CHAPTER 1
PROBLEM STATEMENT AND RATIONALE

1.1 Introduction

This chapter provides a background to the study, describing the difficulty experienced by hearing parents of deaf children in learning to sign. The rationale for the sign teaching strategy explored in the study, that is the use of graphic representations of signs as an aid to sign learning, is discussed. An explanation of the terminology and the abbreviations used, and a brief overview of the chapters are also presented.

1.2 Background

Hearing parents of deaf children have the same needs as all parents to communicate with their child in order to fulfil their role as parents (Bouvet, 1990). However, parent-child interaction is seriously threatened when parents cannot communicate in their natural spoken language, and have to learn to communicate through a visual modality using Sign Language. More than 90% of deaf children are born to hearing parents who have had no prior experience with deafness and the use of signing (Bornstein, 1990). Parents must communicate (Bornstein, 1990, p.129). The importance of communication mode-match, early and consistently between deaf children and their hearing mothers in the light of promoting mental health - irrespective of communication modality - and success with the language acquisition of children, has been raised in the literature (Wallis, Musselman & Makay, 2004; Yoshinaga-Itano, 2000).

In South Africa, many parents are severely disadvantaged as they are unable to access Sign Language (Joseph, 1998; Cohen, 1996). This situation is highlighted by a study of 45 mothers of children attending signing schools in KwaZulu-Natal (KZN), South Africa (SA), which found that less than 5% of mothers had attended signing classes, and had poor signing skills, with 65% having a sign vocabulary of between 0-20 signs. These parents reported having to learn to sign from their children or by using a sign dictionary (Joseph, 1998). Cohen (1996) found impoverished signing at a school in Gauteng, SA, and attempted to develop a sign booklet to assist parents to learn to sign. This was because many of the parents, even after being in a signing programme for a year, had poor signing skills and experienced difficulties in attending classes, citing time-constraints as a hindrance.
Therefore, a lack of resources, support systems and policy to assist parents in learning South African Sign Language (SASL) is a challenge in SA (DEAFSA, 2006).

Although signing has been used in the education of the deaf since the 17\textsuperscript{th} century, it is only modern education of the deaf in the 20\textsuperscript{th} century that appears to have encouraged the practice of parents signing, with attempts to teach parents to sign (Moores, 1996). While successes have been reported in parents learning to sign, for example in Sweden, where a bilingual approach in education of the deaf is implemented (Mashie, 1995), literature repeatedly reveals poor signing skills of parents generally (Mindel & Vernon, 1987; Bess & Humes, 1995; Gregory, Bishop & Sheldon, 1995; Mashie, 1995; Lane, Hoffmeister & Bahan, 1996). It is suggested that more than half of the number of children in signing programmes may not be exposed to signing in the home (Bess & Humes, 1995). The lack of communication through signing, as well as impoverished oral language as a result of the hearing loss, has lead to descriptions of Deaf children as strangers in their own homes (Mindel & Vernon, 1978; Joseph & Alant, 2000). Parents’ use of signing is said to be related to their attitude towards signing, their ability to sign, and access to learning to signing, all of which are inter-related (Bornstein, 1990).

While the need for parent training in signing is evident, studies on teaching strategies are virtually non-existent. The debates about the type of signing used in the education of the deaf, that is sign systems versus natural Sign Language, have further complicated the case for sign learning by parents. Further, the traditional methods of sign learning, such as signing classes offered at school, have been challenged (Swisher & Thompson, 1985; Lane et al., 1996). One of the criticisms is that this system does not prepare mothers with signing skills adequate for spontaneous and meaningful communication (Swisher & Thompson, 1985). These authors suggest that the difficulty experienced by parents in learning to sign has been underestimated, and recommend that alternative strategies be considered in assisting parents learn to sign. These include exposure to signing other than the traditional sign classes at school, increased practice with signers, and consideration of conceptual signing, that is, Key Word Signing (KWS) as opposed to Manual Codes of English (MCE) (Grove & Walker, 1990). In addition, the methods currently available seem to favour a small group with resources in terms of time and finances (Moores, 1996), especially within the early intervention approach. While group learning via Sign Language classes for hearing individuals has a place in learning Sign Language as a second language, this may not be a
format readily accessible or suitable to parents of newly diagnosed, and specifically late identified deaf children, as parents may have very specific language needs pertaining to communication with their child.

Sign Language is a visual-gestural language which occurs in three-dimensional space. Thus, although Sign Language is best learned through observation and from demonstrations by a signer, the need for support via graphic aids to assist with practice and self learning appears to be critical. Graphic aids, such as photographs and line drawings (sign illustrations), in learning to sign have long been used as supplements to signing classes, and continue to be popular (Flodin, 1994; Costello, 1995). The demand for signs in graphic format as an aid to sign teaching became evident in the 1970s and 1980s during the era of Total Communication (TC), when many “Sign Language” dictionaries and “Sign Language” story books for children were published for use with the pedagogical sign systems developed. Currently, there are many Sign Language dictionaries and manuals in print. However, the impact of these graphic representations as an aid to sign learning has not been researched.

The use of communication displays, using graphic representations of signs, has been widely practiced within the field of Augmentative and Alternative Communication (AAC) as an aided communication approach providing access to language and communication for individuals with little or no functional speech (Beukelman & Mirenda, 1998; Bornman, 2005). While there are many display options, the use of thematic displays include graphic symbols for all items needed for a particular scenario (Burkhart, 1993; Goossens’, Crain & Elder, 1995). Communication partners have also been trained to use the displays through specific approaches, such as Aided Language Stimulation (ALS) (Goossens’, 1994). The approach is one of pointing to key symbols while speaking. The parallel to KWS is evident.

Thus it appears that theme-based graphic communication displays could be used as a sign teaching strategy for hearing parents of Deaf children. The use of a graphic display, with sign illustrations of signs relevant to a specific context, and arranged for easy access and recall, could assist parents in learning to sign meaningfully, and with relevance to daily living. The vocabulary arrangement in this format could present a variety of syntactic structures that would facilitate interactive communication, instead of simply being an exercise in vocabulary acquisition. The communication display lends itself to the construction of spontaneous messages, while the theme-based format promotes quick access
to relevant vocabulary. In addition, signs presented on a graphic display offer visual permanence, and could allow the individual a measure of independence in the learning of signs by assisting with recall and practice of signs. Also, the print medium is believed to be a cost effective and accessible medium for the majority of South Africans.

This study therefore aims to place sign illustrations into a meaningful context and to determine their influence on sign learning. While the use of sign illustrations has a long history in sign teaching programmes, their contribution to sign learning has been mainly anecdotal. There is a lack of information on the actual contribution of sign illustrations in learning signs. Thus the study will investigate the influence of sign illustrations in the context of a graphic display as a sign teaching strategy for hearing parents of Deaf children.

1.3 Terminology

*Chereme*: The term refers to the sub-lexical structure of signs, with regard to grouping of sign parameters such as handshapes, locations and movements, similar to the concept of phonemes in spoken language (Fischer, 1982).

*Deaf*: The use of the uppercase “d” will be used to refer to persons who belong to a minority group were Sign Language is central to group functioning (Lane et al., 1996).

*deaf*: The use of the lower case “d” in the word deaf will be used to refer to the degree of hearing loss in the categories of severe (71-90 dB) and profound (91 dB or greater), based on the pure-tone average of the better ear unaided (Scheetz, 1993).

*Gloss*: The translation of a sign into the English word or words which represent the same concept (Costello, 1995).

*Iconicity*: Refers to the visual relationship between a symbol, either a sign or graphic symbol, and its referent. It relates to both transparency and translucency (Lloyd, Fuller & Arvidson, 1997).
**Key Word Signing**: The practice of signing only the main words and concepts in a sentence while speaking (Loeding, Zangari & Lloyd, 1990).

**Manual communication**: The generic term used to refer to any form of signing communication including Sign Language, fingerspelling, and the systems which use signs to represent English (Costello, 1995).

**Sign**: A unit of Sign Language which represents a concept. A sign is made with one or both hands formed in distinctive handshapes. The sign has a location, orientation, and movement that is unique to it (Costello, 1995). In this study, a sign will be denoted by a single word in uppercase (Rosenstock, 2008).

**Signing**: The term refers to the modality of signing and will be used to refer to both Sign Language and sign systems (Fischer, 1982).

**Sign illustration**: Refers to the graphic representation of the sign and will be denoted by the word in uppercase and italicized (von Tetzchner & Jensen, 1996).

**Sign Language**: Is a visual-gestural system of communication. It has no spoken correlate. It is the native language of Deaf people and was created by Deaf people for the purpose of communicating with each other (Costello, 1995).

**Sign system**: The term refers to manual codes developed for educational use. The syntax is that of the spoken language, with speech accompanying signs. It involves using the signs from a Sign Language to represent the spoken language (Kyle & Woll, 1988; Loncke & Bos, 1997).

**Translucency**: A type of iconicity which refers to the ability to recognize the physical relationship between the sign and the referent when the referent is known (Loncke & Bos, 1997).

**Transparency**: A type of iconicity which refers to the direct recognition of the sign and can be operationally defined as the “guessability” due to some physical resemblance of the referent, or some aspect of the referent (Loncke & Bos, 1997).
1.4 Abbreviations

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<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>AAC</td>
<td>Augmentative and Alternative communication</td>
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<td>AATD</td>
<td>Adapted Alternating Treatments Design</td>
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<td>ALS</td>
<td>Aided Language Stimulation</td>
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<td>ASL</td>
<td>American Sign Language</td>
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<td>DEAFSA</td>
<td>Deaf Federation of South Africa</td>
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<td>KZN</td>
<td>KwaZulu-Natal</td>
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<td>KWS</td>
<td>Key Word Signing</td>
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<td>MCE</td>
<td>Manual Codes of English</td>
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<td>SA</td>
<td>South Africa</td>
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<td>SASL</td>
<td>South African Sign Language</td>
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<td>USA</td>
<td>United States of America</td>
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<td>SEE I</td>
<td>Seeing Essential English</td>
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<td>SEE II</td>
<td>Signing Exact English</td>
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<td>TC</td>
<td>Total Communication</td>
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1.5 Chapter Outlines

Chapter 1: The chapter introduces the study. Background information is presented in terms of providing a context for the study. In addition, terminology is explained and an outline of the chapters that will compose the research report is presented.

Chapter 2: This chapter will focus on the theoretical underpinnings of the study by exploring the literature related to strategies used to teach Sign Language, the issues facing parents of deaf children in learning to sign, and the use of graphics in sign learning.

Chapter 3: This chapter will present the methodology used in planning and executing the study. Issues of reliability and validity are discussed with regard to the various procedures conducted. The design and strategies used are presented and defended in terms of the literature.
Chapter 4: The results are presented and discussed in terms of the stated goals. Methods of analysis used and the data obtained in the study, with interpretation, are made available for scrutiny.

Chapter 5: This chapter addresses issues raised in the discussion, with conclusive comments on the study. The research implications arising from the outcomes are presented and recommendations are made with regard to future research in this area.

1.6 Summary

This chapter presented the rationale for the study by highlighting the difficulties experienced by parents of deaf children in learning to sign. The use of the graphic medium, with a format of sign representations in a graphic display, drawing from the field of AAC is suggested as a strategy to teach parents to sign. Finally, an outline of each of the chapters was given.