms. Also these affective factors can create a barrier in the acquisition process. Therefore, one cannot learn anything if he/she is stressed, uncomfortable or unmotivated. Young ones are not affected by affective factors because they are quickly overcoming self-consciousness and try to use new words and phrases. Adults also overcome their self- consciousness sometimes. The same applies to the acquisition of sign language where adult learners can become very self-conscious, especially given that it is a visual language, which requires extra-linguistic expertise, for example an understanding of gestures.

The grammar translation method

According to Yule (2006:165) the most traditional approach is 'to treat L2 learning in the same way as any other academic subject'. Thus the use of vocabulary lists and sets of grammatical rules are used to define the learning target, encouragement of memorisation and written language use rather than spoken language is emphasised. In addition in the traditional teaching of Latin this method has its roots and it is described as 'grammar-translation method'. Its emphasis on L2 learning often leaves students ignorant on how the language might be used in daily conversation (Yule, 2006:165). Many successful L2 users over the centuries are being produced by grammar-translation-method. Furthermore, students sometimes claimed that they can leave school achieving high grades in French class via this method. However, when they are confronted by the way the French in France use their language they can find themselves at a loss. This speaks to varieties of language which are also present in sign language. There will be variations of sign language across countries and within specific communities. It is, therefore, important to learn sign language within the social context in which it is used. The asocial grammar-translation method would not be ideally suited for the acquisition of sign language.

The audiolingual method

The audiolingual method is a different approach that emphasized spoken language. In addition became popular in the middle of the twentieth century. Thus it also involved presentation of systematic structures of L2 moving in the form of 'drills' student had to repeat from simple to more complex. In addition, the audiological method was influenced strongly by fluent use of a language belief that was a set of 'habits' and could be developed

with lots of practice (Yule, 2006:165). Furthermore, this practice had an involvement of hours spent in the laboratory of language repeating oral 'drills'. The approach is still used in the language teaching. Furthermore, an adaptation of such a method could be sued in the acquisition of sign language where signs could be 'drilled' appropriately. Rather than involving audiology this would of course be replaced with visual methods, but following the same pedagogic approach of drilling systematic structures if sign language.

Communicative approaches

L2 learning recently came up with the 'communicative approaches' (Yule, 2006:166). However, there are many different versions of how to create L2 for communicative experience with learners. Thus the belief is based on functions of language that should be emphasized rather than the language forms i.e. grammatical or phonological structures correction. Also classroom lessons are organized according to concepts, i.e. asking for different social settings things rather than different forms of past tense in sentences (Yule, 2006:166). In terms of sign language there would be no point in learning the signs and not being able to apply them to the context. It needs to be both functionally based as well as drilled and learned.

Focus on the learner

In the area of L2 the most fundamental change according to Yule, (2006:166) is a shift from the teacher's concern, the textbook and the method to the learner's interest and acquisition process. For example, the most radical feature of communicative approaches is the 'toleration of errors' that have been produced by students. Thus an 'error' is the clue to the active learning progress that is being made by the student as he/she is trying to find ways of communicating in the new language rather than hindering a student's progress. Furthermore, when children acquire their L1 they produce different types of ungrammatical forms and therefore L2 learner is expected to produce familiar forms at some stage. When it comes to sign language the signs may vary across different varieties. Such an approach would therefore encourage communication and understanding by focusing on the learner rather than using the sign in its 'learned' form. This implies the acceptance of varieties of sign language rather than abiding by the norm of SASL in its standard form only.

Interlanguage

The language produced by L2 learners according to Yule (*Ibid.*) comprises a large number of 'errors' that have no connection to the forms of L1 or L2. For instance, the L1 Spanish speaker who says in English: '*She name is Maria*'. Therefore, the form of production from the sentence is not used by an adult speaker of English also does not occur in English L1 acquisition by children and not based on Spanish structure either. Interlanguage is 'some in-between system used in the L2 acquisition process' which comprises of aspects of L1 and L2 and having rules of its own. As pointed out earlier, the acquisition or use of sign language by a child learning it organically may be different form someone formally learning sign language as a second language based on SASL rules.

Motivation

The success of an L2 learner derives from the combination of several factors. Many learners learn L2 in order to achieve some of their goals, i.e. complete their school graduation requirements or to be able to read scientific publications or for social purposes (Yule, 2006:168). However, there are learners who want to learn L2 for social purposes, in order to take part in the social life of the community by using the language for the purpose of being accepted as that particular community member. Those learners have 'integrative motivation'. Thus the most motivated learning leaners are those who experienced some success in L2 communication. Therefore the language-learning situation which gives support and encourages students in L2 skills for successful communication should be more helpful than the one focused on errors, corrections and a failure to be perfect and accurate (Yule, 2006:168). The same can be said for the acquisition of sign language. Let us now focus more particularly on sign language and the make-up of sign language in relation to the more formal aspects of sign language.

Gestures in sign language

Yule, (2006:172) avers that, when considering the process of language acquisition, people consider the fact that speech is what is naturally acquired by most children. However, as indicated above in this chapter a first language is not only acquired from speech. As pointed out above, English or Spanish-speaking parents acquired natural English or Spanish in the early stages of development. Likewise, Deaf children who are born from Deaf parents naturally acquire signs or sign language. For instance, children growing up in American

homes will surely acquire American Sign Language (ASL) as explicated later in this chapter and in chapter 3 on comparative sign language.

Gestures

Both signs and gestures include the use of hands and other parts of the body, however, they differ. Furthermore, sign represents the speech because it is used in the place of speaking. In addition gestures are used only, while one speaks (Yule, 2006:172). For instance, gestures make a downward movement with one hand when one talks about not doing well in a class. Also when you describe a twisting motion you must use one hand as you are trying to open a bottle or jar. Thus, as indicated earlier in this chapter, gestures are part of the communicative act that is being performed when using sign language. When there's no verbal behaviour there is a distinction drawn between emblems and gestures. Yule (*Ibid.*) states that 'Emblems' are signals such as a 'thumbs up' signal which means that things are good or 'shush'' i.e. keep quiet. These signals function like fixed phrases and they are not relying on speech. Furthermore, emblems depend on social knowledge, hence they are conventional, e.g. 'what is and isn't considered offensive in a particular social world'. Thus in Britain two fingers are used i.e. the index and middle fingers together raised in a V-shape which represents one emblem i.e. = victory when the back of the hand faces the sender then it is a different emblem. However, when the back of the hand faces the receiver the signal means = 'I insult you in a very offensive way'.

Types of gestures

There are different sets of gestures that accompany speech as well as sign language. Among them one can distinguish between the content of the spoken message and those that indicate something is being referred to. Thus there are gestures reflecting the meaning of what is said. These are called 'iconics'. For instance when tracing a square by using a finger in the air when saying 'I'm looking for a small box', an iconic gesture does not mean the same as what has been said, however the meaning might be added (Yule, 2006:173). For example, a woman was moving her arm up and down as holding a weapon with a closed hand, while she was saying, '*and she chased him out again.*' Communication messages included the weapon, which was an umbrella proficient through combination of speech and gesture. The same opportunities present themselves when using sign language – it is an expressive language which uses gesture to enhance meaning.

In addition, another group of gestures are 'deictics'. According to Yule, (2006:173), 'deictics' means 'pointing'. Thus gestures are used to point to people or things while talking or signing. However, the purpose of gesture and speech combination is to accomplish successful reference to something that exists only in the joint memory rather than in the 'current physical space' (Yule, 2006:175).

Another example of gestures is described as 'beats' which are quick and short movements of the hand or fingers. Thus the rhythm of talk is accompanied by these gestures and often used to emphasize the part of what is being said. Hand movements can accompany speech but they are not used as the way of speaking, unlike when sign language is being used. In addition, the use of hand movements in order to speak is described as 'sign language'. This use of hand movements is then the basis of sign language but also presents itself as an accompaniment to spoken language.

Types of sign language

There are two categories of language involving sign language use, i.e. alternate sign languages and primary sign languages (Yule, 2006:173). Thus 'alternate sign language' is a system of hand signals which is developed by speakers for communication limitation in a specific context where speech cannot be used. In addition restricted alternate sign languages are used in some religious orders where there are rules of silence, i.e. by monks in a monastery. Also quite elaborate alternate sign languages are used among some Australian Aboriginal groups when speech is avoided completely during the periods or times of bereavement. From all the above examples, the users of alternate sign languages can speak another first language. "'Primary sign language' is the first language of a group of people who do not use a spoken language with each other" (Yule, 2006:174). British, French or South African sign languages are examples of primary sign language because they are used for everyday communication among the members of the Deaf communities of France, Britain and South Africa. As alluded to earlier in this chapter, these different primary signs are partly mutually understandable and also sometimes do not share identical signs.

Signed English

According to Yule (*Ibid.*) the learning of Signed English has been promoted by many institutions. Signed English is also called Manually Coded English or MCE. Thus signs that correspond to the words in an English sentence are produced in the English word order. The

purpose of Signed English is to create an interaction between the Deaf and the hearing community. Also the advantage of Signed English use is to provide a parent with a communication system to use with the child and it presents a less challenging learning task for hearing parents of Deaf children. In addition hearing teachers use Signed English in Deaf education i.e. to sign and speak at the same time (Yule, 2006:175). Also Signed English is easier for hearing interpreters and lectures for a Deaf audience who produce a simultaneous translation of public speeches.

Furthermore, the preference of Signed English use also influenced many Deaf people. As a result they prefer interpreters to use Signed English for the purpose of higher likelihood of understanding the message. Thus the message seems to suffer when some interpreters try to use American Sign Language (ASL), therefore, for this reason they need to learn ASL from childhood. There are few hearing people who are proficient in Signed English. Signed English is not English or ASL, it is instead used to produce a direct version of sentences of spoken English. One of the major aims of Signed English preference according to Yule, (2006:175) is 'to prepare students to be able to read and write'. Thus the principle is that Deaf education should be well prepared in order to enable Deaf children to take part in the hearing world for economic reasons. The same type of approach could also be encouraged in South Africa in order to create linkages between the hearing and Deaf communities.

Origins of ASL

Yule, (2006:175), as elaborated on in the previous chapter, avers that ASL was developed from the French Sign Language which was used in Parish schools and founded in the eighteenth century as indicated in chapter 3 of this thesis. Thus early in the nineteenth century an American minister called Thomas Gallaudet who tried to establish a school for the Deaf brought a teacher called Laurent Clerc to the United States. In addition Clerc's focus was not only on children, but he also trained other teachers. Furthermore, during this period the sign language imported version incorporated 'features of indigenous natural sign languages' used by the American Deaf which evolved into ASL. Thus the origin of ASL helps us to be able to explain why users of ASL and BSL do not share a common sign language. Each sign language, including SASL, develops against a historical and social backdrop.

The structure of signs

Sign language is a natural language, which functions in the visual mode (Yule, 2006:176). Therefore ASL is designed for the eyes instead of the ears. There are four key aspects of visual information used by signers which produce linguistic forms in ASL, indeed in all forms of sign language, including SASL. Thus they described as the articulatory parameters of ASL in terms of orientation, shape, location and movements. These parameters can be described in the use of the common sign for *Thank-You*.

Shapes and orientation

Describing *Thank-You* articulation in ASL according to Yule (*Ibid.*) starts with the shape of the hand(s) used in the form of the sign. Whether the fingers are bent or extended the shape may differ in terms of which fingers are used. There is a configuration of a flat hand (not a 'fist hand' or a 'cupped hand'). Thus when signing *Thank-You* the palm orientation of the hand is 'palm up' rather than 'palm down'. Hence orientation differs, in other signs the hand may be oriented as the 'flat hand, palm towards signer form 'used to indicate *Mine*'. The way in which hands are used is then integral to signing and also to depicting dialectal variation in sign language.

There is an element of **movement** in Thank-You which is 'out and downward' toward the receiver. Furthermore, faster and slower movements differ in signing as well as having an effect on meaning. Thus there is a different meaning in the types of movement. These can be 'slip of the eye' and 'slips of the ear' (Yule, 2006:177).

Primes, faces and finger-spelling

According to Yule, (2006:177) the four general parameters can be divided into primes or sets of features. A flat hand is referred to as a prime in terms of shape, for example 'palm up'. Thus, each prime allows the creation of a complete feature analysis of every sign, in the same way as we can analyse phonological features of spoken language. However, there are crucial functions which are served by non-manual components such as eye-movements, head-movements and other types of facial expressions. In addition the 'Thank- You' associated with head nodding and a smiling face. When a sentence functions as a question, it is typically accompanied by a rising of the eyebrows, widened eyes and a 'slightly leaning forward of the head'. Furthermore, if a new term is encountered, finger-spelling which is a 'system of hand configurations' is usually used by signers to represent the letters of the alphabet, (Yule,

2006:177). Thus sign language is a linguistic system designed for face-to-face interaction, i.e. it is a visual medium. Also, many signs are located around the neck and head. Yule (*Ibid.*) states that, while signs are produced linearly, multiple components can be produced at the same time in space and in the visual medium.

The meaning of signs

Looking at the signs sometimes they are mistakenly believed to be simple visual representations of objects and actions they refer to and consist of a limited set of primitive gestures which look like objects or mimic actions in drama/pantomime (Yule, 2006:178). Thus when non-users of sign language are told that a sign is used to refer to the particular action or object, they build a symbolic connection that creates a relationship between sign and 'signified' i.e. it seems to be more transparent. Furthermore, the sign for *Thank-You* can be seen as some appropriate symbolic version of the action of '*thanking*'. It is not easy to get the meaning of the sign on the basis of what it looks like. Therefore, if the words cannot be seen, the pictures needed for their interpretation cannot be identified. Fluent users who use sign language everyday are not based on symbolic pictures identification, but rather on the recognition of familiar linguistic forms that have arbitrary status (Yule, 2006:178). Thus signs have their meanings within the system of signs, but not through some pictorial reference image they use each time. Below is an example of the common sign for 'caring':
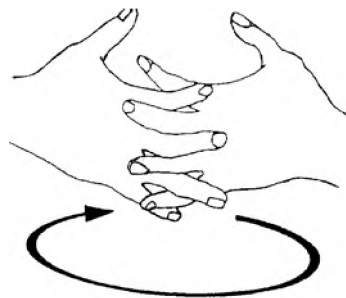
Representing signs

Yule, (2006:179) avers that sign language 'exploits' the visual medium in an indirect way in so much that it makes it difficult to be represented correctly on the page. Thus it has been observed strictly that for instance the only way to write sign language is to use 'motion pictures'. In addition, the major problem is to find a way to integrate aspects of facial expression that contribute to the message. Furthermore, the solution is to write 'one line of

manual signed words' in capital letters then you indicate the nature and extent of facial expression that contributes to the message above the line.

The structure of sign language

Stokoe, (1980:36) contends that 'Sign Language is a language like any other language and that it can be analysed as a language'. However, when we compare it with spoken language it is clear that signed languages are basically different from spoken languages. In addition, Stokoe (*Ibid.*) believed that to think of a sign as a picture was not exhaustive, but rather could be analysed as an abstract and complex symbol into various parts. Furthermore, to analyse the signs into parts allows for the development of new theories concerning where signed languages came from, how they work, where they are going and what is the best way to teach them.

Writing about signs

Stokoe (1980:38) proposed that every sign should at least have three independent parts, i.e. **Location** - where is the sign is being made on the body, i.e. on the chest or in front of the body. **Handshape -** how are the fingers bent or extended in the sign? Is the hand a fist, or does it have some extended fingers? **Movements -** How does a hand move in a circle, 'up-and-down' or forward?

Parts of Signs

Furthermore, signs must be broken up into different parts in order to identify meaning (Stokoe, 1980:42). For instance, the two English minimal pair words '*skim*' and '*skin*' have meanings which are different. Thus they are minimally different. The only difference between the two is the sound unit: '*m*' and '*n*'. However, there are thousands of minimal pairs i.e. pairs of words which differ in one minimal way, as indicated earlier in this chapter. In signed language we can also determine what types of units play a crucial role in distinguishing meanings. Also, minimal pairs of signs differ in aspects of their production:

WHICH   CAR/DRIVE   CHINESE   SOUR
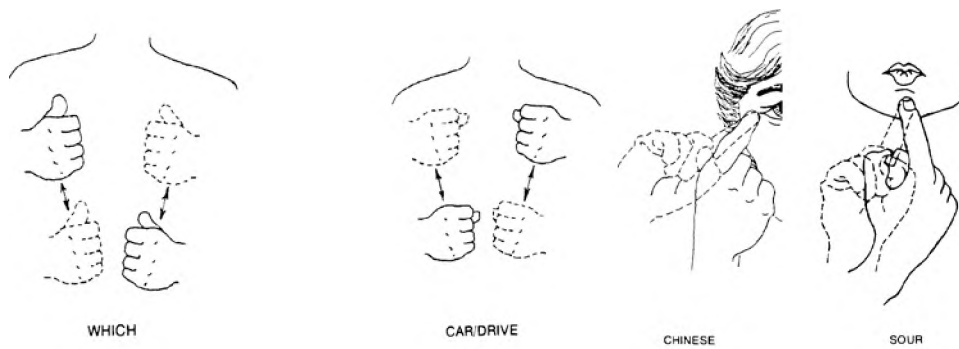
Understanding signed language structure

Spolsky, *et al.* (2008:179) states that 'A sign functions very much the same as a word does in spoken language'. Structurally, sign language needs the use and movement of hand shape from one way to another. A physical way of showing movement internal to a sign would not be operating without the hand shape. Therefore, there are possibilities of location in the signing space i.e. in front of the signer's body and on the signer's body in a correct form of a sign.

A sign should not have more than one hand shape, (Spolsky, *et al.*, 2008:179). Below is an example of, for example American Sign Language for 'WATCH':
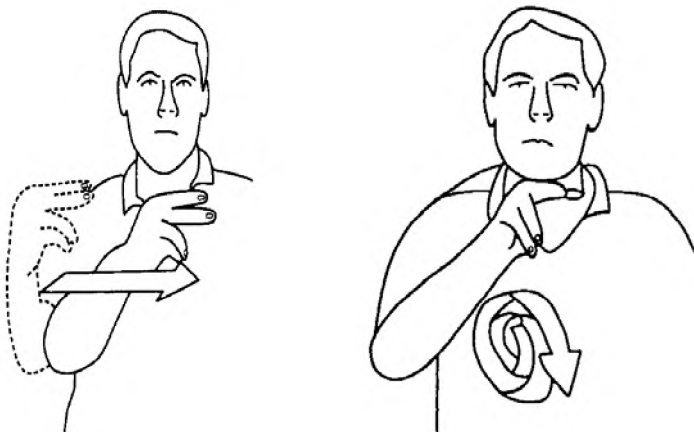
WATCH for verb agreement   WATCH for temporal aspect

However, an interesting part is that transformation form of 'WATCH' is consistent with the formation of signs in general, (Spolsky *et al.*, 2008:182). Therefore, there is no new additional segment to the stem and no unrelated syllables are produced. There is a repetition of the non-linear affixation patterns and structural constraints.

Interaction of classifier predicates and role-plays

This relation according to Aarons *et al.* (2000) is described as a person or animal NP in the utterance or the 'body classifier' or the 'signer's body pronoun'. Thus the use of role-shifted facial expressions is described as 'shifted attribution of expressive elements'. In addition the shifted use of pronominal forms has been described as 'shifted reference'. Also there is a phenomenon affective facial expression or miming actions, which go with verbal items either concurrently or following them. Thus second and third phenomena are sometimes referred to as role-play or 'constructed action'. Therefore, these phenomena are not necessary part of predicate classifier constructions, but provide an increasing or extending description technique once the signer assumed the perspective of the NP in question. Aarons *et al.* (2000:2) state that a role-play is not part of grammar, however it's occurrence in an utterance involves classifier predicates and is subject to grammatical constraints. Furthermore, when role-plays occur and involve classifier predicates within utterances, they not occur before the initial signing of the classifier predicate. In addition they must either occur simultaneously with a classifier predicate or follow a classifier predicate. A repetition of the initial classifier predicate must follow a 'classifier' predicate.

Topic and classifier predicates

The maximum number of topic positions allowed in a sentence of SASL and ASL is two. Thus listing construction is not included. In order to examine the relationship between NP topics and use of classifier predicates the topic and topic position information should be provided, (Aarons *et al.*, 2000:3). The engagement of the NP in the action of movement involvement or location occurs at the left edge of a sentence in either initial or second position depending on the number of NPs that are in the sentence. These are usually called topic positions, however the NP may be 'well focused' in terms of its function. Furthermore, NPs are usually dependent on the perspective of that particular NP chosen by a signer. Thus, these are called classifier handshapes.

In addition, the classifier handshape is included to the movement by the complex verb frame of this kind of a sentence. For instance, the sentence is not grammatical. Also if the NP in the question is a person, then the verb frame should include a handshape which represents a person. Therefore, the handshape should be a G classifier or S which will represent the head of a person or a 'handling' classifier showing that a person or a person's body part is involved in the action.

Words in a signed Language: The example of ASL Phonology

Wilcox & Wilcox (1997:26) aver that the 'words are at the heart of any language'. For instance when people learn a second language they understand that learning vocabulary is crucial. Therefore, it is vital to know how to speak the words properly and also how to make sentences. Thus asking questions carries on a conversation with someone and provides information which is also important for learners' knowledge. In ASL people talk about signs and not words. Furthermore, the understanding of a word is in various ways, (Wilcox & Wilcox 1997:27). In addition, words are symbols, i.e. units that combine two 'entities'-X symbolizes Y. X and Y are symbols which symbolizes two poles. Also words are combinations of forms and meanings. For instance, an English word such as 'cat' has a phonetic spoken form written in 'phonetic transcription' as **/kaet/** and a meaning which describes a cat as a small household furry pet. Phonetics and phonology is the study of meaning. Thus words are made up of parts, hence researchers analyse words in terms of form. Wilcox & Wilcox (*Ibid.*) avers that parts do not mean anything because it is considered as only one side of the symbol. Thus for the English word 'cat' one would find out that the word is made up of three parts, i.e. the sound-/k/, /ae/ and /t/. Linguistically these units are called **phonemes.** However, there are many ways of analysing words and they may not be discussed fully but words may also be analysed in terms of 'rhythmic units' which are called **syllables**. These syllables, form words which are then signed into sign language.

Three stages in understanding ASL Phonology

Looking at people's perspective on signed languages, they think that it is different from spoken languages. Therefore, researchers claim that signs are 'holistic' or universal. Thus people assume that these signs cannot be analysed as combined parts to form words. (Wilcox & Wilcox 1997:29). For instance a gesture such as the sign **'like'** was considered as not an analysable unit.
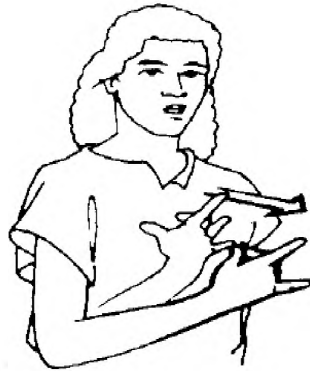
LIKE

In the 1960s Stokoe (1980) proposed that ASL signs could be analysed into parts. Thus ASL could be broken down into three parameters, i.e. handshape, location and the movement. However, there is a fourth parameter which is the palm orientation of the hand. Furthermore, to prove that aspects of signs are equivalent to the aspects of spoken words one can use a technique which linguistics relies on, which is the study of minimal pairs as discussed earlier in this chapter. In spoken language two sounds or phonemes can be determined by substituting one another. In the word 'cat'/kaet/ for example one can substitute the sound /b/ by /k/, i.e. /baet/. Therefore, there is a difference between 'bat' and 'cat' to show that these words are two different words with different meanings. The word 'b' can be used in 'bad', 'ball' etc. The technique can be applicable to signed words as well. e.g. Chinese consists of G handshape as a location i.e. 'the side of the eye on the same side of the face as the dominant hand and a movement'. In addition another ASL handshape used is X-handshape. Also in Chinese X-handshape is substituted by G-handshape. Thus when this substitution occurs the signer produces the ASL word 'onion'. A new ASL word is made by one change of parameter. Therefore, by analogy with phonemes these aspects of signed words were called 'cheremes', (Wilcox & Wilcox, 1997:30).

Signs and spoken words share important characteristics. Both are formed by smaller unit combinations. In addition there are two interesting differences between the two, (Wilcox & Wilcox, 1997:30). The difference is in the way the units are combined. For instance in the case of the spoken word 'cat' the three phonemes are combined in a temporal sequence, i.e. /k/ then /ae/ and /t/. Another example is tack, i.e. /taek/ or act /aect/. Signed word component parts are not produced sequentially. Linguistically the phonology of spoken languages are characterized by high degrees of sequencing, whereas signed languages display a highly simultaneous degree of using various features of gesture and signing at the same time.

Furthermore, spoken and signed words are both different and alike, (Wilcox & Wilcox, 1997:31). Thus both consist of parts that can be combined in order to form new words, i.e. phonemes or 'cheremes'. Therefore, signed and spoken languages share basic and unique features which are common to all human languages. In terms of the word 'idea', it is formed by holding the hand in a certain handshape, orientation, location etc. Thus the hand is 'moved away from the body' and held in a different location. Furthermore, the word 'idea' consists of two parameters. The three pictures below show the various movements that depict the word 'idea':

ASL Morphology

ASL phonology signed words are made up of parts that can be recombined to form different words. However, words in spoken languages are not 'indivisible wholes'. Thus they can be broken down into smaller meaningful parts which are called morphemes. In addition a morpheme is defined as the smallest combination of the meaning and the form. For instance, in the word 'cat' there is only one morpheme which is 'cat.' However 'cats' has two morphemes, i.e. one is 'cat' and another one is 's'. In various languages the way in which morphemes combine to form words differ (Wilcox & Wilcox, 1997:34). Morphology is described as a 'packaging of concepts'. Thus the number of morphemes per word is considerable. English is a 'synthetic language' meaning that it contains many 'multi-morphemic' words rather than being an isolating language (Wilcox & Wilcox, 1997:35).

Manual Codes for English

Wilcox & Wilcox (1997:43) avers that, 'English is a language that can be represented in all three of the major modalities: spoken, written, and signed'. By understanding manual codes one needs to explore the meaning of written English, representation of written symbols and also how symbols will be invented.

Thus units at the primary and secondary level of language can be represented. Also graphs which are written marks can represent meaningful single or poly-morphemic units such as phrases, words and sentences, these are 'logographic' systems.

Furthermore, writing systems can also represent units on another level of language. However, graphs can be represented in a non-meaningful level of sounds. Thus the writing system is called phonographic. In addition, written English is represented through segmental writing. Manual codes for English systems are typically logographic, (Wilcox & Wilcox, 1997:44). For instance, the following sentence in manually coded for the English system: 'He established those policies yesterday'. Therefore this sentence would be expressed in the use of eight signs i.e. "HE ESTABLISH –PAST TENSE, THOSE POLICY- PLURAL YESTER DAY". Sign language therefore expresses the English spoken word order in a different way.

Conclusion

This chapter is based on the study of general theory of language and sign language. The chapter began by outlining the early development of spoken language as well as sign language. It is suggested that the latter may have been the first medium of communication among humans (Mufwene, 2016). Furthermore, the chapter provides a comparative model for analysing both spoken English and other languages as well as sign language from a purely linguistic point of view. The chapter further suggests that sign language is as complex as any other language, both in structure and expression of semantic meaning. This is an important consideration for any bilingual teaching model that is developed for Deaf and hearing impaired learners. The chapter that follows describes the research methodology that was used for this thesis.

CHAPTER 5
RESEARCH METHODOLOGY

Introduction

This thesis undertakes research into SASL, Language Planning, Policy and Implementation, Language-in-education Policy and bilingualism as explicated on page 4 of chapter 1 of this

thesis. South African Sign Language (SASL) is a distinct language ,which is the official sign language used by Deaf people in South Africa. As indicated in chapter 2 of this thesis, it is not a derivational pidgin, but a recognised language in its own right (Reagan, 2007:28). Deaf learners in South Africa experience challenges in education and information access due to the fact that the relevant provision of the Constitution and the South African Schools Act are not actively implemented. Most teachers do not have necessary signing skills in schools as indicated in chapters 6 and 7.

The Bilingual Approach encourages the involvement of interaction between Deaf and hearing people and the recognition of Deaf culture. Early research on the development of literacy skills in Deaf children demonstrated that Deaf children of Deaf families tended to be successful readers and writers and were more socially and culturally knowledgeable than Deaf children of hearing families. These children are more successful because they have a secure first language in which to learn before trying to learn a second language (Humphries, 2013:13).

From the researcher's experience as a Deaf teacher for Deaf children, and from the data presented and analysed in chapters 6 and 7, language planners should encourage the use of bilingualism in all educational settings in South Africa in order to improve the quality of teaching and learning for hearing impaired and Deaf children. This is again emphasised in the recommendations in chapter 8. In addition, Deaf learners use sign language as a home language and English as their first additional language. As a result Deaf learners struggle to read and write English and that leads to high failure rates. The reason for this can partly be attributed to the structure and linguistic nature of English as analysed in chapter 4. Therefore, these learners remain a marginalised minority group when it comes to formal education. Furthermore, in South African statistics taken from 2003, of the number of home language speakers, sign language is not even listed (Beukes, 2004:4).

The research for this thesis was largely undertaken in the Western and Eastern Cape Provinces at the following schools for the Deaf: in the Western Cape, Mary Kihn School for the Hearing Impaired and Dominican School for Deaf Children (Wittebome); the Eastern Cape schools were St Thomas School for the Deaf and EFATA School for the Blind and Deaf. The methodology was contextualised and applied in each of the above schools as they all teach sign language at different levels. Educators, learners and Deaf teacher assistants participated in the study. The methodology that was followed in this study was both

qualitative and quantitative. What was researched was the nature of different approaches used by the teachers to teach in the respective schools by observing teaching in selected Grade 3, 5 and 7 classrooms. After observations Deaf teacher assistants and Grade 7 learners were also interviewed. The questions posed were open-ended and based on classroom observations. The researcher's investigation was to establish which approaches are being used in the respective schools and to assess the effectiveness of such approaches.

Furthermore, there is a new SASL curriculum for Deaf learners which has already been implemented in the Western Cape schools in the Foundation Phase classes. However, some teachers do not have the necessary signing skills in order to prepare this curriculum to be in use and sign language to be the medium of instruction in the teaching of Deaf learners. Thus the research established how teachers cope with the new curriculum, especially the use of teaching approaches including Bilingual-Bicultural education. In addition, the researcher also observed how the curriculum relates to what is being taught and learnt in the classroom. The researcher intended to ascertain how teachers and learners react to this new SASL curriculum in the classroom. There is a lack of awareness in schools regarding the Bilingual-Bicultural Approach. Therefore, the researcher shared information with teachers during the research. The researcher used a video camera to record the interviews and the reactions of research subjects when responding to these approaches. The Education Departments in the Eastern Cape and Western Cape were visited in order to collect SASL curriculum documents. The findings of this research is to be presented to the National Department of Basic Education and the Deaf Federation of South Africa (DEAFSA).

<u>The research process</u>

Gibson *et.al* (2009:9) describe social research as 'a linear process' whereby the researchers move from one stage to another, i.e. from a research topic through different stages of research: 1. Literature review, 2. Research design, 3. Data collection, and 4. Data analysis. Thus researchers move from data analysis, to literature consultation, to more data collection, 'designing alternative approaches', data collection, writing, and back to data analysis etc. (Gibson *et al.* 2009:10). See example below:

Research topic formulation	Consultancy	Design study

| Gather data | Analysing Data | Writing |
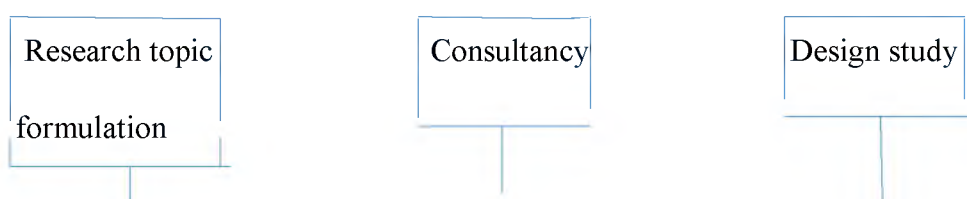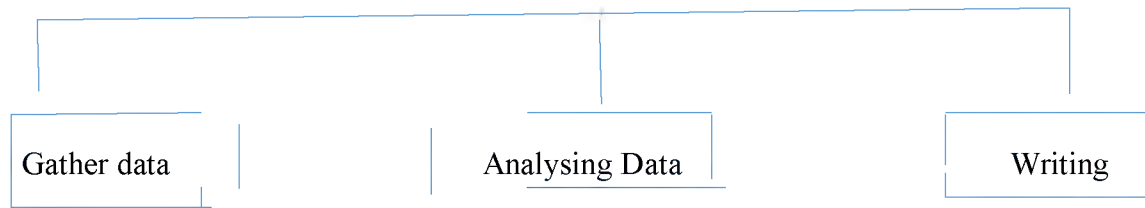
(Gibson *et al.* 2009:10).

Research Problem

Bilingualism is not encouraged in South African Deaf schools in all educational settings in order to improve the quality of teaching and learning for hearing impaired and Deaf children as indicated in chapters 6 & 7. Furthermore, SASL is not the medium of instruction in all Deaf schools, and therefore it is taught as a subject in Deaf schools. In addition, Deaf learners use sign language as a home language and English as their first additional language. Thus Deaf learners struggle to read and write English and that leads to high failure rates.

The objectives

The primary objectives of this study was to provide case studies of sign language practice in education by exploring teaching pedagogies in different South African schools for the Deaf, particularly in the Eastern and Western Cape. The secondary objective of my research was to investigate what it will take to implement effective Bilingual-Bicultural education in every South African Deaf school.

Research design

The research method chosen was an ethnographic method which is the type of social science research that investigates the practices and life of a community. Thus it is the study of people's self-understanding of their life worlds, their everyday life practices and their belief system. Furthermore, ethnographic research methods are a detailed collection of descriptions as they occur (Harries, 1999:17). The study also used a mixed method approach which is the collection of both qualitative and quantitative data. The researcher wanted to find out which teaching approaches are being used in the selected Western and Eastern Cape schools and also how the new SASL curriculum is related to what is being taught and learned in the classroom, including the Bilingual-Bicultural Approach. Penn (1993:12) maintains that sign language should be equal in status to all other languages. Therefore, the researcher wanted to

find out how the teachers use Bilingualism in their sign language classes and whether the status of SASL was indeed advanced. The researcher decided to focus on teachers who would teach English and sign language and experienced and non-experienced teachers working with Deaf learners in Deaf schools. In addition, the focus was on learners who were currently experiencing problems in their classes and Deaf teacher assistants who also experienced the complex linguistic and cognition issues in the classrooms.

Furthermore, the selection was based on Schneider and Priestly's (2016) argument which says that if Deaf children are not exposed to sign language, it amounts to an infringement of their human right to language usage. Initially the researcher planned to concentrate on Grade 12 classes, but not all chosen schools offered Grade 12. Both Western and Eastern Cape school sites and Education Departments were chosen according to the researcher' familiarity. The researcher taught in one of the Western Cape schools and currently resides in the Eastern Cape due to studies. The researcher informed the teachers, Deaf assistant teachers and Deaf learners in good time about the interviews. Communication was done by means of fax, telephonically and via email. The researcher gave a brief summary about what the study entails. The teachers encouraged the learners and Deaf assistant teacher to participate in the study. Mrs Stein who is the Western Cape SASL Curriculum Advisor agreed to assist the researcher. Also a suitable time was arranged for interviews.

Mixed methods (Pragmatic approach)

The mixed methods approach, including ethnography, involves the use of methods which appears to best suit the research problem (Alzheimer Europe Office, 2009). Thus the mixed method approach is the best approach. Pragmatic researchers allow themselves the freedom to use any methods, techniques and procedures allied with qualitative and quantitative research. Hence there is recognition of different methods which have their own limitations. Therefore, different approaches can be harmonising. Different techniques can be used at the same time or after one another. Thus face-to-face interviews could begin with many people or a focus group and then findings; in order to create a questionnaire one could measure participants' attitudes. Data collection is then analysed in an appropriate manner. Furthermore, 'Being able to mix different approaches has the advantages of enabling triangulation' (Alzheimer Europe Office, 2009). A mixed methods approach is the one in which the researcher's knowledge is based on pragmatic grounds such as 'pluralistic, problem centred and consequence-oriented' approaches (Creswell, 2003:18). It uses

strategies of inquiry which involve simultaneous or sequential collection of data to understand research problems better.

Qualitative Research Approach

Qualitative research can be described as a research strategy that usually emphasises words rather than quantification in collection and analysis of data (Bryman, 2001:20). Qualitative research gathers information that is not in numerical form (McLeod, 2008). In addition, it also stresses the importance of allowing theoretical ideas to emerge from one's data. It can and should have an important role in relation to the testing of theories as well. Furthermore, it serves the researcher's needs better, since it is typically associated with the generation of a theory, rather than with the testing of a theory (Bryman, 2001:22). The research goal is defined as description and understanding rather than explanation and prediction of human behaviour (Gibson, *et al.* 2009:53). Qualitative research is designed to divulge a target audience range of behaviour and insights that push it to specific topics (QRCA, 2015). Furthermore, in-depth studies are used in small groups of people in order to support and guide the construction of hypotheses (QRCA, 2015). Thus qualitative research results are descriptive rather than predictive and likewise support the ethnographic approach involving observation mentioned above. The qualitative approach originated in the social and behavioural sciences such as psychology, anthropology and sociology (QRCA, 2015). Qualitative research emphasis is on observation and analysis methods that link the researcher to the research subject. Della Porta *et al.* (2008:296) view qualitative research as an investigator of the 'why and how of social action'. Observational methods such as unstructured interviews, participant observation (ethnography) and the use of personal documents are included. Thus terms that are used as synonyms with the term 'qualitative research' are the following: ethnography, field research and naturalistic research. Creswell (2003:18) views the qualitative approach as allowing the inquirer to make knowledge claims primarily based on observation. It employs inquiry strategies such as 'phenomenology, ethnographies, grounded theory studies and case studies'.

Phenomenological Research

In this research the researcher identifies the 'essence' of the experiences of humans regarding a phenomenon (Creswell, 2003:15). Thus phenomenology as a philosophy, method and procedure includes studying a small number of subjects through extension and general engagement for the development of patterns and the relationship of meaning. Therefore,

through the 'brackets' of the researcher's own experience, there is an understanding of participants in the study (Creswell, 2003:15).

Grounded Theory

In this theory the researcher attempts to originate interaction grounded in the participants' views in the study and a general abstract theory of action and process. Thus this process involves the use of multiple stages of data collection, interrelationship and refinement of information categories. The two characteristics of this design are the comparison of data and theoretical sampling of different groups for the purpose of maximising the differences and similarities of information (Creswell, 2003:14). Payne *et al.* (2004:99) view grounded theory as one of the more broadly 'used' and 'abused' recent research methods. It includes an accurate and systematic set of methods, however, some researchers believe that theoretical knowledge should be based on a described social phenomenon and need to take an inductive attitude. Thus grounded theory does not substitute fieldwork. In addition, if any study does not 'embrace' a full set of procedures it should not be labelled as such (Payne *et al.* 2004:99).

Furthermore, grounded theory is work with both inductive and deductive frameworks, i.e. positivism and realism and qualitative methods. Induction means that the researcher explores data that will be allowed to suggest explanations and meanings that might be collected into the model of theory. Also it claims to begin with fewer biases and to be factual in relation to the data (Payne *et al.* 2004:99). Grounded theory is dominated by an operation of qualitative methods. Deduction means that the researcher begins with hypotheses and theories and collecting data in order to test them. Thus deduction is the origin of many qualitative methods. The approach of grounded theory starts with fieldwork and data collection from an 'inductive' perception. For instance, 'The researcher begins with an area of study and allows the theory to emerge from the data' (Payne *et al.* 2004:99). Theory derived from the data is more likely to resemble the 'reality' than is theory derived from putting together a series of concepts based on experience or solely through speculation (how one thinks things ought to work). Grounded theories because they are drawn from data, 'are likely to offer insight, enhance understanding, and provide a meaningful guide to action' (Payne *et al.*, 2004:99).

Wyse (2011) avers that qualitative research is exploratory research. Thus it is used to achieve an understanding of reasons, motivations and opinions. It also provides acumen into the problem and helps to develop notions for potential quantitative research (Wyse, 2011). In addition, it is used to discover trends in the opinions and thoughts and goes deeper into the

problem. It employs unstructured and semi-structure techniques. It also includes focus groups for group discussions, participation observations and individual interviews. Thus respondents are selected to achieve the sample size proportion given and the sample size is usually small.

Quantitative Research Approach

Quantitative research (Babbie, 2001:278) has different features such as:

(a) Openness to multiple sources of data, i.e. multi-method approach.

(b) A detailed engagement.

(c) Small number of cases to be studied.

(d) Flexible design features that will allow the researcher to familiarize and make changes to study where and when necessary (Babbie, 2001:278).

Creswell (1994:6) avers that a quantitative researcher should write a study that shows language that is not 'impersonal and formal' but is based on 'accepted words' such as comparison, relationship and within-group. Thus from accepted definitions, concepts and variables are well defined. Also in quantitative methodology a deductive form of logic is used. Thus theories and 'hypotheses are tested in an effective order'. 'Concepts, variables and hypothesis are chosen before the study begins and remain fixed throughout the study (in a static design)' (Creswell, 1994:7). In addition, most of the above features have been shared by three design types which are: ethnographic studies, life history and case study. Wyse (2011) views quantitative research as used to measure problems by generating numerical data or data that can be converted into statistics that can be used. It is also used to measure attitudes, opinions, behaviours and other variables. Quantitative research is more structured (Wyse, 2011). It includes different forms of surveys such as paper surveys, online surveys, kiosk surveys, face-to-face interviews, telephone interviews, mobile survey, systematic observations etc. (Wyse, 2011). Quantitative research addresses questions such as: 'what, where and when' (Della Porta *et al.*, 2008:296). Thus the 'what, where and when' may occasionally present more intricate or open-ended answers than what is expected.

Ethnographic Studies

Ethnography, already referred to above, can be described as the 'data of cultural anthropology' derived in a particular society from direct observation (Babbie, 2001:279). Thus an ethnographer makes an evaluation of these observations. Ethnography is not

distinguished by specific research techniques from other work apart from the cultural perspective. Ethnography is the work of cultural description. Thus the core aim is to understand other ways of life from the 'native point of view'. Field work contains disciplined studies of how the world looks like to people who have learnt to hear, see, speak, think and act in different ways. Many social scientists have taken up ethnography to undertake studies in clinics, schools, 'cult' groups, etc. and 'therefore the term has lost its special connection with cultural anthropology' (Babbie, 2001:279). Furthermore, ethnographic studies use methods of data gathering such as interviewing techniques and participant observation (Babbie, 2001:279). In an ethnographic study research is positioned in specific settings related with its member's encounters and documented in a twofold sense. Firstly, it has to be 'read by the researcher and afterwards communicated via a written document' (Payne *et al.*, 2004:193). The interactions of these elements come together in the researcher who must be at the centre-stage, especially if a reliable account of the research process has to be achieved. Thus the question of how successfully the research act has been accomplished is raised (Payne *et al.*, 2004:193).

Della Porta *et al.*, (2008:296) view ethnography as a form of writing that 'embraces philosophical research as the central point of qualitative research'. It also provides a 'cherished social sciences contribution that can be considered by researchers by differentiating qualitative and quantitative preferences' (Della Porta *et al.*, 2008:296). In addition, ethnography is the 'heart of qualitative methods in the social sciences' relative to interpretive and descriptive approaches (Della Porta *et al.*, 2008:299).

Ethnography as a naturalistic approach

The ethnographic approach is 'naturalistic' hence it tends to work with a society without controlling or influencing it (Della Porta *et al.*, 2004:300). The naturalistic goal is to understand behaviour in the context of its habits rather than in an 'abstract or laboratory setting'. In addition, it also interprets how people create meaning to their practices and involves a society's exploration of the way people make sense of the world they live in and also how they act in their related beliefs and to different people other than themselves (Della Porta *et al.*, 2004:301).

Holistic approach

Della Porta *et al.*, (2004:302) mention the ethnographic holistic approach in the sense of its foundation through the idea of understanding something as part of its 'whole system' and by making assumptions that a 'whole is more than the sum of its parts'. Ethnographers engage themselves in the phenomenon within the context of the study. For example, if someone is undertaking research on the behaviour of football fans, he or she should attend the match and pose open-ended questions to those who are present in order to understand the behavioural context (Della Porta *et al.*, 2004:302).Thus observation and background knowledge are crucial factors.

Observations

Creswell (1994:45) suggests that observation has three main elements: watch what people are doing, listen to what they are saying and ask them to clarify questions. There are two main kinds of observation: 'participant' observation which entails being involved and referring to a qualitative method and 'structured' approach, which means 'watching from outside' referring to a qualitative method. Thus the above forms of observation are not the same. Therefore they should be seen as different techniques with different kinds of data. Both techniques can be used simultaneously in order to get information. 'Participant observation should be used first then structured observation' (Creswell, 1994:46).

The use of observations

The kind of case you are dealing with and the kind of research questions you are asking 'vary from observation use as a technique' (Creswell, 1994:48). Thus observation can be used in various ways, i.e. as an 'exploratory' technique, as an 'initial phase', as a 'supplementary technique', as a 'multi-method approach' and also as the 'main technique'. However, Babbie (2001:293) mentions that there are two types of observation in qualitative research, i.e. 'simple observation' whereby a researcher is an observer and an outsider. There is also 'participant observation' where the researcher is both a researcher who is doing the study and a member of a group he is studying. In my study observations were based on teachers and learners' responses. Thus teachers were observed while they were teaching to ascertain whether they use appropriate teaching approaches when they teach Deaf learners in their classrooms and whether they include the Bilingual-Bicultural Approach and the New SASL curriculum or not. Furthermore, what we may wish to observe is crucial and should be noted.

Babbie (2001:293) mentions major types of 'observable data' such as: (a) 'Exterior physical signs', i.e. radios, clothes, church services etc. (b) 'Expressive movement', i.e. facial expressions, eye movements, postures or body movements, etc. (c) 'Physical location' i.e. people's personal space and the setting one is observing. (d) 'Language behaviour' i.e. topic of discussion, slips of the tongue, etc. (e) 'Time duration' i.e. how long does the person you are observing engage in what she/he is doing?

Participatory observation

The main data collection technique in ethnographic research is participant observation (Della Porta *et al.*, 2008:305). According to Gillham (2000:53), 'the first requirement for a participant observer is to answer the following questions: who are you, where are you from, what are you trying to do or find out?' Thus this requirement will not disadvantage the members of the group, unless the researcher is biased. In addition, the researcher should be open and tell the participant the purpose of the research. Furthermore, members of the group or participants might bring more information and be encouraged to be more 'noticing and analytic', i.e. trust will be built between the two. Therefore, when a researcher is 'straight forward and sympathetic, people will trust him/her and disclose information' (Gillham, 2000:53). Starting with descriptive observation is vital, i.e. the setting, people, events, activities and 'apparent' feelings. It is also important to describe more details including a 'provisional explanation' which is the inductive method. Thus field notes are essential.

Participants were observed through the interviews recorded on the video camera and thereafter the recordings were transcribed for the purpose of keeping all necessary information. The participants i.e. educators and Deaf teacher assistants were informed that there will be video recordings taken while they were busy teaching in their classes. Observations were based on the learners' responses while the teacher was teaching, as well as on the ways the teacher teaches in the classroom. Field notes were taken while the researcher watched and listened as recommended by Bernard (2000:318). Thus educator's observations were based on different teaching approaches used in their classrooms and the use of the new SASL curriculum and whether they include bilingualism or not while teaching. Furthermore, based on what the researcher experienced from teaching Deaf learners, sign language was used as a home language whereas English was the first additional language. Therefore, observations were based on whether learners coped with English or not, based on reading and writing skills. Also learners' observations were based on whether they understood the

teaching approaches used by the teachers in the classroom and whether they preferred bilingualism or not.

The learners were also observed to identify whether the material used by teachers was doable and answerable or too complicated for them. The Deaf teacher assistants were observed while they assisted teachers and learners with signs and whether they understand the teaching method used by the teacher in the classroom. In addition, Deaf teacher assistants were observed on whether they followed the method and were able to transfer information to the learners or not. Furthermore, the video recordings done for Deaf teacher assistants and learners were made for the purpose of keeping the information hence they used hand signs to communicate. Different Deaf learners from different schools used different signs and therefore the researcher learnt new signs from these different dialects. Before the researcher switched on the tape recorder permission was granted by participants and thereafter the tape recorder was switched on. If any participants were reluctant to answer questions, the researcher would leave the tape recorder on the table and when everyone was more relaxed then she would say in the interview, 'This is really interesting, I don't want to trust my memory on something as important as this, do you mind if I record it'.

Furthermore, when the participants become emotional or sensitive about the topic the researcher confirmed from 'the participants whether the tape recorder should be switched off' (Bernard, 2000:161). After the researcher completed interviews, the tape recorder remained on. Thus video recording made it easier to identify speakers and non-verbal characteristics of the conversation (Bernard, 2000:161). For instance, all Deaf participants who used hand signs were identified and, therefore, signed questions and answers were not missed out. Also video recording is the best mode of observations; recordings captured facial expressions of Deaf learners and Deaf teacher assistants. The tape recordings captured the voices of teachers and Education Department curriculum advisors.

Participant selection criteria

Each learner was a Deaf learner and studied in each of the selected schools. Thus he/she had knowledge of sign language and relied on the use of sign language as his/her primary means of communication (Ganiso, *et al.* 2013:24, cited Commerford, 2003:20). They also had similar cultural and socio-economic backgrounds (Ganiso, *et al.* 2013:24 cited Roth & Spekman, 1984). The gender composition was both males and females. The races represented were blacks, coloureds and whites. The Deaf teacher assistant criteria were based on Deaf

assistant teachers who taught learners from Foundation Phase classes. Some Deaf teacher assistants knew sign language and were able to teach it.

The teacher's selection was based on Deaf school teaching experience and non-Deaf teaching experience as some teachers do not know sign language while teaching in Deaf schools. Thus some of the teachers while teaching in Deaf schools for many years also experienced language problems. Some taught Deaf learners for the first time and also experienced language problems. Education departments were selected based on SASL's new curriculum provision to different schools and such documents were collected for analysis.

Participatory description

All the learners were Deaf learners who obtained their primary education from Grade R or Grade 1 in Deaf schools. They were all signing learners, i.e. profoundly Deaf. Their ages were between 12 and 13. Learners were both males and females. Deaf teacher assistants were profoundly Deaf and some were lip-reading. Some Deaf teacher assistants obtained their primary education from Grade R/1 up to Grade 6/7 and above. Furthermore, some Deaf assistant teachers passed Grade 12 and studied at the University for about a year. They experienced language problems from their foundation phase because of previous experience from different provinces of study. Their classroom teaching assistant experience differs hence some have been assisting for more than 10 years and some for less than 10 years. Teachers were both males and females. Some taught Deaf learners for more than three years and some less than three years. Some had sign language skills and used the curriculum at all times in their classrooms. However, some teachers did not have signing skills nor implemented sign language curriculum or taught Deaf learners for many years. Education Department curriculum advisors were both females as there was no availability of male curriculum advisors in the above mentioned Education Departments.

Fieldwork

Gibson *et al.,* (2009:326) aver that there are five rules to be followed when doing participant observation fieldwork: Firstly, the researcher must not choose a site that is difficult to enter. Therefore he/she must choose a site that is easy to be entered. Secondly, when the researcher goes into the filed, he/she must have written documentation about him/herself and the project that he/she is researching. Thus a presentable request letter with Rhodes University letterhead was submitted to the relevant schools and Education Departments to request permission of

conducting the research (See Appendix A). In addition, the letter was written in English in an attempt of accommodate all the participants. Thus a brief explanation of the study was given in the letter without the details of the research. Furthermore, the letter was shown to the security guard of the school to confirm the researcher's permission granted by school principals for conducting research. The letters were submitted to the Eastern and Western Cape Education Department managers to confirm permission. Western Cape Fieldwork was conducted from March 2014 to April 2014 and in the Eastern Cape from May 2015 to December 2015. The researcher introduced herself to the educators, learners and Deaf teacher assistants. Preliminary arrangements were done while the researcher familiarised herself with the environment. Furthermore, in schools the researcher contacted the principals and requested permission to conduct interviews with staff and the learners; however in the Education Department permission was requested from the officials.

Case Studies

Case studies have been labelled by researchers as the 'uncontrolled case study' type of research. The Alzheimer Europe Office (2009) says that case studies usually involve a detailed study of a person or group. Thus various methods of analysis and data collection are used and include interviews and observation and also involve consulting personnel, the public and people's records. Furthermore, the researcher may have an interest in a specific phenomenon and select individuals based on whom to base their case study on in a respective situation. Case study can challenge existing theories and practice, another field and be useful in clinical settings as well, (Alzheimer Europe Office, 2009).

Questionnaires

Questionnaires are a good way of obtaining information from people who do not have time to attend interviews and from a large number of people (Alzheimer Europe Office, 2009). Thus people should be allowed to take their time, think about the questions and come back to the questionnaire. In addition, it is much easier for the participants to state their views privately without concentrating on the researcher's reaction. Furthermore, participants should be encouraged to be honest when answering the questionnaire to avoid an invalid conclusion that could be drawn by a researcher from the study. Questionnaires comprise multiple choice questions, closed questions, attitude scales and open-ended questions (Alzheimer Europe Office, 2009). Questionnaires can be administered in different ways; they can be sent by email attachments, by post, can be handed out personally or posted on internet sites. Thus the

researcher can decide to administer the questionnaire if he or she includes people who have difficulties in reading and writing. In such a case the researcher could note down the responses on behalf of the participant. For instance, Deaf teacher assistants and Deaf learners could not write down their answers in the questionnaire. Instead the researcher assisted them by asking questions in sign language and wrote their answers down.

Gliner *et al.*, (2009:183) claims that 'questionnaires are any groups of questions written down for participants in order to respond in writing'. Thus responses are always checked or circled. In addition, questionnaires can be close-ended questions and highly structured including interviews so that the participants can select one response from the provided responses. Furthermore, there are three fundamental ways to assemble questionnaire information: administered questionnaires, mailed questionnaires and internet questionnaires.

Mailed Questionnaires

Mailed questionnaires are questionnaires which are being mailed with a stamped cover letter including 'return-addressed' envelope (Gliner *et al.*, 2009:184). If the respondents are not identified to everyone who had received the questionnaire there should be 'reminder post cards' and duplicate copies of the questionnaire (Gliner *et al.* 2009:184). These types of questionnaires are regularly sent to non-respondents. In comparing interviews to mailed questionnaires, mailed questionnaires are costly because of the requirement of administration time. Furthermore, the information can be roughly gathered in a few weeks. However, the response rate can be poor because of the lack of relationship with the investigator (Gliner *et al.*, 2009:184).

Internet Questionnaires

The most commonly used and newest type of questionnaire is an internet questionnaire (Gliner *et al.* 2009:184). This type of questionnaire is set up on the internet with the survey program that is online. Multiple techniques i.e. email lists, existing groups etc. can be used for the selection of participants. In addition, an internet questionnaire is an advantageous way to assemble questionnaire information (Gliner *et al.*, 2009:184). If the respondents have a computer they can privately complete their survey in their homes. Internet questionnaires are preferable and cheaper than mailing questionnaires through the post office. The use of internet questionnaires could eliminate data entry errors by sending information straight to the data file (Gliner *et al.*, 2009:184). Furthermore, internet questionnaires can be

problematic sometimes because they require respondents to have a computer or a smartphone. If the survey is long the respondents can close the survey window easily and not submit responses. Another disadvantage of internet questionnaires is that the data collected by internet programs is no longer confidential as it is revealed i.e. 'IP addresses attach themselves to the data' (Gliner *et al.*, 2009:184).

Directly Administered Questionnaires

In this type of questionnaire a group of people are gathered in a certain place for a particular reason such as a club meeting or class and the administering of the questionnaire takes place (Gliner *et al.*, 2009:184). Thus a one-on-one or face-to-face directly administered questionnaire is possible e.g. to give a questionnaire to a mother while testing the child at the same time. Gliner *et al.*, (2009:185) highlighted an example of a directly administered questionnaire where the authors collected data from students whereby students were given time during the classroom period to complete a survey to ensure a high rate of responses for mailed or internet questionnaires (Gliner *et al.*, 2009:185). This has been the chosen method for my research.

Types of Questionnaire Items

There are four types of structures of questions for questionnaires and interview items, i.e. open-ended, 'partially open-ended',' close-ended unordered choices' and 'close-ended ordered responses' (Gliner *et al.*, 2009:185).

Open-ended questions

In this type of structure, each participant is required to formulate answers in his\her own words. However, writing effort is required in this type of question because of various major encounters. Payne *et al.*, (2004:188) argue that open-ended questions allow the respondent to answer fully because a researcher might have little previous knowledge of responses. For instance, the question could be 'What do you think are good methods of teaching Deaf children?' The questionnaire layout should leave enough space to record answers (Payne *et al.*, 2004:188). In addition, open-ended questions can create lots of different responses and responses to open-ended questions need straight forward easy answers, e.g. date of birth of a person etc. (Gliner *et al.*, 2009:185). Thus it is pivotal that development of possible responses should not be considered as wasteful of space. Also open-ended questions are more useful and successful when used for interviews rather than questionnaires. Della Porta *et al.*,

(2008:310) note different types of open-ended questions, e.g. **Partially open-ended questions** which provide many possible answers and also keep space for other comments and responses. **Close-ended unordered items**, which according to Gliner *et al.,* (2009:185) uses answers which are based on question 'fit nominal categories' which do not fall on a 'continuum'. Thus participants are given a choice to choose from these understated categories to select the best reflection category of their opinion or situation. **Close-ended questions with ordered choices** are similar to the items of an individual and are commonly used in a 'personality inventory attitude scale' (Gliner *et al.,* 2009:185) where the researcher is attempting to ascertain certain attitudes.

Length of the study

It was decided by both parties i.e. the researcher and the participants that the study would be conducted over a period of four weeks, meaning one week per institution.

Sampling

The sample group comprised sixteen Deaf learners. Four learners from each school, eight teachers , eight Deaf teacher assistants, one curriculum advisor from the Eastern Cape and one from the Western Cape. Samples are formulated in relation to the interests and concerns of the researcher and the logic of the research design adopted. Thus selection of the teachers was motivated by the researcher's interest in teachers' experience in Deaf schools. Gibson (2009:85) avers that 'the researcher may be interested for example in the experiences of nurses of a particular specialisation'. In this case the learners' ages were between 12 and 13 years.

Preliminary meeting

The researcher made an appointment to meet with teachers, Deaf assistant teachers, Deaf learners and Education Department curriculum advisors who agreed to participate in the study. The researcher met the participants to explain what the research was about and also what was to be expected of them during the study. The teachers and Deaf teacher assistants were made aware of classroom observations and they were also told about how the content of the study will be analysed. Thus after the observations they were asked to answer the questions. They were informed about their rights and the researcher respected them. Furthermore, Deaf learners were informed about the study and the interview process including their rights. Education Department curriculum advisors were informed about the

study and the time when the collection of the new SASL curriculum documents would be done (See Appendices D, E & F). In addition, participants were informed about the use of a tape recorder and video camera in order to keep records. Thus participants were allowed to withdraw at any stage of the research process when they needed to do so. Each Deaf participant interview guided the researcher in the collection of the required knowledge about how sign language is used in the classroom of Deaf learners. The researcher also collected the required knowledge on whether the teachers get assistance from the Education Department or not. The Deaf learners were asked questions on how sign language was used in the classroom and how they felt about that particular language use, i.e. the approaches used by teachers in the classroom (See Appendix B for interview questions).

Deaf teacher assistants also expressed the view that they experienced learning barriers when they were young. Therefore, the researcher decided to ask the same questions asked to the learners. However, the Western and Eastern Cape Education Department curriculum advisors were asked questions based on the new SASL curriculum (See Appendix B). The differences between the existing curriculum and the new SASL curriculum were enquired about from the education departments. Questions on the SASL curriculum suitability were posed. Documents were also collected from these Departments (See Appendices D, E & F). Bryman (2001:114) avers that the wording of questions should be kept in the same order. Therefore questions were in the same order including the signs for sign language purposes. The time scheduling was arrived at in agreement between the researcher and the participants (Bryman, 2001:114). The research also included probing in order to assist participants who might not understand the questions and to get more information concerning the research. Probing showed evidence of 'lack of understanding' of participants and was a way of obtaining further information. Thus the interview process followed the following steps: 1. Design - the outlining process of the study, 2. Interviewing - interviews conduction, 3. Transcribing - written texts construction from the interviews conduction, 4. Analysing – finding the meaning in the written text and finding out whether the research problem has been answered.

Interviews

Alzheimer Europe Office (2009) avers that interviews are usually carried out on a face-to-face basis and can also be administered by skype or telephone. Thus interviews can also be held at home or in a neutral place. In addition, the interview venue should be comfortable in order to accommodate the participant in order to speak freely without being disturbed or

disturbing other members. The interviewer could espouse a formal or informal approach so as to allow the participants to speak freely about the research questions. The researcher conducted 45 minute interviews with each teacher from four schools. Deaf teacher assistants and learners were interviewed for 60 minutes due to more time needed, i.e. they take time to think and understand. Another 45 minutes was allocated for Education Department interviews with officials and documents collection. Interviews were conducted over a period of four weeks. Interviews were both structured and unstructured.

Interviews assist the researcher to get and understand the 'systematic role of the individual as a social actor' (Della Porta *et al.*, 2008:309). They also help to expand exclusive knowledge of the community under study. Furthermore, interviews take place in different times during the fieldwork depending on the needs of the researcher. In ethnographic research open-ended interviews are the fundamental form of interviewing because they permit interviewees 'to say what they think is important and also what they feel is of relevance for them' (Della Porta *et al.*, 2008:309). In addition, it is crucial to understand that interpretation of the questions may be affected by the background of interviewees.

Structured Interviews

Structured interviews 'make use of questions that have been prepared in advance' (Babbie, 1998:87). In structured interviews the researcher decided the exact areas that needed to be explored. Thus analysis is built around and depends on structured interviews. Furthermore, data is generated from topical issues which have been developed as questions. When designing structured interviews, it is useful to bear the following advice in mind:

(a) All the questions should be clear and certain.

(b) Pilot your interviews and ask someone to read through them before undertaking your research.

(c) All the relevant matters should be analysed and be included in the interview schedule. Researchers often make the mistake of failing to include questions about key issues in their research.

(d) The interesting matters should be part of the enquiry.

(e) Time should not be wasted in the interviews.

(f) The order of questions should be appropriate. Piloting can be useful to make sure that one gets it right (Babbie, 1988:87).

After the interviews have been conducted, analysis was undertaken around the themes represented in the question topics. The ways in which respondents answer the questions involved a form of thematised analysis. 'The structure of the questions asked should be rigid in order to ensure data gathering' (Babbie, 1988:87). Togo (2009:35) posits that 'interviews can range from high planned and structured verbal questionnaires to more unplanned and informal opportunistic chats'.

Unstructured interviews

Unstructured interviews involve asking questions that have very little predefinition of the topical concerns of the interview. Therefore, this approach should be used in long-term ethnographic research. Thus researchers need to familiarise themselves with a given research setting in order to figure out how to conduct the research. Unstructured interviews may also be used as a form of pilot to find out what might be of interest in a given setting. Becker *et al.* (2012) describe the value of unstructured interviews as helping to uncover data that will enable researchers to work out what types of questions they should be asking in their research. Thus the interview followed the questions that were asked by the researcher. In addition, the researcher did not limit the responses of the participants. Open-ended questions were asked, and participants were probed about what they said. The researcher expected the participants to express themselves, i.e. to share their feelings with the researcher and say whatever they wanted to say. These interviews involved all the participants, e.g. educators, learners, teacher assistants and Western and Eastern Cape curriculum advisors.

Teacher interviews

The teachers were interviewed as to which approaches they use when teaching Deaf learners in their classrooms (See again Appendix B for questions). Teachers were also interviewed on whether they had already implemented the new SASL in their classes or not and whether they receive assistance from the Western and Eastern Cape Education Departments regarding their needs concerning the use of appropriate pedagogic approaches. There were eight educators from four different schools, i.e. two per school. Teachers were observed while they were teaching. Thus after the observations questionnaires were distributed to the teachers. Some of the questions were based on what the researcher had observed in the classroom when the teacher was teaching. The interviews took 20 minutes. Furthermore, each teacher completed his/her own questionnaire. In addition, questionnaires were both structured and unstructured. Completion of the questionnaires took 45 minutes. Questionnaires were open-ended and

allowed for probing. Some teachers lacked the knowledge of teaching approaches. Therefore the teachers were asked questions in the questionnaire based on how they teach Deaf learners in their classrooms. The teachers were selected randomly from Grades 3, 5 and 7, i.e. teachers who experienced working with Deaf learners for many years and those who did not have sign language skills and had only worked few months in Deaf schools.

Interviews with the Deaf learners

Deaf learners were asked questions on how sign language was used in the classroom based on teaching approaches and also how they feel about the use of those approaches, e.g. Oral method, Total communication etc. (See Appendix B). Thus observations were made during school hours when they were taught in the classroom. The researcher also observed the way learners answered questions in the classroom. In addition, when the observations were done, learners were given questionnaires. However, Deaf learners could not answer questions independently due to a lack of language skills. Therefore, the researcher explained each question from the questionnaire. From the researcher's teaching experience, Deaf learners cannot read questions on their own when they write tests, classwork and assignments. Also learners use sign language as home language and English as their first additional language. As a result, they struggle to read and write English. Furthermore, interviews with Deaf learners took 60 minutes, i.e. an extra 15 minutes was allocated for explaining questions.

Interviews with Deaf assistant teachers

The Deaf assistant teachers were asked the same questions as Deaf learners, i.e. how sign language was used in the classroom based on teaching pedagogies and also how they feel about those approaches. Deaf teacher assistants also experienced what Deaf learners are experiencing at an early age. They were given questionnaires. The researcher explained each question for the Deaf teacher assistants. Thus interviews also took 60 minutes, i.e. 45 plus 15 minutes allocated for explaining questions as Deaf teacher assistants also required explanation. Interviews were both structured and unstructured.

Interviews with the Western Cape Education Department Curriculum Advisors

The Western and Eastern Cape Education Department Curriculum Advisors were interviewed based on the development of SASL's new curriculum. This included whether the curriculum involved a content specialist and curriculum specialist or not. In addition, the curriculum was viewed in the light of whether it was made available for all Deaf school teachers to be

reviewed. Furthermore, they were asked whether they thought the curriculum was suitable for Deaf learners and if so, why they thought so. Curriculum Advisors were also given questionnaires which took 45 minutes for completion.

Analysing observational data

Babbie (1998:107) avers that 'observational work is data analysis that involves thinking through what is being observed, why it is interesting' etc. Data collection should not be separated from data analysis. Therefore, the researcher combined both data collection and data analysis. Thus after observations were done the researcher combined observation notes and video recordings. The purpose of research according to Babbie (1998:107) 'is to understand an empirical domain for some motivated reasons.' For the variation of research materials, the researcher would think about the following reasons:

(a) What particular settings, people or practices that were observed are about?

(b) Were there any defined questions or issues that were being explored when the researcher started the observations and does the data help the researcher to deal with those questions?

(c) Was there anything the data showed that was not part of the formalised research interest prior to the observation which is interesting and relevant?

(d) What were the strengths and limitations of the data gathered and also what other form of data might complement them? (Babbie, 1998:107).

Observations according to Togo (2009:36) enables a researcher to gather data that is from lived situations. For instance, a researcher experiences the situation and sees what is going on instead of hearsay or a 'second hand perspective'. In addition, observational data should allow the researcher to be part of the situation by entering and understanding the situation that is described. In this research, observations were suitable in order to understand what was happening in Deaf classrooms regarding language use i.e. different teaching approaches including the Bilingual-Bicultural Approach. Thus a video camera was used in order to document the information. Observations were also used to gather data from teachers while teaching in the classroom including Deaf learners' responses in the classroom (Togo, 2009:36). Furthermore, observations were structured and unstructured and based on the teachers and learners' communication including verbal and non-verbal.

A plan for gathering data

A plan for data gathering encompasses 'comprehensive specification' (Babbie, 1998:55). Thus the plan encompasses the method used and the ways in which the researcher would use it. The researcher visited four schools including two Education Departments as already stated. Furthermore, the explanation of the interview and questionnaire process has been discussed above.

Survey research

The method of collecting data for this study was 'survey research in the form of questionnaires' (Babbie, 2008:356). Thus after the observations questionnaires were distributed to educators and learners. In addition, each educator was given 20 minutes to complete the questionnaire. Furthermore, the questionnaire allowed participants to give their own answers and ask their own questions. Open-ended questionnaires provided a frame of reference where participants were allowed to give answers in their own words. A second questionnaire was administered to Deaf learners and Deaf teacher assistants. Their feelings including possible solutions and suggestions for improving sign language teaching in the classroom were investigated. In addition, each learner and Deaf teacher assistant were given 45 minutes to complete the questionnaires. As they took time to understand the questionnaires they were given more time. Nevertheless, Deaf teacher assistants and Deaf learners were assisted. After the questionnaires were completed the researcher supported participants by checking spelling and grammar. In addition, the researcher did not answer for Deaf assistant teachers and learners. They used their discretion.

Transcribing the interview responses

Gibson (2009:173) defines transcription as 'part of the listening process'. Thus the dialogue needs to be transcribed. After the interviews the researcher transcribed the responses. Furthermore, transcription is seen as the empirical data of an interview. The researcher may use different transcripts during the analysis when necessary. Transcription is also the 'translation of an oral discourse into written discourse' (Kvale and Brinkmann, 2009:178). Transcription is never 'value-free' and it is always theory-laden (Kress *et al.*, 2005:10). Thus the researcher represents the data gathered through transcription. The researcher made transcriptions of the tape recordings and video camera recordings.

Meaning condensation as a method of analysing transcribed interview data and content analysis

Meaning condensation is a process of 'summarising long statements' (Kvale & Brinkmann, 2009:205). After completion of the transcription process, each transcribed interview was read. The researcher then obtained a sense of what each participant was saying. Thus the researcher used the most useful themes, i.e. the main theme in the transcribed text and rephrased them into easy-to-understand texts. Therefore the themes were applied to the purpose of the study.

Conclusion

The research was based on teachers teaching in Deaf schools. Thus teachers were observed in their classes when they taught Deaf learners. What has been outlined in this chapter is the basic methodology that was used to gather the data which is presented in the chapter that follows. In terms of the methodology it is important to note that the main approach is ethnographic and therefore also qualitative in nature, making use primarily of questionnaires and classroom observations. There is also some quantitative data presented in tables and graphic form which is included in the chapters that follow.

The research method chosen was therefore an ethnographic method which is the type of social science research used to investigate the practices and life of a community. Mixed methods approaches, which is the best approach and involves the use of methods which appears best to suit the research problem, were discussed. The qualitative research approach which is a research strategy which emphasises words rather than quantification in data collection and analysis was defined. In addition, the quantitative research approach which is used to measure problems by generating numerical data or data that can be converted into statistics was also mentioned. For instance, Deaf learners were observed in the classroom as to how they responded when their teacher taught them using specific teaching approaches.

They were also interviewed about their feeling concerning the use of these approaches in their classrooms. The learners were also asked what teaching ways they thought would help them to make sign language teaching more competitive and successful in their classrooms. Their input formed a valuable part of this research. Deaf teacher assistants were also interviewed. The chapter mentioned the problems identified by the researcher such as Deaf learners' rights not being protected through the appropriate language-in-education policy in the same way that the rights of speakers of the 11 official languages are entrenched in the

Constitution. The chapter that follows presents the data gathered from the four schools that made up the research sites.

CHAPTER 6
AN ETHNOGRAPHIC AND COMPARATIVE ANALYSIS OF SCHOOLS FOR THE DEAF

Introduction

This chapter includes a presentation of the information garnered from the interviews and questionnaires. This methodology has been outlined in chapter 5. Furthermore, the various pedagogies used in the four Eastern and Western Cape Deaf schools are explored in relation to their reception by learners. This discussion is informed by the use of the Total Communication and Bilingualism strategies that are used in these selected Deaf schools and explicated in chapter 2. The research presented here is also largely ethnographic in nature and involves a presentation of extensive observations that were undertaken in the respective schools.

School A Observations

There were thirty respondents to questionnaires in this Western Cape school, which included a mix of males and females. The researcher interviewed research subjects across racial lines that included Coloureds, Whites and Blacks. The Grades that were considered for the research included Grades 3 to Grade 7. It is interesting to note that there were no male teachers in all four schools. There were eight Deaf teacher assistants, seven females and one male due to the scarcity of male Deaf teacher assistants. From twelve learners, six were males and the other six were females.

This school is located in the Western Cape. The average number of learners per class was about ten. The number of learners ranged between seven and ten. Classrooms were generally quite large in size. They contained colourful posters and there were also charts on the wall.

Some of the charts had sign language alphabets which clearly identified the classrooms as a Deaf learners' class or environment. There were only four Deaf teachers out of twelve staff members for the whole school. The Grade 3 Deaf learners responded very well and acknowledged that they had a good teacher who had good sign language skills. She communicated very well with her learners. They had already implemented the new SASL Curriculum. Learners watched, for example a story from a video and managed to retell the story by using sign language. The strategy which the teacher used was to switch to the FAL period where the learners studied pictures and then translated them into English, thereby allowing for the development of continued bilingualism in sign language and English. She gave them turns to write the answers on the board. When one learner made a mistake, then the others corrected him\her. They also learned about handshapes, e.g. by focusing on their names and the first letters in their names. They would then explain and tell the meaning of the parameter (what the handshape stands for). Learners were very excited with the lesson and as a result they participated in the class. The teacher used facial expressions so as to be understood by the learners i.e. whether she was happy or sad etc. There were three Deaf teacher assistants from Grade 3 to Grade 7. The school did not have enough money to employ more teacher assistants in their school. As a result, they swopped the classes. Interviews were also conducted with Grade 3 and 5 female teachers. Such interviews were also conducted with two female Deaf teacher assistants as well as three male and one female Deaf learners.

School B Observations

Observations and interviews were conducted in the Grade 3 and 5 classes. School B was also located in the Western Cape. The number of learners per class was less than seven. The Grade 3 teacher used sign language, however the Grade 5 teacher used the oral Approach and Total Communication as defined in chapter 2 of this thesis. Learners were very confused, especially when oral communication was used because most learners were totally deaf. The school had different sections which entailed learning skills courses as well. Signs that were used were different than those used in other schools, even though a universal sign language training programme had already been initiated in the Western Cape. Different teachers from all the Western Cape Deaf schools had a workshop whereby they formulated universal signs specifically for Deaf children in the Western Cape. By using different signs in school, this presented challenges. The number of Deaf teachers was more than four, however the language used was Total Communication and thereby oral in nature. There were only two Deaf teacher assistants who assisted from the lower Grades, (Grade R) to the higher Grades.

School C Observations

School C was located in the Eastern Cape Province. The number of learners ranged between ten and more learners per class. Observations were undertaken in Grades 3 and 7. There were many Deaf teachers who taught Deaf learners in this school. However, some teachers had sign language skills and others did not have sign language training. Those teachers who had sign language skills communicated very well with their Deaf learners in the classroom. The teachers with no sign language skills struggled to communicate with their learners. Instead of the teachers providing skills to Deaf learners, the learners taught them sign language before beginning the lessons. The skills classes therefore became language classes. Teachers who did not have sign language training were miserable and felt inept. They blamed the Eastern Cape Department of Education for not providing sign language training for them. As a result, two teachers refused to take part in the research because they did not have sign language skills and they felt this would affect them negatively. The classrooms were colourful with posters and charts on the wall. The charts also involved sign language alphabets, hence contributing to the environment. Inside and outside the classrooms learners communicated in sign language and isiXhosa. The school had one Deaf teacher assistant who carried the burden of assisting all the grades.

School D Observations

School D was also located in the Eastern Cape. There were three blocks of classrooms starting from Grade R up to Grade 12. Each classroom had in excess of ten learners. Some teachers were trained in sign language, whereas some lacked sign language training. The headmaster was initially unsure whether or not to permit the researcher to do the research in the school. Classroom sizes were generally small considering the number of learners at the school. There were two Deaf teacher assistants and a large number of teachers.

Ethical considerations in relation to the research sites

Mpofu & Chimhenga (2013:37) mentions three crucial ethical issues that need to be addressed by all researchers. These include 'protection of participants from harm, the ensuring of confidentiality of research data and the question of deception of subjects'. Therefore, this research assured that all these issues were addressed in the following ways:

Participants were made aware of the aim of this research in order to ensure their participation and willingness to participate. This included school management, the principal, parents of

students and teachers from different Grades, i.e. Grades 3, 5 and 7. A letter was written to the school principal by the researcher's supervisor including information on how the study was to be conducted and where the results would be used and also indicating what would be done with the results after the research. (See Appendix A). The school management gave permission before the observations and interviews were undertaken. Teachers conveyed the message to Deaf teacher assistants in sign language in order to get permission for them to participate in this study. It was mentioned that the interviews would include video and audio tape recordings to all participants, i.e. the audio tape were used for teachers. However, the video recordings were used for Deaf learners and Deaf teacher assistants. A full presentation of the methodology that was used to collect this data has been presented in chapter 5 of this thesis.

What follows is a presentation of the types of questions that were asked and the responses that were received from participants at the various research sites.

Questions posed to the teachers and Different approaches used in classrooms

The initial question posed regarding approaches used in the classrooms was the following:

Which approaches do you use when you teach Deaf learners?

Each question is followed by some interpretation in the sections that follow.

Table 6.1: The frequency of different teacher's responses to the above question:

Response	Frequency of response. (No. of teachers)
Use SASL only	3
Use of Total Communication only	1
Use of SASL, Bilingual and Bicultural Approach	1
Signed English, SASL and Total Communication	1

Learner centred and teacher approach	1
Sign language and English	1

In the above table, the evidence presented shows that only three teachers used South African Sign Language (SASL) in their classes even though all the learners were Deaf or hearing impaired. One teacher used only the Total Communication approach, thereby excluding all those students who could not lip-read. However, one teacher used a combination of both SASL and the Bilingual-Bicultural Approach. In addition, another teacher believed that SASL, Signed English together with Total Communication worked well for her. Whereas another one who was new in the Deaf environment with no sign language skills felt that what worked well for her in the classroom was a learner and teacher centred approach. However, sign language and English was preferred by the other. This shows that teachers used SASL which is supported by other approaches. What is clear is that there was no one approach that seemed to facilitate effective learning. What is also clear is that teachers did not all seem to understand the needs of their learners. As indicated in chapter 4 of this thesis, sign language is as complex as any other language. Therefore, if teachers are not conversant with it, this may really affect the way in which information is both imparted and received.

Table 6.2: Use of Bilingualism in class

Question posed: Do you use Bilingualism in your class?

Response	Frequency of response (No. of teachers)
Yes (Use Bilingualism)	3
No (Do not use Bilingualism)	5

It is clear from this table that three teachers used Bilingualism in their classes. However, five teachers did not use Bilingualism in their classes. Those teachers who did not use Bilingualism used the Oral Approach, or Total Communication approach together with SASL. This would be an acceptable bilingual approach as it is not only relying on communication and lip-reading. If this were the case, then the Deaf learners who used and understood only sign language would be disadvantaged.

Table 6.3: Types of communication in classrooms

Question posed: Do you use Total Communication or Oral approaches in your class?

Response	Frequency of response (No. of teachers)
Yes (Total Communication)	4
Yes (Oral)	2
Not at all	2

From the table above, four teachers in interviews and observations preferred to use Total Communication in their classes because some learners come to school with no sign language

background. Other teachers are new in sign language schools and have not been exposed to sign language. Therefore, they do not know sign language, they think that the use of Total Communication will assist them in their teaching. Extensive definitions of these approaches are provided in the literature review in chapter 2 of this thesis. Two of the teachers use an Oral Approach as their school uses Oral Communication. Two teachers were against Total Communication and Oral Approaches especially in sign language classes. They felt that sign language should not be mixed with any other language. It should be unpolluted like any other language that is used as medium of instruction.

Table 6.4: Learners' reaction to the use of bilingualism by teachers

Question posed: Are your learners coping with a bilingualism approach?

Response	Frequency of response (No. of learners)
Yes	2
Some are coping and some not	4
Not sure whether they are coping or not	2

Two teachers said that their Deaf learners cope when they use bilingualism. They felt that they must use these approaches so that they should not deprive Deaf children in order to change many people's negative thoughts about Deaf children compared to speaking children.

However, four said that not all of them are coping, there are those who need assistance but some of them are coping and the problem is in the wording arrangement. Two teachers were not sure whether their learners are coping or not, they said that it is very difficult for them to say whether they were coping or not because some of them have to rush through the syllabus. They find that this is a major problem because learners need more explanation and need more revision because of their disability, yet the time constraints do not allow for this.

Table 6.5. Curriculum use in schools

Question posed: Which Curriculum do you use in your school?

Response	Frequency of response (No. of teachers)
CAPS and SASL	6
CAPS	2

From the teachers, two said that SASL is not yet implemented nationally, it is only implemented in the Western Cape in the Foundation Phase. One supported the above statement by saying that however SASL has been recognised by the Higher Education Department but there is no implementation. This means that it has not been used hitherto in some schools. Two of the teachers indicated that they only used the CAPS curriculum. The teachers therefore made use of the new CAPS programme but they did not all use SASL in imparting the CAPS programme. It depended really on the levels of exposure that the teachers had received in both acquiring and understanding SASL. It would make sense to

only employ teachers with good sign language knowledge in Deaf schools but this is presently not the case (See Appendix G).

Table 6.6: Teacher attitudes towards the SASL Curriculum

Question posed: How do you feel about the new SASL (South African Sign Language) Curriculum?

Response	Frequency of response (No. of teachers)
Excited	5
Not sure	1
Not exposed	1
Struggling	1

Five teachers were very excited about the onset of the new SASL Curriculum. They could see now that they can improve their teaching skills. They also felt that they did not provide enough information to Deaf learners. They have experienced massive changes and felt that the learners understand much better through SASL. In addition, they are also pleased by the new SASL Curriculum structure. Some said that the new curriculum is more specific, more adapted and straight forward. It explains everything and as a result it is much easier to work on it. Furthermore, there are also DVDs in order to assist with teaching. The learners for example watch poems from the DVDs and have an opportunity of creating their own poems and to present their own poems. The new curriculum is challenging and keeps everyone busy.

One teacher is not sure whether she is excited about the new curriculum or not because the new curriculum is only in the Foundation Phase and not in the FET (now TVET) and Senior Phase. Another teacher is not exposed to the curriculum because not all the teachers obtained the new SASL curriculum training. As a result, for SASL classes, learners are being taken to the trained teachers' classes during sign language periods. One teacher said that she struggles a lot because her subject advisor was always busy, therefore she did not get the new SASL curriculum information. She was one of the teachers who did not get the training opportunity. Without the proper training teachers are not able to operate at optimum levels.

Table 6.7: Teacher knowledge about the curriculum

Question posed: Does the curriculum include Bilingualism?

Response	Frequency of response (No. of teachers)
Not sure	1
No	1
Yes	6

From the responses recorded from the teachers above, one teacher was not sure whether the SASL curriculum included Bilingualism because she believed that when one teaches Deaf learners' s\he must use pure sign language. Another teacher said Bilingualism is not included

in the curriculum. However, six teachers said that Bilingualism is included because we need to do the bridging to teach the reading and that does include some bilingualism because they have to go back and read English and Afrikaans using some of the knowledge that they have received from the sign language class. It would seem then that there is some bilingualism involved, however when one analyses the curriculum only sign language is emphasised. The teachers added that these children were Xhosa and they know the Xhosa words, but the medium of instruction at school is often English. They taught those English rather than SASL which is their language. Bilingualism can be favoured because you will hear a child pronouncing a word in isiXhosa, but also using English and sign language.

Table 6.8 Language used in classrooms

Question posed: What language do you use in your classroom in order to assist your learners?

Response	Frequency of response (No. of teachers)
English as FAL and Sign Language	2
English, Sign Language and isiXhosa	2
Sign Language as Home Language and FAL	4

In this table, two teachers use English as a First Additional language and sign language, while the other two use English, sign language and isiXhosa for learners who do not understand English words. However, four teachers employed sign language as Home Language and First Additional Language in their classes. There is therefore no consistency in the way that language is used in the classroom. There is also no recognition by most teachers of any

existing language policy in the Western Cape. This will be discussed further in chapter 8 of this thesis where certain recommendations are made.

Teacher's profile summary

Teachers at school A

GENDER

Female	Total
2	2

School B

Female	Total
2	2

School C

Female	Total
2	2

School D

Female	Total
2	2

It is clear from the above data that there is a gender imbalance among teachers in Deaf classrooms with most of them being female. Although many of these teachers are experienced this leaves male learners with very few role models and this is a cause for concern which should be addressed. Strategies to recruit male teachers should be put in place.

Teacher's home language

School A

IsiXhosa	Total
2	2

School B

English	Afrikaans	Total
1	1	2

School C

IsiXhosa	Total
2	2

School D

IsiXhosa	Total
2	2

The mixture of languages presented by the teachers which includes sign language, isiXhosa, English and Afrikaans can be, generally, perceived as a positive factor which influences and encourages multilingualism. However, this does not necessarily benefit the Deaf learner unless both learner and teacher are proficient in sign language, thereby allowing the Deaf learner to translanguage to other languages through bilingual teaching models as explicated in chapter 2 of this thesis.

Teaching experience

Schools	Years of teaching
School A	
T1	11 years
T2	10 years
School B	
T1	22 years
T2	5 years
School C	
T1	2 years
T2	17 years
School D	
T1	1 year 6 months
T2	28 years

The above statistics show that generally speaking the teachers are very experienced with many having taught for more than ten years and one for as long as twenty-eight years. However, this does not mean that they would necessarily be conversant with, and open to new approaches. This can be seen from the responses to the new CAPS curriculum and the use of SASL more generally as indicated above.

Table 6.9: Questions posed to Deaf learners and Deaf teacher assistant

Learners and Deaf teacher assistant's home languages

Question posed: What is your home language?

Learner's response:

Response	Frequency of response (No. of learners)
ISIXHOSA	8
ENGLISH & SL	2
SL only	1
ISIXHOSA & SESOTHO	1

From the table above eight learners home language is isiXhosa only. One learner is born to Deaf parents. Therefore, they communicate in sign language only. However, one learner's home language is isiXhosa and Sesotho, i.e. the mother's home language is isiXhosa and the father's home language is Sesotho. This means that the learners themselves bring various forms of bilingualism to the classroom. The real challenge is however for teachers to work with these varying backgrounds, including various levels of knowledge regarding sign language.

Deaf teacher assistant's response

Response	Frequency of response (No. of teachers)
IsiXhosa	5
Afrikaans	2
Sign language	1

Five Deaf teacher assistants use isiXhosa in their homes. However, two are Afrikaans speaking. One teacher assistant uses sign language in her home because she was born from a Deaf family. Again, the various levels of linguistic competence in a number of languages presents varying levels of expertise on the part of the Deaf teacher assistants. Some uniformity should be required in order to best benefit the learners in this environment.

Table 6.10: Learners' and Deaf teacher assistants' modes of communication at home

Question posed: How do you communicate with your family at home?

Learner's response:

Response	Frequency of response (No. of learners)
Communicate in writing	1
Through interpretation	3
Through Sign Language	2
Struggle to communicate	1
Through lip-reading and interpretation	1
Through lip-reading	2
Through Sign Language and lip-reading	1
Through isiXhosa	1

In the above table, one learner communicates with his\her family in writing because the family members do not know sign language. Three learners communicate through family members and friends' interpretation. However, one struggles a lot because the whole family

does not know sign language and there is no other means of communication, hence the learner cannot read and write isiXhosa. Also there is no interpreter. If the learner needs something, he\she has to point to it. One learner communicates through lip-reading together with sign language interpretation from someone else. Two learners communicate through lip-reading alone. One learner communicates through both sign language and lip-reading. In addition, one learner communicates through isiXhosa because he is hard of hearing, he communicates very well especially when the person does not give him his\her back. In other words, they understand best when able to both lip-read and follow the formation of words by visually seeing the person speaking aloud.

Deaf teacher assistant's responses

Response	Frequency of response (No. of teachers)
Communicate in writing (isiXhosa)	1
Lip-reading and sign language	2
Sign language and Total Communication	2
Sign language	1
Lip-reading	1
Speaking and lip-reading	1

One Deaf teacher assistant communicates in isiXhosa written language with the family because she had an isiXhosa foundation before she became deaf. However, two assistants use sign language and lip-reading. Then two communicate by the use of sign language and Total Communication. In addition, one communicates in sign language because her husband and children are Deaf. Furthermore, one lip-reads only and another one lip-reads and speaks, however she is Deaf.

These variations on the part of teachers, teaching assistants and learners creates challenges in the classroom and more often than not teachers are not equipped to deal with this variety of linguistic competencies as this does not necessarily form part of their teacher training.

Table 6.11: Learners' and Deaf teacher assistants' mode of communication in classrooms

Question posed: Which language do you use at school in your classroom?

Response	Frequency of response (No. of teachers)
English and Sign Language	7
English, Sign Language and Afrikaans	2
English, Sign Language and isiXhosa	2
IsiXhosa and Sign Language	1

In the above table, it is clear that learners are being taught in different languages in their classrooms. Some learners learn in English and sign language. Others learn in English, sign language and Afrikaans in the classrooms. Whereas others learn in English, sign language and isiXhosa. In addition, some learn only in isiXhosa and sign language. There is therefore once again no consistency in the use of language in the classroom. More importantly there is no consistency with the use of sign language which should be firmly entrenched either as a medium of instruction or as a subject or both. Clear policy directives are yet to be given nationally in this regard.

Deaf teacher assistant's response

Response	Frequency of response (No. of teachers)

Sign language and written English	4
English and isiXhosa	1
Sign language, English and Afrikaans	2
English, sign language and isiXhosa	1

As can be seen in the above table, four Deaf assistant teachers said that the language used in their schools is sign language and written English. However, others claimed that teachers do not know sign language, but they complained that children do not understand them hence they combine sign language and isiXhosa. Two Deaf teacher assistants insisted that the language use in their school is sign language, English and Afrikaans because their school is an oral school. Some said that, their school used English, sign language and a little bit of isiXhosa. Learners communicate in isiXhosa in the playground. Again, there is no linguistic consistency and this complicates the learning process.

Table 6.12: <u>Learners' and Deaf teacher assistant attitudes towards languages taught in class</u>

Question posed: Are you happy with the language taught in your class?

Response	Frequency of response (No. of Learners)
Yes	7
No	5

Seven learners are happy about what they are being taught in the classroom because they like sign language and English. Whereas five learners said that they are not happy about the

language taught in their classroom. Some said that they do not understand sign language because they have never been in a Deaf school. Also some teachers use Oral and Total Communication and therefore they get confused because the teachers mix sign language and other languages. In addition, others said that English is difficult and other teachers do not know sign language and they only use English. Furthermore, some learners complained that teachers teach them in isiXhosa whereas they need to learn English. Again, it would be advantageous if a systematic approach was adopted in the classroom that being a bilingual sign language/English approach as indicated elsewhere in this thesis.

Deaf teacher assistants' response

Response	Frequency of response (No. of teachers)
No	4
Yes	4

As is evident from the table above, four Deaf teacher assistants asserted that they are not happy with the languages used in their schools because children struggle to write English and the teachers don't know sign language. Therefore, this is a huge challenge for children because they struggle a lot hence they do not know English. Also when the teacher tries to explain there is a miscommunication between the teacher and the learner because the teacher lacks sign language skills. Another teacher assistant said that sign language is a language on its own, therefore it does not need to be mixed because when one mixes it, it is no longer a pure sign language and this amounts to more of a Total Communication approach. In addition, one claimed that, the schools should use sign language as the first language and English as a second language because sign language is their first language. Furthermore, another one said that, most teachers do not know sign language, and as a result they cannot express themselves when conveying the learners message via Deaf teacher assistants. Thus Deaf teacher assistants become confused in so much that they struggle to apply what they have been told by teachers to the learners. For these reasons, there is a high failure rate. Four Deaf teacher assistants are happy with the language used in their schools because they felt

that children communicate well. Also these languages boost their confidence. One encouraged Afrikaans to be included in these languages as her home language is Afrikaans.

Table 6.13: Learners' and Deaf teacher assistants' future language preferences

Question posed: Which language do you want to learn in future?

Response	Frequency of response (No. of teachers)
Afrikaans and sign language	1
English and sign language	4
English, isiXhosa, sign language and Afrikaans	1
Sign language structure and English	1
Sign language, English and isiXhosa	4
English only	1

What is important to note here is that only one learner opted for an English-only approach for future language learning, and most of them favoured learning more than one language alongside sign language. The importance of sign language acquisition is clearly articulated.

Deaf teacher assistants' response

Response	Frequency of response (No. of teachers)
English and Sign language (structure)	3
Sign language and isiXhosa	1
English, Afrikaans and sign language including Oral Communication	1

English, sign language and Afrikaans	2
English, sign language and isiXhosa	1

As highlighted from the table above, three Deaf teacher assistants desired that English and sign language structure would boost their communication confidence if they could be taught in schools in future. However, one preferred sign language and isiXhosa because she felt that the new SASL Curriculum did not help them through the workshop training experience. Thus another one felt that schools and Universities should offer English, Afrikaans and sign language including oral communication. However, another one preferred only English, sign language and Afrikaans. Furthermore, the last one claimed that English, sign language and isiXhosa would be a good language combination. Again, what is clear is that sign language is favoured by all.

Future teaching approaches preferred by Deaf teacher assistants in class

Question posed: Which teaching methods do you want to be used in your classroom?

Response	Frequency of response (No. of teachers)
Pure sign language and Bilingualism	1
Sign language only	2
Bilingualism	2
Pure sign language and Oral Communication	1
Total Communication and Bilingualism	1
Total Communication	1

From the above table one Deaf teacher assistant said that s\he prefers pure sign language and Bilingualism because s\he feels that by learning English or isiXhosa this is an advantage. Another one felt that pure sign language is good rather than learning Total Communication

because Total Communication confuses the learners. Whereas one preferred Bilingualism because s\he felt that children will be learning both sign language and English. In addition, s\he said that Total Communication can be used outside the classes and not in the classroom. Inside the classroom it is suggested that expert sign language structure be taught. Furthermore, another Deaf teacher assistant expected that pure sign language should be used including oral methods. One also contended that learners should be taught Total Communication and Bilingualism in order to be multilingual and also to accommodate everyone in schools in order to communicate freely. There is again no consistency of opinion.

Learner's summary

School A

Grade 3 classroom

Number of learners	Boys	Girls	Total
6	2	4	6

Grade 5 classroom

School A

Number of learners	Boys	Girls	Total
8	3	5	8

Grade 7 classroom

School B

Number of learners	Boys	Girls	Total
6	2	4	6

School B

Grade 3 classroom

Number of learners	Boys	Girls	Total
7	3	4	7

Grade 5 classroom

School B

Number of learners	Boys	Girls	Total
14	9	5	14

Grade 7 classroom

School B

Number of learners	Boys	Girls	Total
9	4	5	9

School C

Grade 3 classroom

Number of learners	Boys	Girls	Total
10	5	5	10

Grade 5 classroom

School C

Number of learners	Boys	Girls	Total
15	9	6	15

Grade 7 classroom

School C

Number of learners	Boys	Girls	Total
14	7	7	14

School D

Grade 3 classroom

Number of learners	Boys	Girls	Total
11	6	5	11

Grade 5 classroom

School D

Number of learners	Boys	Girls	Total
12	5	7	12

Grade 7 classroom

School D

Number of learners	Boys	Girls	Total

12	6	6	12

The ratio of girls to boys is therefore fairly even. This creates a generally harmonious learning environment. Given this ratio of boys to girls, it would also be good to encourage the appointment of male teachers within this learner-centred environment where boys are largely taught by female teachers.

Deaf teacher assistant summary

Number of Deaf teacher assistants	Female	Male	Total
School A			
DTA 1	1	0	1
DTA 2	1	0	1
DTA 3	1	0	1
School B			
DTA 1	1	0	1
DTA 2	1	0	1
School C			
DTA 1	1	0	1
School D			
DTA 1	1	-	1
DTA 2	-	1	1
Total			8

Teacher assistants' experience

School	Assistance experience
School A	
DTA 1	10 years
DTA 2	3 years
DTA 3	13 years
School B	
DTA 1	8 years
DTA 2	3 years
School C	
DTA 1	10 years
School D	
DTA 1	18 years
DTA 2	22 years

It is also clear from the Deaf teacher assistants that they are mostly female. In fact, there is only one male Deaf teaching assistant in all four schools. Again, it would be beneficial if a better mix of male and female teaching assistants could be found.

Classroom arrangement

School A

The Classroom arrangement for school A was neatly arranged as seen in the picture below. There are also bright pictures on the wall. In addition, on the wall there are sign language alphabet charts. In front, there is a green and a white board. There are also movable clip boards which the teacher used especially when she was doing reading with learners. A copy of a reader was placed on the clip board so that all the learners would see the vocabulary and

pictures. The learner's tables were presented in a curve to accommodate group work and to enable the teacher to work closely with learners and be part of the class discussion. The classroom should be arranged into a semicircle so that Deaf learners should be able to see one another. This is evident in the picture below. The Deaf child should not be isolated by a sitting arrangement. Thus if there are no chances of a semicircle arrangement, the Deaf learner should sit in the second or third row of the classroom.

The above picture uses sign language at the top of the picture to encourage understanding.

School B

School B was similar to school A. The tables were arranged in a semicircle for the learners to work co-operatively. In front was a white board where the teacher recorded information of that particular lesson. There was also a DVD stand in front of the class. Also in the front there was a carpet on the floor where the teacher used to sit with the learners when playing games and telling stories. The environment was therefore quite learner-centred.

A DVD player used by the teacher to encourage story-telling

School C

The classroom in School C was also appropriately arranged in the sense that the chairs were organised in a circle in order to accommodate all Deaf learners. This gives them the opportunity to sit next to each other together with the teacher. The teacher can also easily identify the learners and get their attention.

School D

The classroom was bright and encouraging as can be seen from the picture below. There were different pictures on the wall which included SASL alphabets and other learning areas. One can easily see that the classroom belongs to Deaf learners, with sign language information presented in both English and Afrikaans. It is a visual classroom with many posters which assist in the learning process.

Conclusion

In this chapter an ethnographic approach has been undertaken in order to present the data that was gathered from the four schools. This data was garnered through a questionnaire format and the responses are tabulated in the chapter i.e. the responses of teachers, teaching assistants as well as learners. Furthermore, the classroom environment is depicted through a selection of pictures in order to allow for ethnographic visualisation of the learning environment. The chapter that follows seeks to provide a further analysis of the data presented in chapter 6.

CHAPTER 7
DATA PRESENTATION AND ANALYSIS CONTINUED

Introduction

This chapter presents further data and data analysis based on observations, interviews, questionnaires, documents and note taking as outlined in the methodology presented in chapter 5 of this thesis. The data analysis was done concurrently which means that, an integrative approach was employed. The collection and analysis of data supports the objectives of this study. The data is analysed thematically to see which teaching pedagogies teachers use when they teach Deaf learners in their classes. This study seeks to suggest ways of improving the quality of teaching and learning for hearing impaired and Deaf children. It is suggested that language planners should encourage the use of bilingualism in all education settings in South Africa. The main aim of the research is to find ways for SASL to be taught as a subject and possibly used to teach content subjects. Sign language should be encouraged as the first language for Deaf learners.

Participants' data were analysed from teachers, Deaf teacher assistants, Deaf learners and Curriculum Advisors. Participants were both male and female and from the Eastern and Western Cape Provinces. The teacher's ages ranged between 30 to 60 years. The Deaf teacher

assistant ages ranged between 25 and 55 years. In addition, Deaf learner ages ranged between 12 and 20 years. Teachers' sign language fluency ranged from fluent to illiterate. With the Deaf teacher assistants and Deaf learners, language skills varied and so the researcher signed the questions taken from the questionnaire for them while the video-tape captured the information. Curriculum Advisors from the Eastern and Western Cape Education Departments were also interviewed. The questionnaire and interview data collection and analysis was tabularised in the previous chapter. Chapter 7 provides more of a contextual discussion based on information taken directly from research subjects.

The study was designed through the use of research questions and a mixed method approach as indicated in chapter five i.e. qualitative and quantitative methods were used. Data collection was done through observations, questionnaires and interviews. The chart below shows the research design of this study as mentioned above and elaborated on in chapter 5:
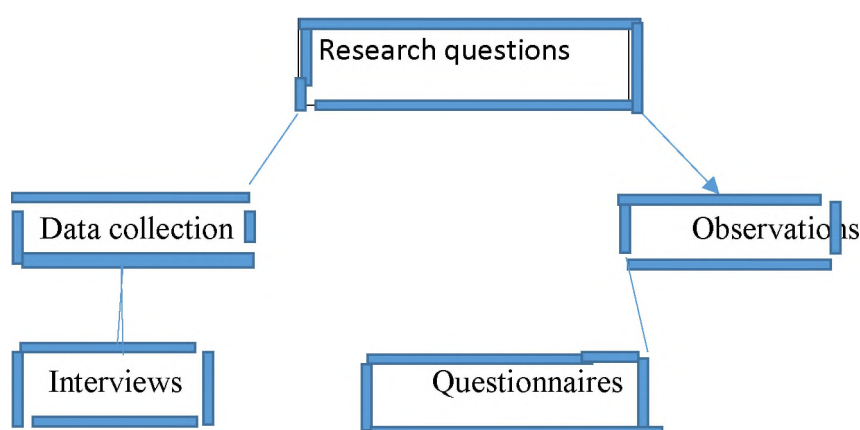
Data analysis and interviews

A number of 8 interview questions were posed to 8 teachers. The interview questions were also posed to 2 Curriculum Advisors. The interview questions put to both teachers and Curriculum Advisors were clear and answerable. They were able to answer the questions and this speaks to the usefulness of the method. However, Deaf teacher assistants and Deaf learners were unable to complete their questionnaires because of the language barriers. Therefore, the researcher read the questions for them and recorded the answers through the video.

Data analysis from questionnaires

A total number of 32 questionnaires were distributed to teachers, Deaf teacher assistants and Deaf learners. The Deaf teacher assistants' questionnaires contained 6 questions, whereas the Deaf learner's questionnaires totalled 5 questions. This method also shows insightful and interesting responses which confirmed that the method was appropriate. (See Appendix B).

Procedure

Data describing teachers' approaches used when teaching in Deaf schools were collected from teachers who gave responses through interviews and questionnaire completion. Data from questions describing home language and communication from Deaf teacher assistants and Deaf learners were extracted. In addition, data from the Curriculum Advisors concerning the development of SASL Curriculum was collected. These questions were listed and dealt with in chapter 6.

Different approaches used in the classroom

In terms of approaches the views of teachers are dealt with in more detail below. Extended extracts from teacher interviews are presented and analysed in order to further support an ethnographic methodology as espoused in chapter 5.

Question 1: Which approaches do you use when you teach your learners?

Three teachers use SASL only. They contend that, sign language is a pure language that is similar to all other languages. Therefore they do not mix the language with other languages. As a result, one teacher said that, she writes 'NO VOICE' on the board to insist that her classroom is a sign language class. In addition, another one said that, 'This is a South African sign language class, therefore I sign all day'. She also mentioned that a Bilingual-Bicultural Approach is also employed in her class. She further defined a Bilingual-Bicultural Approach by providing an example saying that, the children come to sign language class and learn sign language, then a lot of them focus on the vocabulary because the learners' vocabulary are limited. However, they also need to learn sign language structure. For example when they ask questions, then the question form comes at the end of the question with proper facial expression for the question and the learners needs to learn to do basic sign language sentences: subject, object and verb. Then they also learn English in the classroom. The target then is that learners have to read and write English, then teachers go into the classroom to do

English reading and Afrikaans reading, whichever language the class is using. They also tried to teach them cultural aspects along the way, e.g. turn taking which is very specific in the way the Deaf do it, using appropriate attention seeking strategies because the learners tend to bash each other to try and get attention in the Foundation Phase. However, in higher grades, the language will be more complex because it will include sign names in which they experienced challenges, hence the learners mock each other and tease one another. The same educator also mentioned that the school's previous approach was Total Communication. She continued saying that the researcher would see that the teacher was teaching sign language in her class, but other teachers are still using the Total Communication Approach. She acknowledged that Total Communication Approach is a dated pedagogy.

Another teacher said that: 'Deaf children's language is SASL and it's a visual language. They understand more by seeing. The way I teach them I make sure that the content is not abstract for them. All the time I always make sure it should be a visual language. Sometimes we always take them for educational tours once a year to learn things they do in class. Some of these children are from backgrounds that do not allow them to learn more. I feel it is our responsibility to talk to the parents that the children should explore their environment. And it's so interesting when you take them out that some of our children have never seen many things, e.g. a child never seen a train, sea, river. However, here at school we give them a sign for the sea. They have different needs and as a result, in the class, I give them individual attention while others move with their work because I do not want to leave one child behind. If I can see that I give them lots of work for those who cannot cope I give them the same work but at a lower level e.g. Maths if I do hundreds, I would give that child tens and units. I do not speak, I only communicate in SASL because it's their language. We also show them videos because they learn much better, when they use them. SASL is their mother tongue, most of these children are from hearing parents so that child should be bilingual from a very early age, meaning he will learn SASL and spoken language and when he comes to school should use SASL. You cannot use two languages because you will confuse them and try your level best and use sign language with facial expression. For instance, when you speak to a hearing person you use the voice. The only way for Deaf is to show by using facial expression, e.g. when it is joy show your facial expression.'

One teacher said that, she used Total Communication together with SASL. In addition, Total Communication allows her to communicate with all Deaf learners. Furthermore, there are Hard of Hearing who have different degrees of learning and who can lip-read as well.

Therefore, Total Communication will assist them especially when one talks and signs at the same time because they will be reading from the lips. For those learners who are totally Deaf, SASL is good and short, it suits them very well in communication because it does not include long English sentences. Another teacher preferred Signed English. She continued to point out that when she started teaching, she was not trained. Therefore she learnt signs from learners and then after some time she signed every word she learnt. That was when she discovered that the learners were not using the same structure as the English structure. That was how she began the use of Signed English. However, she is now aware that she employed Signed English. Another teacher said that, she used mostly speech English supported by signs, it is basically Signed English. The teacher taught Intermediate Phase, i.e. Grades 4, 5 and 6. She said that children are not able to access the information through sign language at present, they will only be teaching sign language as a subject in 2016. She pointed out that there are times when children do not understand things and concepts, it could be either English reading or Maths. She then tries to use sign language only. However she mentioned that she is not perfect in sign language. She also mentioned that she needs lot of sign language training.

A certain teacher used two approaches, i.e. a learner centred approach and a teacher approach. By learner centred approach she meant that she knew nothing about sign language. Therefore, some learners knew how to sign on the chalkboard and they were more knowledgeable than she was. The teacher used the learners when she taught to help her, e.g. asking them how they sign various concepts. That was her explanation of a learner centred approach. She contends that the teacher centred approach is when she taught them by telling them information and asking them to tell her how they sign different signs. One of the reasons why she preferred these approaches was because of the lack of sign language training skills. In addition, the preference of these approaches was to use the learners to assist the teacher as she does not have sign language skills. The teacher taught them but she could not convey the message directly to the learners. Instead she made the learners teach each other through sign language. She depended and accepted the learner's information even though she was not sure whether the information was correct or not. One teacher used different methods, i.e. Sign Language and English. She used sign language for communication where she 'reads and signs the story to the learners'. They sat down in circles so that she would be on an equal level with the learners and she was visible to the learners and she could see each of them. 'I need to be on an equal level with the learners. I use sign language and switch the voice.' In her class, a learner who came from a normal school joined them in the previous year. She felt

that she needed to accommodate that learner because s\he did not understand all the signs. Therefore, she taught them sign language for the first time. She used code switching and showed them pictures. She highlighted an example of how she read the story to the learners. An example was a Baboon story where she drew everything that happened in the story, for instance she drew the whole story and signed it to the learners. That is how she integrated two approaches, i.e. sign language and Art/drama.

Use of bilingualism in class

Question 2: Do you use Bilingualism in your class?

Three teachers used Bilingualism. One teacher said that: 'I'm using Bilingualism because the way I understand Bilingualism is that you actually use sign language and that you teach it as a subject and that you are using it as a medium of instruction and then you are doing another spoken language.' Another teacher said that she taught English and Sign language. Nevertheless, in a sign language class she used pure sign language. Then in the English class, she emphasised to the learners that they were in an English class so that they could easily identify the language. One teacher said that: 'What I want to make clear is that a child has to be bilingual by using SASL and English for literacy, they need to have literacy skills'. Five teachers who did not prefer this Bilingual approach used different approaches such as Total Communication, Signed English etc. as mentioned in question one.

Types of communication in class

Question 3: Are your learners coping with the Bilingual approach?

From three teachers who said that they used the bilingual approach, two of them said that the learners do cope with this bilingual approach because when feedback is required they could answer the question. One teacher said that, the reason why she used this approach was to ensure that one must not deprive Deaf children. Many people think that Deaf children are graded lower compared to speaking children. To be Deaf is just that you cannot hear with your ears and you hear with your eyes, hence the need for sign language as part of a bilingual approach. That is why when two Deaf people are communicating with one another, no one is allowed to cross between them as part of Deaf culture. For instance, when she teaches there are two circles, there is a yellow circle, which is used when they sign, and a red circle which shows that they are now using English. Most of the learners cope with these approaches and as a result they understand the videos and other work. A teacher pointed out that the stories

were more easily understood through dramatisation and sign language. Another teacher pointed out the following with regard to the bilingual approach: 'Deaf children are not given a fair opportunity in terms of time because they need more time, it's very difficult for me to say whether they are coping or not because I have to rush through the syllabus and that is a major problem because they need more explanation, they need more revision because they cannot hear as hearing people. Therefore, the information has to be repeated, it is difficult to say whether they are coping or not because each class is different to others. For instance, the class that I taught last year coped much better because they had different bilingual abilities.'

Teacher's reaction towards the use of bilingualism

Question 4: Do you use Total Communication or an Oral approach in your class?

Four teachers use Total Communication. Teachers 2, 4, 5, and 8 argue that they use Total Communication especially for new learners who do not know sign language. Teacher 3 and 6 used Total Communication and the Oral approach because their school started with sign language which was based on the Irish sign language and then it changed to Oralism and Total Communication and they now again changed to sign language. Deaf education therefore evolves all the time. In addition, they said that they also used Total Communication and the Oral method when they ask questions and when they want learners to assist them with signs. Teachers 1 and 7 are against Total Communication and the Oral approach because they believe that Deaf children should learn pure sign language.

The curriculum in schools

Question 5: Which curriculum do you use in your school?

Six teachers i.e. teachers 1, 2, 3, 4, 5 and 7 used the CAPS and SASL curriculum. Teachers 6 and 8 used only CAPS because they believed that even if SASL is to be implemented they have not been trained and that appropriate SASL training was not provided for all the teachers. There were only a few teachers that were selected to attend the training, particularly those who taught sign language as a language in the classroom.

Teacher attitudes towards the New SASL Curriculum

Question 6: How do you feel about the New South African Sign Language (SASL) curriculum?

Teacher 1 feels happy about the New Curriculum because she can see that she can do much better for Deaf children. She feels that the learning process will be more cognitively sound if they implement SASL teaching. Furthermore, she said that, 'there are lot of changes to our children we see that they understand few things'. In addition, previously the SASL structure was not easy to study for learners and teachers. However, now that it was standardised and formalised it is exciting and children are able to understand it. 'I am now happy to see that these things are happening.'

Teacher 2 feels that the New SASL Curriculum is more specific and is more adapted and straight forward. It is structured daily and weekly and it keeps both teacher and learner on the right track. There is clarity on what is expected from the teacher. There are also DVDs to assist with analysis of poetry which is recited by the learners, taking their cue from the DVD. After the children watch the DVD, the teacher provides them with 'a chance to go and think about their own poems and either the following day or the following week, they can come up with their own poems and present them.'

On the one hand, teacher 3 feels excited about the new curriculum because it is something challenging and something new. On the other hand, even though there is a structured curriculum they suggest that 'you struggle because we do not have all the materials so you get confused to where you can get material and stuff, but it is exciting and it is something that is challenging. In addition, children are enjoying it a lot, so when they enjoy it that means they are learning.'

Teacher 4 is not exposed to this Curriculum. She contends that she is not trained in the New SASL curriculum because there were only a few chosen individuals at the school who were trained. 'We are not all trained in this Curriculum. The CAPS we are using is the CAPS that is used by normal schools'. Only the Foundation Phase teachers together with grade 9 teachers received training in Pretoria. 'Therefore, we take our children to their classes for their sign language periods so that they can give them SASL training. SASL has already been implemented in our school.' That said, it would be important for everyone to be trained in sign language. Selected teachers specifically teach SASL as a subject to add to the FAL they have been teaching.

Teacher 5 expressed excitement about the new course, but was concerned 'about the FET Phase because it is still introduced in the Foundation and the Senior Phase.' However, the teacher was excited because she thought that once the learners have a good command of their

own language; it would then be easy for them to understand the curriculum. 'As teachers we have to make sure that children understand the difference between the sign language structure and the English structure. Once they have the knowledge of their own language it would be easier for them to move from sign language structure to English structure.' This is in line with theory of bilingual teaching where students can translanguage from one language to the other (Hesson, *et al.* 2014). This will allow for learners to excel and to enter colleges and university.

Teacher knowledge about the curriculum

Teacher 8 said that she was struggling, but did her best under the circumstances. However, the department of education assists them, for instance, the subject advisor helps but s\he does not have time to assist everyone with their queries. 'We once attended a sign language workshop and the tutors were Deaf people. It was a stressful workshop because we could not turn around or look down because if you look around, you will lose the information and get lost. It is the same with Deaf people because they also lose information if they do not look at you.' Furthermore, many of the learners do not understand her signs; as a result, she is struggling. 'A Deaf assistant teacher is willing to assist us. I got my limited sign language skills from Wits University.' Arguably all universities should be offering such courses, especially in relation to teacher education. This will be elaborated on in chapter 8.

Teaching approaches

Regarding teaching approaches in all four schools in the Eastern and Western Cape, some teachers felt that there are existing teaching approaches in their school policy such as Total Communication that were already included in their school policy. However, she mentioned that the discussion about the new sign language approach was welcomed. This statement is supported by another teacher who said that, Total Communication has been long included in a language policy in the 1990s. Also the new approach is Sign Language, which would improve learner's reading and written language skills. More approaches such as SASL, Oral, Signed English, Bilingual-Bicultural Approach, learner-centred, and teacher oriented approaches were employed in these schools, thereby representing a multifaceted set of approaches to teaching in these schools.

Teaching practice and learning material: Teacher Responses

School A

Teacher A: Learners should read what they understand, i.e. in sign language. If the teacher adds –is or –ing, learners will not understand. She said that when one says '**I am going to town**', a Deaf learner will not understand. A good sign language structure would be '**Me go town**'. She also mentioned isiXhosa translation from the same sentence which is, 'Ndiya edolophini' which is similar to sign language structure. She said that, sign language is a language that has its own structure, which is not the same as other languages. Ganiso (2013:33) contends that, 'SASL is a unique language which is unrelated linguistically to any of the spoken language in South Africa'. Deaf children receive knowledge after they experience what they are learning. For instance before learning FAL, the teacher should let them watch the story through the video. When the video has been watched, they practise signs, e.g. if the theme is based on healthy food, they practise healthy food signs. Thus after they have acquired the knowledge visually and practised their language, they will be able to practise what they have seen orally and in writing. However in sign language class, learners do not write, they only sign.

Furthermore, FAL includes reading. Reading occurs after Deaf learners have been taught sign language. The teacher said that, 'when the learners learn sign language structure they do not sign everything from the sentence. The learners study the picture from the book and the teacher shows them a vocabulary list. Thus from the vocabulary list, they will chose a word 'Didi' and cut it in order to paste it in the FAL book. In addition afterwards they closed the books and the teacher did finger-spelling with them. For instance, the teacher signed 'healthy' or 'teacher' and one learner would come to the front and finger-spell 'healthy' or 'teacher' or 'Didi' first, and then write the word on the blackboard. Also when a learner made a mistake, other learners correct that particular learner and give him\her a correct answer.'

FAL also comprises of parameters whereby learners represent their sign names. Yule (2006:176) states that the shape of hand(s) are used in the form of the signs. Thus whether the fingers are bent or extended, the shape may differ in terms of which fingers are used. In addition there is a palm orientation of the hand which differs in other signs, i.e. the hand may be oriented as the flat hand etc. Furthermore, the learner shows the teacher his\her sign name. Also the palm orientation was performed by learners. For instance, the learner's name was Liyema. Therefore, her sign name combined a sign and the first letter of her name which is 'L'. The learner is first shown her sign name and afterwards the teacher assisted her by showing her sign name palm orientation, which was a G-handshape.

A teacher supporting a learner on G-handshape palm orientation

Furthermore, after the learner was shown palm orientation, she went straight to the back side wall of the class where the teacher hung charts with different alphabets and handshapes in order to show the teacher a G-handshape together with support from other learners support. Below is the G-handshape:
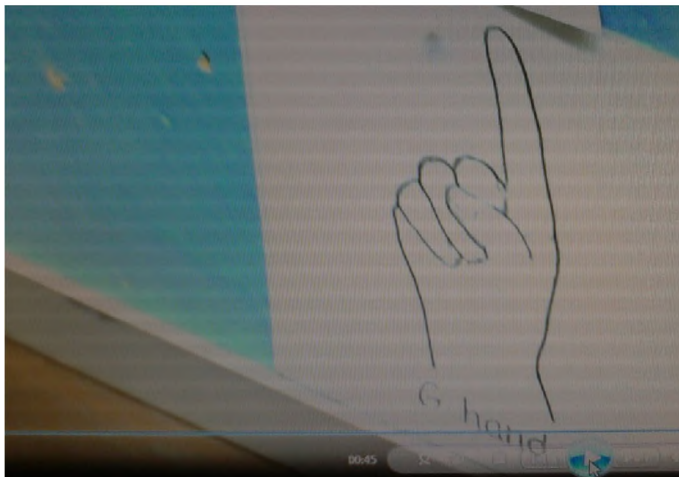
A palm orientation of the G-handshape

Further examples of handshapes and palm orientations

The above picture is an open B-handshape
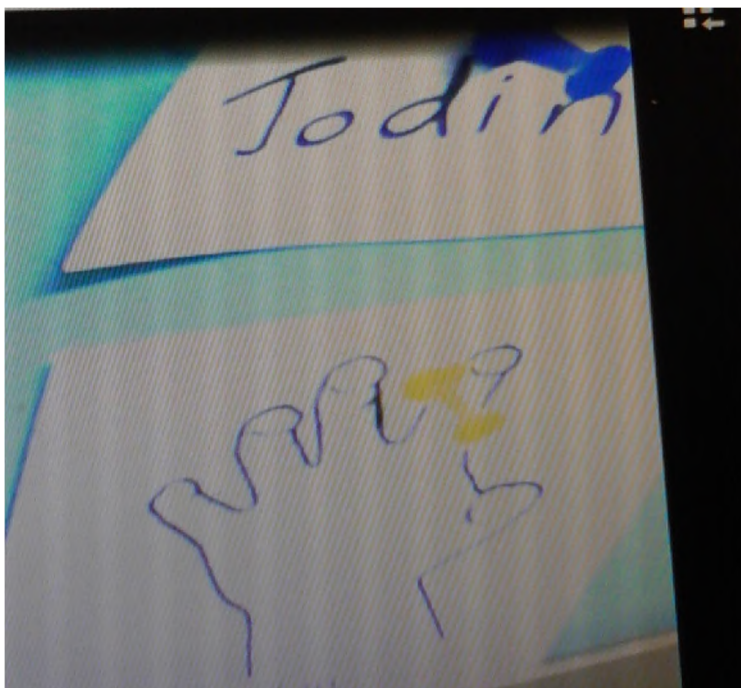
A flat B-handshape
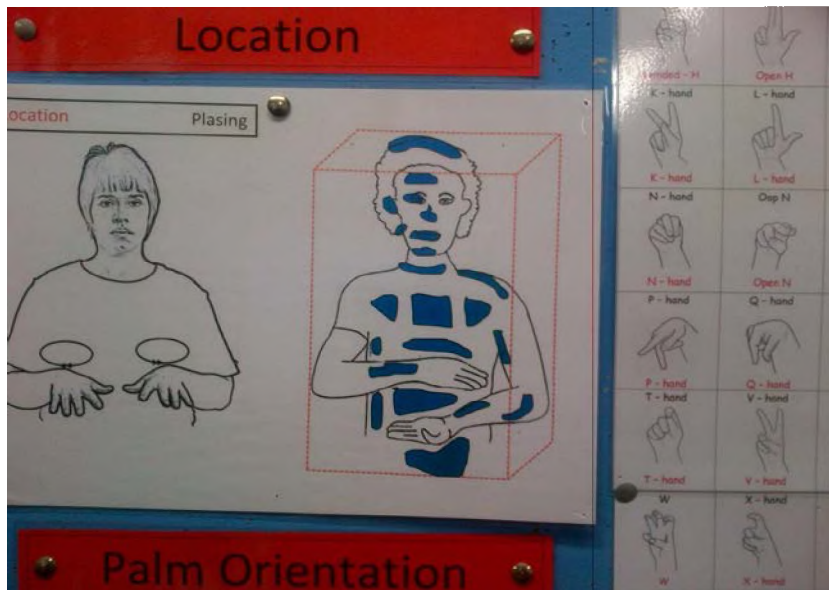
A palm orientation

Palm orientation is based on the 'orientation of the palm in relation to the body', (Heydenrych, 2005:31).

After the learners were taught they were given homework. For instance, the teacher gave them a vocabulary list which was taken from the story dealt with in class. However, there was a challenge at home, as the parents could not help the learners with their homework because they were not trained in sign language. Additionally, children brought the list of vocabulary to their parents and showed them the vocabulary and signed each word. That was when parents also began to learn sign language, especially those who were keen to assist their children with homework.

Teacher B: Teacher B in this particular school was the Head of Department. She was not aware of teaching approaches or methods. Her lesson was in Grade 5, and based on language. However, time was spent cutting pictures from magazines. Therefore learners spent much time cutting out pictures. The teacher was not trained in the New SASL Curriculum, and therefore she struggled to teach. Thus there is no clear analysis based on her lessons. It is inconceivable that a teacher who is not trained in sign language can be appointed to a Deaf school and be expected to develop cognition in learners through the use of clearly unsound teaching pedagogies.

School B

Teacher A: This teacher taught a Grade 3 class in the foundation phase. She taught language. She was fully trained in the New SASL Curriculum. Learners watched an English story from a DVD. Before watching the DVD, the teacher first explained instructions to the learners. Afterwards they were asked questions which were based on the story. She called learners individually so that they could not disturb one another. A learner was sitting alone watching the video until the end of the story. When he\she finished watching, the teacher came and sat opposite the learner and asked questions based on the story. These are examples of the questions in sign language with English grammar translation:

Sign Language	English
a) "Sit car who"?	Who was sitting in the car?
b) "Raining"?	Was it raining?
c) "Raining why"?	Why was it raining?

The teacher should be aware of including the subtitles. For instance, if the DVD does not have English subtitles, then one must allow the Deaf child to take the DVD home and re-watch it in a quiet place. Furthermore, when the teacher asked questions, she used facial expression/non-manual features. This is an example of sound usage of teaching pedagogies in the classroom and such an approach represents a more learner-centred approach.

Below are examples of non-manual features represented through facial expressions

However, the teacher showed ambiguity when it came to the use of sign language. Referring to the third question: 'Raining why?' i.e. Why was it raining? The learner's answer was 'lightening'. The teacher nodded, meaning that she agreed with the learner. Thus in the first place the teacher's question was in the wrong format. It would be better if she asked: 'How do you know that it was raining?' In this case, the learner would give many possible answers; such as storming, lightening, cloudy, etc.

Furthermore, the learner was left confused. The teacher did not correct the learner, therefore s\he thought that s\he was correct. This will keep the learner's mind excited when s\he watches the same story, telling h\herself that s\he understands the story. The challenge will be when the learner goes to the next grade. Thus the next grade teacher will struggle because the learner will employ his\her previous erroneous knowledge. In addition, however, the teacher was already trained in the New SASL Curriculum, she came from an oral background. Therefore she struggled in sign language practicality as she agreed with all the learner's

responses. Also there was no feedback of the DVD story to the learner. Thus the teacher called the next learner using the wrong sign name. Fortunately, Deaf learners always correct hearing people when making mistakes by using wrong signs. Therefore, s\he corrected the teacher's mistake until the teacher rectified her mistake. The researcher's concern was related to how the teacher would allocate her oral assessment marks if she could not communicate thoroughly with Deaf learners. There are, therefore, numerous challenges in the Deaf classrooms based largely on teacher inadequacies and lack of appropriate training.

Teacher B: Teacher B was a Grade 5 teacher. She did not get SASL New Curriculum training. The Intermediate, Senior and FET phase teachers were to be trained in the following year during implementation. The lesson was on reading whereby learners were turn taking in reading. An interesting part was that learners were having fun in reading. As a result learners who struggled in reading were not stressed because they were watched by the teacher and other learners, while at the same time having fun. Thus learners corrected them immediately when they made mistakes in reading. In addition, this attitude led to a large number of readers in class who were relaxed. Furthermore, the Deaf learners competed to read and to write vocabulary on the blackboard. Furthermore, the reading included finger-spelling. Thus the learners would read and finger-spell the new terminology from their lesson.

School C

Teacher A: Teacher A taught the Grade 3 class. SASL New Curriculum training was provided to the teacher. She was well equipped and she was also used as an interpreter in that particular school as most teachers were not trained in SASL language. She interpreted for teachers and learners as well as Deaf teacher assistants. The lesson was in the sign language class whereby learners learnt through sign language. They were supposed to watch a story from the DVD but because of lack of material in their school, the teacher used a story book. Each story book page had pictures where learners understood them much better than vocabulary. The teacher let them discuss the pictures and tell the teacher about them after they have analysed them. After they studied the pictures, the teacher let them draw what they had seen from the picture. In addition they drew their own story, be it a family story or a story about that particular learner. Also in the FAL period they used the same story but focussed on writing. The teacher included finger-spelling in sign language.

Teacher B: The teacher taught Grade 5 and did not get sign language training. The teacher did not have a lesson because she was very nervous. Firstly she did not trust whether a

researcher in the class would expose her or not. Secondly, she was not sure whether the learners would respond or not, hence she depended mainly on a learner-centred approach, resulting in learners having to explain to one another. The Deaf child should never be expected to become an interpreter in the classroom.

School D

Teacher A: She was the Grade 5 to 9 subject teacher. Her major was Business Economics. She was not yet trained in the New SASL Curriculum as the training only occurred in the foundation phase at that stage. The lesson was very exciting and based on 'cash slips'. The lesson introduction was interesting. The teacher asked the learners the meaning of cash slips. They shared different ideas but some could not give the correct answer. The teacher said that, 'when you buy something from the shop, the teller gives you something. What is it?' Many of them raised their hands and gave the correct answer by saying, 'slip'. The teacher was very excited. She said, 'Yes' when you buy something from Shoprite or Pick 'n Pay you get a slip. She showed them cash slips. That was when they matched the cash slip which was the paper and the term 'cash slip'. Afterwards, they were able to give more examples.

Teacher B: She was a Grade 7 language teacher. The lesson was on a baboon story. She arranged a big circle of leaners on the carpet. All the learners were sitting and ready to listen to the story. The teacher showed them the cover of the book and discussed it with them. Learners analysed the pictures and the colours. The teacher read and dramatized the story and the learners listened attentively. She made them take turns to dramatise the story. The learners enjoyed the story and were ready to reflect on the story. The teacher asked questions and they answered because they understood the story very well.

It is clear from the above that both learners and teachers bring varying strengths of sign language to the classroom. This in itself results in emerging pedagogies which are moulded to react to the moment rather than being carefully considered as part of a definitive and well thought through pedagogy.

Problems teachers encountered in the use of teaching approaches in Deaf schools

The main problem teachers encountered in teaching Deaf learners was the lack of communication. Most teachers lack adequate sign language training skills. School principals and School Governing Bodies often employ unskilled teachers when it comes to SASL. As a result Deaf learners end up struggling. Another problem is that Education Departments did

not have a sign language teachers' data base in order to supply schools with teachers who are well equipped in sign language. In addition, teachers who are already in the system do not get sign language training or workshops. There is no universal teaching approaches in Deaf schools in order to accommodate Deaf learners. For instance if there was one universal teaching approach such as bilingualism then Deaf learners would not struggle, whether they would be in the same province or not because they would learn the same curriculum which includes the same signs.

The lack of teaching resources is another problem in the Eastern and Western Cape Deaf schools. For instance, all Deaf schools should have interpreters in order to assist the hearing teachers to meet the curriculum requirements. This is supported by Adoyo (2007:3) who states that the 'Curriculum is one of the obstacles or tools that needs to be carefully designed and adapted in order to facilitate the development and implementation of a proper inclusive system'. The regular curriculum used needs to be demanding and expanded. In addition, there is also a lack of knowledge, hence I have mentioned that they do not get opportunities to attend the workshops in order to gain more knowledge. Sign language is also not universal, learners come from different Deaf schools with different approaches learnt from those schools. This forces the immediate teachers to change their teaching style to satisfy the new learners' needs. Teachers also contend that there is only one sign language teacher per school who attended SASL CAPS training and who also focusses on sign language as a teaching subject. Therefore if the teacher who received training gets another job, there will be challenges in that particular school due to the replacement of the teacher.

There are a number of problems faced by teachers: these include issues of comprehension, language use and resources (Lekoko, 2007). This is further discussed in the section that follows.

Comprehension factors

There is often a lack of comprehension where learner's attention, according to Lekoko, (2007) is 'deficient and memory deficient'. The majority of learners do not understand their teachers when teaching. Also learners tend to forget what has been taught the previous week. Students with hearing impediments easily forget and have low memory, (Lekoko, 2007). Learners do not grasp because they lack concentration. As a result this leads to high failure of their assessments and tests. This is further exacerbated by Deaf learners who have low self-esteem when they are mixing with hearing learners.

Resource factors

When resources are available, the learning experience can be fruitful and meaningful, (Lekoko & Mukhopadhyay, 2007). Many Deaf schools struggle with the absence of resources such as technology support and learning material. Additionally, there is an absence of overhead projectors where material is presented visually in order to support the learner's education.

Language use

Due to dominant sign language use that may not be the natural language or dialect of Deaf learners, this can affect Deaf learners, their cultural and experiential development. Thus some of the signs will carry different meaning and cause confusion to Deaf learners. The teachers' belief is that, good communication skills will be due to a Total Communication approach as they believe that learners will benefit from it. However, the challenge will be teachers' unpreparedness in the use of Total Communication. If, for example, Signed English is used together with SASL, problems of syntax and semantics appear as Signed English and SASL differ in grammatical structure as indicted in chapter 4. In addition, when a Deaf learner is being taught in both languages, s\he becomes confused as this can be a frustrating experience if the pedagogy is not carefully thought through. Let us now turn to the analysis of the input provided by curriculum advisors in order to corroborate some of the views put forward in both chapters 6 and 7.

Curriculum Advisors

Developers of SASL Curriculum

A number of research questions were posed to the curriculum advisors and what follows below is an analysis of this data.

The first research question posed was the following: Who developed the SASL Curriculum?

Curriculum Advisor A: 'Free State University decided to develop sign language curriculum years ago. They worked together with the Western Cape Education Department (WCED). De la Bat School piloted it for two years. The Minister of Basic Education formed different committees, i.e. the Curriculum Management Committee as well as writing teams led by a sign language expert.'

Curriculum Advisor B: 'SASL was developed by DeafSA because they are people that are working directly with Deaf people and they are the people who are looking after all the Deaf people's needs around our province.'

The development of SASL can then be attributed to selected Education Departments, DeafSA, as well as some leading universities where research has been done on sign language. However, university involvement remains on the periphery and much more needs to be done.

Question: Was the curriculum developed by a content specialist and a curriculum specialist?

Curriculum Advisor A: 'Dr Akach who is a specialist was there from Free State University and Dr Claudine from Wits University. There were many other specialists and the writing committee for linguistics. They called people from outside to add more information, e.g. 'SLED', (Sign Language Education).'

Curriculum Advisor B: 'Yes there were specialists that were consulted for instance if I remember well last year there was a workshop that took place in Johannesburg when this New Curriculum was done. For instance for those Deaf learners who are doing Grade 12 they are not doing all the subjects, they are only doing one language which is English. Now they are going to do two languages, the second language will be sign language and it's going to be done soon. The people that have taught at a Deaf school for quite a long time and people that worked directly with Deaf learners, some of them have got Deaf children so they were ones who were doing this because since sign language is formed on space they are going to use videos and cameras when they are going to do their tests, they will be tested on camera, videos etc.'

<u>Relevance of the curriculum to students' achievements goals</u>

Question: Does the curriculum include goals which are related to student's achievement levels?

Curriculum Advisor A: 'Yes, it builds up language skills as in other languages, e.g. cognition influenced and developed achievements. Learners are able to bridge between languages. Bilingual-Bicultural language was added. L1 should be on a firm foundation. Many teachers teach subjects they have never done. Children showed interest by asking questions if they don't understand.'

Curriculum Advisor B: 'I can say yes because firstly when a Deaf learner is going to write exams for those concessions they apply for them and they will get extra time because they take time to read hence they are in a silent world. Secondly the invigilator who works with them must be a person who knows sign language interpreting so that if maybe there is a sentence they do not understand they ask it from an invigilator which is a sign language interpreter. Thirdly their question papers will be adapted. That does not mean that the Curriculum will be watered down. They will do exactly the curriculum that is done in the main stream. But their sentences are going to be put in a more accessible way for them so that their goals can be achieved.'

Availability of the curriculum for teachers

Question: Is the curriculum made available for teachers to review?

Curriculum Advisor A: 'Yes, after the curriculum was completed. The Minister commented and teachers were also involved. They complained that the curriculum implementation was too short. Many schools and teachers made comments especially Grade R-3 when they brought in the curriculum. In three years' time the curriculum will be implemented from Grade 9. Western Cape is geared with the curriculum. It is too much content subject for 1 year then it takes two years. Meeting at DBE we then said all those inputs we made will be taken as is because it has been piloted by the Department of Basic Education and we wanted to roll out the Curriculum in 2014 and they have sent out the circulars to direct us that it should be done. They find out that the rest of the country was not geared for it because there was no training done as you had experienced at MKS that there was no training done in the rest of the country. And the rest of the country could not roll out this year. So what they are going to do is to use 2014 as a year where they can prepare for the roll out in 2015. However Western Cape is geared because of the project because of the training that has been done. Not only in the level of sign language but also in the roll out of the curriculum, so we have started from the Department side with the blessing of the SG and the premier. We are rolling out in the Western Cape as from January 2014 from Pre-Grade R-3 as well as what we are doing this year instead of rolling out next year only in Grade 9, we are rolling out bridging curriculum from Grade 8 in the Western Cape half of it so that next year we can finish the rest. It's too much subject content so we are now doing it in two years. We are planning in the next year to start with Grade 4-6. That will mean that we are ahead of the rest of the country always for one year except with the Grade 9. We will then be in line with the rest of

the country so that they can write in the same year for Grade 12 then we also write with them.'

Curriculum Advisor B: 'Yes because teachers are people who are dealing with them directly. So there is nothing that can be done without their educators. Because their educators know them very well, e.g. they know who is supposed to move to the next grade and especially those learners who can move from Grade 9 to skills. Because not all learners can go to Grade 12, like other learners that are in the mainstream. When they do not cope academically they are directed to skills. Definitely the teachers must be involved in whatever involves the Deaf learners.'

Changes occurring in the curriculum and made by teachers

Question: If a teacher makes changes to the curriculum and informs a director or co-ordinator, do changes occur?

Curriculum Advisor A: 'I think with the comments that could be sent in we do not know whether everybody's comments will be included. But what they said at the last training session is that advocacy session they said that they will look at everything and everything that they find is valuable. They will see if it can be included. What I can tell you is that suggestions we made for Grade 9 is that they are going to use it as is.'

Curriculum Advisor B: 'I think so because teachers are the ones who are involved in the education of children.'

Teacher' updates about changes in the curriculum

Question: If changes occur, are other teachers informed of these changes in the curriculum?

Curriculum Advisor A: 'I think yes, early in February the DBE had a session in Pretoria where they have invited all schools in South Africa for the Deaf to be at that training session to inform people about what has happened, and what has been expected by everybody. It was mainly the SMT of the schools and the principals and they are expected to go to their schools and give back all the information that has been divulged there. There were also training sessions throughout the rest of the year where other stake-holders, teachers etc. were involved. Deaf teacher assistants will be involved later. The first session will be only the SMTs of the schools.'

Curriculum Advisor B: 'Yes I can say they do occur because as I had already said that teachers are with Deaf learners all the time if they see that in the classroom things are not working, in fact it starts from school. The teacher informs the HOD and the HOD informs the principal then the committee sees to whatever that particular teacher has highlighted and they take it to the department section of inclusive education from the province and district and come together. Then step by step they move to the national. Then if there are changes that are supposed to be made these will be made because of that teacher who has fought this in the classroom. Even in their workshops they discuss about how a Deaf learner can be assisted in the classroom.'

Distribution of the curriculum to students

Question: Is the syllabus distributed to the students on the first day of the class?

Curriculum Advisor A: 'I think for the Foundation Phase it's just an explanation of what we are going to do and then for Grade 8 it was also more or less capturing what will be done and explained to them i.e. what is expected or why are we doing it. I speak for the Western Cape and not the other provinces.'

Curriculum Advisor B: 'I can say yes it changes from school to school. It also depends on what the teacher has a passion for and through the supervision of the HOD it happens. In most schools when they open the school they know when there are changes. But fortunately with the Deaf people they are not waiting, immediately they see the change they feel free to confront the teacher and ask why the change is being made. So Deaf people are people that are so open, so the teachers at Deaf schools they can't just fold their arms, they will be confronted by their students, that is why they need to be on their toes when there are changes. '

Curriculum Advisor suggestions regarding the curriculum

Question: Are there any things that you think could have been changed or done more successfully in the process?

Curriculum Advisor A: 'Yes there are definitely things that I feel can be changed. The first thing is the curriculum starting only at Grade R that is for me a vital point as a child's language window to automatically learn a language is from birth to 7 years which includes the pre-school years for me - it feels very important to start in the pre-school and that we are

also doing in the Western Cape even though we only had a Grade R curriculum. We are using the Grade R curriculum and just make it a little bit less and implement it from three years old. That is for me the greatest point of critique around the curriculum. As I also said that the Grade 9 curriculum is just too much which can be done over two years. And then one thing for me that is absolutely vital, one cannot give a curriculum to a teacher who does not have a background. If the teacher does not have a good command of linguistics and of linguistics specifically related to a sign language grammar, especially in higher grades. To me this is the same for Xhosa, Afrikaans or English, you cannot give a person who has not studied English in English a class and say teach in that class even though a teacher is speaking English as a home language - it does not work like that, it's impossible especially in higher grades. For instance I can't go and teach Afrikaans as a subject because as I never studied Afrikaans as a subject although I speak Afrikaans fluently and it is my home language. I think we could have started earlier to recruit people to train so that by now the curriculum could be implemented very easily. However, I think it is not too late if the government or Education Department make bursaries available and recruit students to study sign language as a third or fourth year course at the Universities. Crash courses do not help because it is not the full diploma that's been done. As of now I am in the Western Cape and we really have to jump around for posts, posts need to be given to schools and there should be something from national that specifies that we have so many posts for sign language teachers or Deaf assistants as role models in the classes and the staff establishment should be looked at very prominently. Otherwise people will teach sign language as a stop-gap subject just to fill out the time. That is unacceptable.'

Curriculum Advisor B: 'I think parents must also be involved because as educator, the parent and a student should work together. So I think most of the parents of Deaf learners must be educated. They should be involved in the education of the learners e.g. most of learners stay in the hostels, when the parents are called, how I wish the parents could come and be prepared and spend a week with the learners. I wish schools could make workshops with parents because other Deaf learners are from hearing families so in that particular family it is the first time they get a Deaf child from birth. So they know nothing about sign language. The parents and the relatives should learn sign language so that when the learner is at home during the holidays they could feel free and being accommodated. The siblings and relatives should learn sign language, they must know that, that particular child should feel free at home knowing that everyone is interested in my language i.e. sign language which is my mother

tongue. That is another thing that must be done. The other thing is that all the departments, I mean Department of Health, Agriculture, all the Departments there must be someone who knows sign language who is employed in that particular department because when Deaf learners have finished school since it has been said that all the departments must employ two percent disabled people. They must get someone who knows sign language to see that these people who are in this department are interested in sign language. Another change is that, in our churches each congregation must have someone who knows sign language so that when the preacher is delivering the message Deaf learners must not feel that they are neglected - they can also go to church so that spiritually they can feel God's presence. Since at church there is no one who knows sign language how do we expect Deaf people to be Christians or how do we expect Deaf people to know God as their saviour? So that is another important thing that must be done in our communities Deaf children grow, they get married and they need to be fed spiritually and know who God is. We also go to funerals so how do we expect a Deaf learner to express emotion at a particular funeral if there is no one who interprets for them. They feel neglected. Even in the banks there must be someone, at times they save their money so there must be more information given by the bank to Deaf people from someone who interprets. Even at the hospital when they see the doctor, there must be nurses who are interested in sign language for confidentiality of Deaf people. There must be someone who can be able to explain a particular sickness to a Deaf person. They can have someone who can give them a counselling because there are new diseases like HIV and AIDS, Diabetics, cancers, etc. Even when there are campaigns they need to be invited, i.e. they should be part of our community and feel that they belong in this beautiful land. So sign language is so important. I think each and every person should learn sign language. Even if I do not know Afrikaans I learn it, same applies to sign language even from White people, there are White people who learn Xhosa. Deaf people will also be happy to see someone greeting them in sign language. Those are the things that need to be changed.'

Differences and similarities: Eastern and Western Cape Education

The Eastern Cape Education Department lacked the knowledge of SASL curriculum development as they are not updated and this is evident from interviews. However, the curriculum advisor of the Western Cape Education Department was well informed about the curriculum from that province. It appears that much more is being done in the Western as opposed to the Eastern Cape Province. The Minister of Basic Education then formed different committees such as the Curriculum Management Committee and writing team together with

DeafSA to plot a way forward. This SASL knowledge is supported by National Curriculum Statement (NCS) CAPS-Senior Phase Grades 7-9, (2014:7):

> The Minister of Education appointed a ministerial committee, The Curriculum Management Team (CMT), to oversee the development and implementation of South African Sign Language as a subject to be taught in schools. The Department of Basic Education (DBE) and the CMT appointed a writing team to develop CAPS for SASL. It was decided to develop SASL as a Home Language (rather than a First Additional Language) to parallel the process of attaining official status for SASL in South Africa. The decision by the SASL CMT was to make the CAPS of SASL as close as possible to the other Home Languages in terms of structure, content and sequence. (See Appendix C).

There have also been new developments and awareness in the Eastern Cape in the sense that the Eastern Cape Curriculum advisor stated that when Deaf learners write matric they will be given extra time as they read slowly. Also their invigilators will be sign language interpreters. In addition, the curriculum will be adapted and simplified in order to accommodate Eastern Cape Deaf school classes starting from grade R-12. This shows a huge improvement in curriculum development in the Eastern Cape, though in terms of implementation it lags behind the Western Cape.

Preferred language teaching approaches in the SASL CAPS Senior Phase Grades 7-9 documents

The National Curriculum Statement (NCS) CAPS-Senior Phase Grades 7-9, (2014:12) document states that, 'the teaching of language structure should focus on how language is used and what can be done with language, i.e. how to make meaning, how to attend to problems and interests, influence friends and colleagues, and how to create a rich social life.' Thus language and grammatical structure teaching should be based on communication, integration and text. The classroom activities should relate functional language form, i.e. reporting writing, narrative essay and past tense. The principles considered when teaching language according to CAPS include the following:

- Texts should be recorded in a meaningful and logical way.
- Encouragement of the use of factual material such as interviews and dialogues.
- Contextually, grammar should be taught with the purpose of text construction.

(National Curriculum Statement (CNS) Curriculum Assessment Policy Statement Senior Phase Grades 7-9 (2014:12).

Learning and teaching support materials

The National Curriculum Statement (CNS) Curriculum Assessment Policy Statement Foundation Phase Grades 7-9 (2014:17) mentioned crucial support materials teachers should have in their classes such as the following:

- Curriculum and Assessment Policy Statement document
- SASL Dictionary
- Literature genre
- Access to visual aids in order to be used in the classroom
- Variety of media materials: news or magazines items
- Signed language linguistic text books for the purposes of resources
- Language-in-education policy

There are also Foundation Phase classroom recommended texts or resources which includes the following:

- Computers or software for editing
- Digital cameras/tripods or video recorders
- DVD players and TV monitors
- Memory cards or flash drivers
- Range of DVDs to accommodate different reading levels
- Optional Webcam facilities/broadband internet, access/smart board smart phone with video recording and viewing capabilities including tablets.

(National Curriculum Statement (CNS) Curriculum Assessment Policy Statement Foundation Phase Grades 7-9 2014:17).

In order to facilitate effective sign language teaching there would also need to be interest shown on the part of the teachers. This would correlate with their commitment to the system. This is captured in the graph that follows:

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Percentage of teacher's interest in sign language
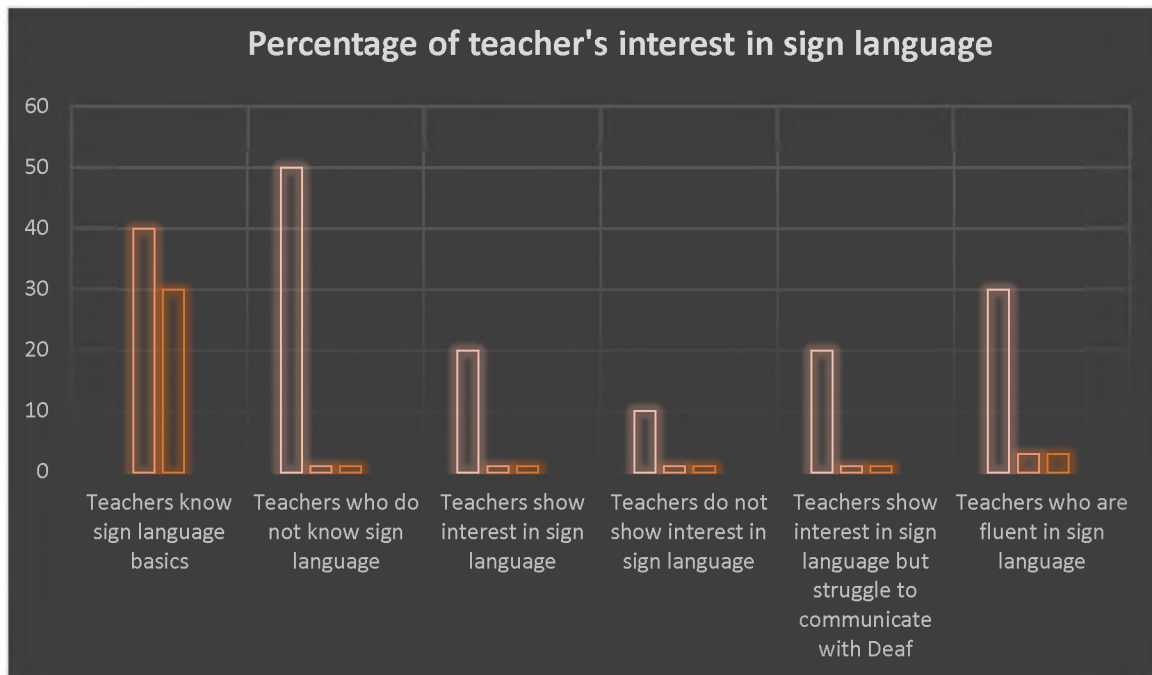
As shown in my graph above, there is forty percent of teachers who know sign language basics. Fifty percent of teachers do not know sign language. Twenty percent of teachers show interest in sign language. Ten percent of teachers do not show interest in sign language. Twenty percent of teachers show interest in sign language but struggle to communicate with Deaf learners. Finally, thirty percent are teachers who are fluent in sign language. These statistics are not encouraging and indicate that there is much work to be done in sign language advocacy.

In order for teachers and teaching assistants to be more effective the following points should be taken into consideration:

- Teacher assistants should be provided with lesson plans and copies of work prior to entering the classroom.
- They should be given what they would use in class, i.e. copies of textbooks and other resources.
- Teachers should allocate lesson planning time and discussion with Deaf teacher assistants.
- Teachers should allow Deaf teacher assistants to advise them regarding learners' needs.

- The role that needs to be taken by a teacher assistant during different parts of the lesson should be discussed by a teacher together with a Deaf teacher assistant.

- Regarding discipline on poor behaviour, the teacher including the Deaf teacher assistant should agree with one another as to how to manage it.

- Teachers should involve Deaf teacher assistants in setting up targets and allow them to write reports hence they have full knowledge about Deaf learners.

Deaf teacher assistants' work collectively with the teachers, and they also need to be appropriately informed about a learner's progress and any challenges. The NDCS (National Deaf Children Society), (2004:42) states that, 'A deaf child may be supported by a teacher assistant or communication support work however as the class teacher you are primarily responsible for their learning.'

Conclusion

It is clear from this research that SASL is in its developmental stages as part of a two-fold process. Firstly, the language itself is accessed at various levels across the Deaf schools indicating that what is required is the use of a more standard SASL in the teaching process. Secondly, the language exists in relation to emerging policy documents as referred to in this chapter and elsewhere. In other words, the language planning aspects for the use of SASL are continually being developed. There is also no uniformity in the way that the teaching takes place or in the way the policy is being developed and implemented across the country and more particularly in the Eastern and Western Cape, the focus areas of this research. This is exacerbated by a lack of appropriate teacher training within South African educational institutions.

CHAPTER 8
CONCLUSION AND RECOMMENDATIONS

Introduction

This thesis takes into account teaching trends in four South African Deaf schools in two provinces as explicated in chapters 6 and 7. This is done against the backdrop of a comparative assessment of teaching practices in other African as well as European countries and the United States of America, which forms the main thrust of chapter 3. These countries include Zambia, Kenya, Zimbabwe, the United Kingdom and Denmark. The history of the development of sign languages in these countries is explored. It is found that on the African continent Zambia leads the way in creating an integrated approach to teaching Deaf learners within the mainstream educational environment. The thesis, in chapter 4, also explores the development of sign language in relation to the structure of English in the hope of creating a clearer understanding of the challenges that may face any bilingual approach which teaches SASL as well as English oracy and lip-reading skills.

It is clear from this research that Deaf learners are a marginalised minority group when it comes to formal education. The general goal of this research was to find out what is happening on the ground in selected Western and Eastern Cape schools and to come up with ways in which the use of sign language can become entrenched as a human right. This point has been made by scholars such as Schneider and Priestly (2006), who argue that if Deaf children are not exposed to sign language, it amounts to an infringement of their human right to language usage.

This research isolated many sign language challenges in sign language-in-education policy in South Africa. For instance, the relevant provision of the Constitution and the South African Schools Act are not implemented. Most teachers do not have the necessary signing skills in order to prepare this language to be used as a medium of instruction in the teaching of Deaf learners or to teach it as a subject. Again, this should be a right in the classroom, in other words to be taught in a language that one understands best. This needs to be fully explored as a methodology in Deaf schools.

Furthermore, language planners do not include Deaf teachers in their planning. Although the opinions of teachers were canvassed as indicated in chapter 7, it is doubtful that these are taken seriously in the planning and implementation process. Therefore, the teachers experienced teaching barriers. This resulted in the development of their own teaching methods, which are only suitable for them, but not for learners. Deaf learners also struggle to read and write and that leads to high failure rates. Thus Deaf learners need to be given a

chance to prove themselves. Penn (1993:12) argues that sign language is a real language which should be equal in status to all other languages, meaning that Deaf learners' rights can be protected through appropriate language policy.

The research established how teachers cope with the new curriculum especially the use of teaching approaches, including the Bilingual-Bicultural Approach. It was noted that language planners should encourage the use of bilingualism in all educational settings in South Africa in order to improve the quality of teaching and learning for hearing impaired and Deaf children. It is found that there is often a lack of awareness in Deaf schools regarding the Bilingual-Bicultural Approach.

Some specific recommendations

It is recommended that all curriculum development should involve all provincial Curriculum Advisors in order to train school principals, HOD's and teachers, as mentioned in chapter 7 of this thesis. A coordinated system is required. Education department officials should visit schools to see whether teachers have enough sign language training as well as resources such as books, technology resources such as DVDs, tablets, etc. There should be consistency in the way language is used in the classrooms. Additionally, there should be a recognition of a language policy which is implemented uniformly in all Deaf schools. For instance, schools should share their policies among themselves. Universal signs for all schools need to be employed in order to accommodate all Deaf learners from all provinces to be able to communicate wherever they may find themselves.

There should also be a strong focus on attracting teachers into the profession who know and understand sign language. These teachers should include a good mix of both male and female teachers. Universities would therefore have to be at the forefront of training such teachers, something which is yet to happen in South Africa. Further to this, sign language learning should be encouraged as a second language for all leaners, including hearing learners. This would in turn encourage advocacy work across the board among both hearing and Deaf learners.

As already mentioned in chapter 2 regarding the approaches used by teachers in Deaf schools, teachers use different teaching approaches such as, Total Communication, an Oral Approach, Signed English, SASL, etc. These approaches are often used inappropriately at the expense of learning and cognition where learners have not been properly exposed to such

approaches. It is therefore recommended that a Bilingual or multilingual approach be developed where SASL takes pride of place alongside English and/or isiXhosa. Deaf learners should be able to study SASL as a subject and it should be used as a medium of instruction alongside English and/or isiXhosa as a FAL where possible. Finally, sign language must be recognised as a 12th official language in South Africa in order to give impetus and political will to the use of sign language in the educational system.

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Appendices

Appendix A: Letter asking for permission to conduct research

Researcher's letter from the supervisor

ATT: Head – School for the Deaf

TO WHOM IT MAY CONCERN

This is to confirm that Ms Mirriam Ganiso is a full-time doctoral student under my supervision as part of my SARChI Chair.

She is presently gathering data for her PhD thesis from various schools in the Eastern and Western Cape Provinces.

Kindly assist Ms Ganiso in order to gain access to the necessary data that she may require from the schooling system.

Ms Ganiso would particularly benefit from a relationship with MARY KIHN as her research pertains to Deaf and hearing impaired scholars within the education system.

Please do not hesitate to contact me if any further information is required.

Sincerely

Professor Russell H Kaschula

SARChI Chair: Intellectualisation of African Languages, Multilingualism and Education

Appendix B

Teacher interview questions

1. Which approaches do you use when you teach Deaf learners?
2. Why do you use these approaches?
3. If no use of approaches, what methods do you use to teach English and Sign Language in your class?
4. Are your learners coping with these with these approaches?
5. Which Curriculum do you use in your school?
6. How do you feel about the new SASL (South African Sign Language) Curriculum?
7. Does the curriculum include Bilingualism?
8. If yes what languages do you use in your classroom in order to assist your learners and why did you choose them?

EDUCATOR'S QUESTIONNAIRE

1. Which approaches do you use when you teach your learners in your classroom?

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2. Why do you use the above approaches?

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3. If no use of approaches, what methods do you use to teach English and Sign Language in your classroom?

----

4. Are your learners coping with these approaches?

----

5. Which Curriculum do you use in your school?

----

6. How do you feel about the New Sign Language Curriculum, and how do you implement it in your school?

----

7. Does the Curriculum include Bilingualism?

----

8. If yes what languages do you use in classroom in order to assist your learners? And why have you choose them?

Deaf teacher assistant interview questions

1. Which is your home language?
2. Are your parents' deaf or hearing?
3. If they are hearing, how do you communicate with your family at home?
4. How many languages do you use at your school?
5. Which languages are used in your class?
6. As a person who is assisting Deaf learners, are you happy with these languages?
7. If no, which language do you prefer to be used in your classrooms?
8. Which teaching methods do you want to be used in your classroom?
9. Which languages do you want to learn in future?

Deaf Learner interview questions

1. Which language do you use at home?
2. Are your parents Deaf?
3. How do you communicate at home?
4. Which languages do you use at your school?
5. Which language do you want to learn in your school as a Deaf learner?
6. In future which languages would you like to be used in all Deaf schools and why?

Curriculum Advisor interview questions

1. Who developed SASL Curriculum
2. Was the curriculum developed by a content specialist and curriculum specialist?
3. Does the curriculum include goals which are related to student's achievements levels
4. Is the curriculum made available for teachers to review?
5. If a teacher makes changes to the curriculum and inform a director or co-ordinator, do changes occur?
6. If changes occur, are other teachers informed of these changes in the curriculum
7. Is the syllabus distributed to the students on the first day of the class?
8. Are there any things that you think could have been changed or done more successfully in the process?

Appendix C

SASL CAPS Curriculum Development

FOREWORD BY THE MINISTER

Our national curriculum is the culmination of our efforts over a period of seventeen years to transform the curriculum bequeathed to us by apartheid. From the start of democracy we have built our curriculum on the values that inspired our Constitution (Act 108 of 1996). The Preamble to the Constitution states that the aims of the Constitution are to:

- heal the divisions of the past and establish a society based on democratic values, social justice and fundamental human rights;

- improve the quality of life of all citizens and free the potential of each person;

- lay the foundations for a democratic and open society in which government is based on the will of the people and every citizen is equally protected by law; and

- build a united and democratic South Africa able to take its rightful place as a sovereign state in the family of nations.

Education and the curriculum have an important role to play in realising these aims.

In 1997 we introduced outcomes-based education to overcome the curricular divisions of the past, but the experience of implementation prompted a review in 2000. This led to the first curriculum revision: the Revised National Curriculum Statement Grades R-9 and the National Curriculum Statement Grades 10-12 (2002).

Ongoing implementation challenges resulted in another review in 2009 and we revised the Revised National Curriculum Statement (2002) and the National Curriculum Statement Grades 10-12 to produce this document.

From 2010, we undertook the development of Curriculum and Assessment Policy Statements (CAPS) for the South African Sign Language (SASL) Grades R-12 which were completed and approved as policy in July 2014. For a long time, learners who are Deaf were persistently marginalised as they had been deprived of a home language, resulting in their education not being one of quality. This has impacted the extent of their retention within the system and their opportunities of studying further up to and including higher education institutions.

This ground-breaking work has however, ensured that the Department complies with the provision of the South African Schools Act (84 of 1996) which recognises the SASL as a language of learning and teaching (LOLT). The CAPS for SASL therefore begins a new era in the educational experiences of Deaf learners in the system and is part of the Department's commitment to improving the quality of education for all.

MRS AM MOTSHEKA, MP MINISTER

Education Department documents
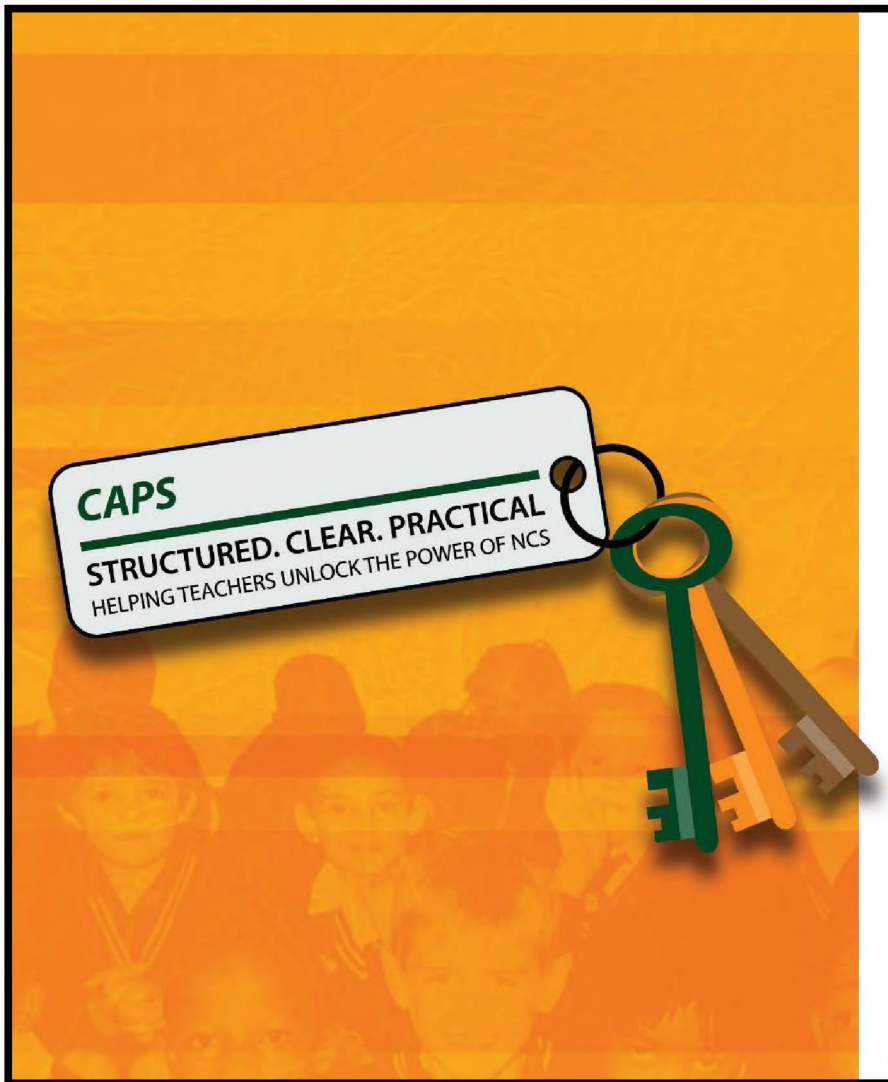
Curriculum
Assessment
Policy Statement
Foundation Phase Grades R-3

National Curriculum Statement (NCS)

Curriculum Assessment
Policy Statement

CAPS
STRUCTURED. CLEAR. PRACTICAL.
HELPING TEACHERS UNLOCK THE POWER OF NCS

Further Education and Training Phase
Grades 10 - 12

basic education
Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

SOUTH AFRICAN SIGN LANGUAGE | HOME LANGUAGE

National Curriculum Statement (NCS)

Curriculum Assessment
Policy Statement

CAPS
STRUCTURED. CLEAR. PRACTICAL
HELPING TEACHERS UNLOCK THE POWER OF NCS

Senior Phase
Grades 7 - 9

basic education
Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

Appendix E

PHONOLOGICAL AWARENESS

OVERVIEW OF PHONOLOGICAL AWARENESS IN THE SASL HOME LANGUAGE GRADES 2 AND 3

GRADE 2	GRADE 3
• Recognise simple commonly used handshapes • Recognise that signs are made up of parameters • Understand and group different signs which have the same parameter • Understand and group common signs into parameter families (e.g. signs made using the same handshape or signs made in the same location) • Distinguish between different parameters of signs • Recognise some rhyming signs in simple signed texts • Recognise parameters in different signed texts	• Recognise simple commonly used handshapes • Recognise that signs are made up of parameters • Understand and group different signs which have the same parameter • Understand and group common signs into parameter families (e.g. signs made using the same handshape or signs made in the same location) • Distinguish between different parameters of signs • Recognise some rhyming signs in simple signed texts • Recognise parameters in different signed texts • Understand that changing one of the parameters of a sign can change the meaning of the sign or forms another sign • Form different signs by changing the parameters (e.g. handshapes and location) • Link handshapes to specific meanings (e.g. person classifiers • Understand that certain signs come from specific locations (e.g. signs to do with thinking and intellect are made on the forehead and signs to do with emotions are made on the chest) • Segment simple one-handed and two-handed (same handshape) signs into parameters • Segment one-handed and two-handed (different handshape) signs into parameters • Recognise that in some two-handed signs there is a dominant and a passive hand, e.g. HELP, STAND • Identify all the possible handshapes that the non-dominant hand can take

Appendix F

RECOMMENDED TEXTS/RESOURCES FOR THE PHASE

Classroom resources

- Digital cameras / video recorders / tripods

- Memory cards / flash drives

- TV monitors and DVD players

- Computers / software for editing

- A range of DVDs to accommodate different reading levels

- OPTIONAL: Webcam facilities / broadband internet access / smart-board/ tablets/ smart phone with video recording and viewing capabilities

Grade R

- Theme charts, books with pictures and posters

- Photographs

- Colour charts

- Number charts

- Games (e.g. Terence Parkin hand-shape flash cards)

- Objects related to themes and topics

- Story board pieces

- Pictures to sequence/picture stories

- Picture puzzles (e.g. Spot the difference, Where's Wally?)

- Jig-saw puzzles

- Toys e.g. blocks, construction toys, cars, dolls, puppets, masks, etc.

- Plastic bottles, jars, boxes, etc.

- DVDs with stories, poems, action rhymes, mime and sign songs

- Deaf television programmes (e.g. DTV, SABC programmes, Zwakala)

- Sign language dictionary for young children

- Simple instructions

- Simple descriptions

- Children's animated films (no voice)

- Recorded name signs

- Announcements

- Messages

Grade 1

- Theme charts, books with pictures and posters

- "Logos"

- Recorded name signs

- Pictures or recordings of finger spelling

- Messages

- Announcements

- Familiar advertisements

- Photographs

- Colour charts

- Number charts / time-line charts

- Games (e.g. hand-shape flash cards)

- Objects/props related to themes and topics, puppets, masks, etc.

- Story board pieces, jig-saws, tangrams and matching puzzles

- Pictures to sequence/picture stories

- Costumes for role-play

- DVDs with stories, fables, legends, poems, action rhymes, mime and sign songs

- Deaf television programmes (e.g. DTV, SABC programmes, Zwakala)

- DVD player, television, video camera (tapes, memory sticks, etc.)

- Sign language dictionary for young children

- Instructions of growing complexity

- Simple descriptions

- Children's animated films (no voice)

Grade 2

- Pictures and posters

- Magazine pictures and advertisements

- Photographs

- Games (e.g. hand-shape flash cards)

- Objects/props related to themes and topics, puppets, masks, etc.

- Pictures to sequence/picture stories

- Costumes for role-play and other signed activities

- DVDs with stories, fables, legends, poems, action rhymes, mime and sign songs

- Deaf television programmes (e.g. DTV, SABC programmes, Zwakala)

- DVD player, television, video camera (tapes, memory sticks, etc.)

- Sign language dictionary for young children

- Instructions of growing complexity

- Rules (e.g. rules for a game)

- Lists

- Descriptions

- Dialogues and conversations

- Jokes

- Children's animated films (no voice)

- Calendar

- Recorded signs related to learning areas eg. Maths and Science

- Graphs / table charts

- Messages e.g. Thank you / get well

- News items

Grade 3

- Pictures and posters

- Television advertisements

- Photographs

- Games (e.g. handshape flash cards)

- Objects/props related to themes and t

Communication Difficulties
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Kommunikasieprobleme van
die Dowe Kind in
Khayelitsha en Worcester
'n Navorsingsanalise

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Iweengxaki zonxibelelwano zabantwana
abanengxaki yokungeva ngeendlebe
baseKhayelitsha naseWorcester

Department of Cultural Affairs and Sport
Departement van Kultuursake en Sport
Isebe Lemicimbi yeNkcubeko NeMidlalo