EXPERIENCES OF INTEGRATION FROM LANGUAGE UNITS TO MAINSTREAM SCHOOL FOR CHILDREN WITH SPECIFIC LANGUAGE IMPAIRMENT

Thesis submitted in accordance with the requirements of Liverpool John Moores University for the degree of Doctor of Philosophy by:

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February 2001

ABSTRACT

The purpose of this study was to examine the experiences of children with Specific Language Impairment who had integrated from a Language Unit to mainstream school. The aim of the study was to explore the development of the children in the areas of language, academic ability, and psychosocial performance both during and after that period.

Data was collected from 40 children in Phase 1 of the study by means of a structured interview schedule (Stone 1991). In Phase 2, the prospective second phase, 7 children were asked to complete the Pictorial Scale of Perceived Competence and Social Acceptance (PSPCSA) (Harter and Pike 1984). In both phases, parents of the children took part in unstructured interviews using a chronological or life history approach advocated by May (1993). Teachers in Phase 1 completed the Teacher Rating Scale (Urwin 1988) and in Phase 2, both language unit and mainstream schoolteachers completed the appropriate section of the PSPCSA.

A combination of qualitative and quantitative methodologies was used to access the range of experiences of the children and the views of their parents and teachers. Analysis of the data revealed a lack of planning and preparation on the part of mainstream schools for the children during the short integration process. There was minimal collaboration between language units and mainstream teaching staff. The children's statement of Special Educational Need terminated for the majority after 3 months in mainstream school. No further monitoring of the children's verbal abilities took place after that, although a third of the children had continuing speech and language problems.

Despite the general failure of the mainstream system to support these children, those who needed help in academic areas did receive it on an ad hoc basis. Two thirds of the children had help with academic subjects, although teachers rated these children as average. In the second phase, teachers showed more concern over the academic and social abilities of the children.

The children saw themselves as no different from their mainstream peers. This finding reflects the sometimes overly optimistic views of children in the younger age groups, although there is some evidence from the study that children can be aware of their verbal limitations much earlier than what is generally held to be the age of self awareness at approximately 8 years.

Children with SLI in a mainstream setting continue to have difficulties for several years after integration. Parents in this study frequently expressed the view that they would have liked the children to remain in the language units because of the better quality of education they provided.

The value of the study lies in its in depth exploration of parent and child views and experiences of SLI within the education system using a combination of research approaches. Increasing the involvement of parents and children in the educational decision-making process is widely advocated. Understanding child and parent perspectives in this area is therefore of considerable importance

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ACKNOWLEDGEMENTS

Sincere thanks are due to my supervisors Professor Sheila Glenn and Dr Christina Lyons for their support and encouragement throughout this project.

Thanks are due to the group of parents from AFASIC without whose commitment the project would not have begun. I would particularly like to thank Mike Clifford for his encouragement and interest in the early days of the project.

I would like to acknowledge the willingness of the two LEAs to provide my own initial funding. I am indebted to their administrative staff for allowing me to share their workspace and tea-making facilities at times during the data collection phase of the project.

I would also like to thank the staff of the language units for their interest in the work and for the enthusiasm they showed in helping to get the project under way in the early days. Thanks go to all the teachers and headteachers who contributed to the project and who always made time to see me.

The support of many of my colleagues has been invaluable throughout the project. Particular thanks go to Mr Phil Deeks, Ms Clare Simms, Dr Linda Mason, Dr Ffion Lloyd-Williams and Mrs Jo Thomas.

Warm thanks go to my dear friend Dr Jan Bogg, whose support has been unfailing and without whom I would not have embarked on this project.

Every thesis benefits from the input of a good proof-reader, and this one is no exception. My friend Martin Walker was an excellent proof-reader. His interest, enthusiasm and good humour helped to keep me on track, when the end was so near but yet seemed so far away.

Special thanks go to Ian Rannard whose support allowed me the opportunity of embarking on a new career at the ripe old age of forty. Thank you to all my friends and family for their support, love and patience during the project. Thanks are also due to my partner Charlie for his unfailing belief in me and for giving up all semblance of a normal life, particularly in the last few weeks of the project.

My biggest thanks go to the children, their parents and teachers for giving so generously of their time. Children with SLI are a very special group of people. I am grateful for the chance to have shared some of their time with them.

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EXPERIENCES OF INTEGRATION FROM LANGUAGE UNITS TO MAINSTREAM SCHOOL FOR CHILDREN WITH SPECIFIC LANGUAGE IMPAIRMENT.

1.0 Introduction

The study examines the experiences of children with Specific Language Impairment (SLI) from a psychosocial and educational perspective. SLI is a condition which affects children of normal hearing and intelligence, impairing their ability to acquire and use language. The source of the problem has not been clearly identified, although it is thought to affect 5% to 10% of school age children. This study seeks to explore the effects of the condition on children's lives from the time of detection to language unit entry and their subsequent experiences in mainstream school.

Combined accounts of parents, teachers and the children themselves are sought through both the retrospective first phase of the study and prospective second phase. The process of integration into a mainstream classroom is examined, as well as its effect on the self perception of the children from the time of entry and for up to one year after. The aim was not to concentrate on linguistic ability *per se* but to explore the process of integration into mainstream school from a number of different perspectives.

2.0 Background

This study originated from the concerns of a group of parents whose children had been diagnosed with speech and language disorders. The Education Act of 1988 had introduced a market-led approach to the whole educational system, and parents were concerned as to the ways in which the changes would affect special educational provision for their children.They requested a study be undertaken to determine the effectiveness of Special Educational Needs (SEN) provision for children with speech and language disorders in two Local Education Authorities (LEAs).

The study concentrated on children who had attended Language Units and had subsequently been integrated into mainstream school under the terms of the various Education Acts from 1981 to 1993. A small number of the respondents were children later placed in special needs education under the statementing process. As the majority of respondents were children who had integrated into mainstream education, it was felt that this particular group would provide a broad picture of SEN provision.

3.0 Contents

Chapter One examines the development of language in typically developing children. The biological and environmental influences of this process are explored in what is considered to be the normal sequence of development in speech and language acquisition. Particularly relevant to this study is society's need for language, in order to support the social structure and allow formal and informal social networks to be established. A child who has difficulty in communicating will have limited opportunities in this area, and therefore an examination of the function of language in society is also included in this section.

Chapter Two traces the history of speech and language disorders, their incidence, prevalence and definition. The tendency to interchange terms to describe these disorders can be confusing, but in this can be seen the wide range of speech and language problems which defy neat categorisation and, as in many learning disabilities, remind the reader of the heterogeneous nature of the problem. Varying inclusion criteria have been used in earlier studies which again make it difficult to calculate numbers of children affected by different types of disorder. Follow-up studies of children with Specific Language Impairment (SLI) are reported; however, the emphasis has predominantly been on academic achievement rather than psychosocial adjustment.

Chapter Three provides information on the current statutory provision of special needs education for children with SLI in Britain today and how that provision has evolved over time. Language unit provision in particular is examined; it is not uniformly available and tends to vary in nature from one LEA to another.
There is also consideration of the inclusion /exclusion debate, which is gaining more prominence at both national and international levels.

Chapter Four addresses study design, methodology and procedure. The structure of the study design was based firmly on a parent, child and teacher centered approach. Employing an exploratory design allowed all three groups to tell their own story in their own way, adding richness to the data and giving a more complete picture of the experience of SLI from different perspectives. This was particularly relevant for parents, whose views are seldom canvassed in the SLI literature. Hence the adoption of an unstructured but focused approach for parent interviews.

Children and teachers were also encouraged to give their own views on the condition of SLI, but were also asked to respond to more structured means of data collection. This was especially relevant for children, where focused responses were needed.

Chapter Five reports on study results from the different perspectives of the child, parent and teacher. The retrospective first phase records the experiences of children who attended language units in two LEAs, using a triangulation of methods to enhance study outcomes. The prospective second phase explores the way in which children dealt with the process of integration from language unit to mainstream and how they subsequently fared in a larger mainstream class over a period of one year.

Chapter Six includes discussion of results and conclusions from the study with recommendations for future research in this growing area of speech and language development. In Phase One of the study, information was collected from 40 children, their parents and teachers. Parent interviews gave the background to the speech and language disorder from detection through diagnosis to intervention. Parents' stories followed a consistent pattern of trying to convince professionals there was something wrong with the child's speech and language and the difficulty encountered in getting those professionals to take some action. Once speech therapy started then at least their concerns were being addressed, but overall it had little impact in solving the problem, in the parents' view at least. Language unit intervention provided the solution. All parents praised the work of the units and were reluctant for their children to integrate into a mainstream school. Parent comments on the issue are included in this chapter.

The children themselves showed some resilience in going from a supported environment into a large mainstream class. To a large extent, the success of the move depended on the personal resources of the child, because they received no formal support after leaving the language unit. The children only received one visit from a speech therapist three months after integration. If their speech and language was thought to be progressing, no further contact was arranged and the statement of special educational need was terminated. From then on, it was up to the child. Interestingly, teachers in mainstream school rated the children as no different from other children in the class. One Special Educational Needs Co-ordinator (SENCO) didn't know the child he had been asked to comment on had attended a language unit or had ever had a communication problem.

Phase two of the study echoed these findings. Seven children were followed from language unit to mainstream school over the course of a year. The children, their parents and teachers were seen at three time points during the year and information was collected on the experiences of the children as they integrated into the mainstream system. The results of parent interviews and teacher rating scales were broadly similar to the previous retrospective accounts from the first phase of the study. Both of these groups felt the children were generally making progress.

However, the results of child ratings in the areas of cognitive competence and peer acceptance showed a decline over the year, indicating that their own views differed from those of their parents and teachers. It would appear that the resilience of the children, rather than support from the system they returned to, was the major influence on integration outcomes.

CHAPTER 1

DEVELOPMENT OF LANGUAGE IN TYPICALLY DEVELOPING CHILDREN.

1.0 Introduction

Over the last century the study of language and speech has concentrated on three main areas: linguistics, which explores the structure of a language including its grammar; neurolinguistics, which attempts to explain how the structure of the brain governs the reception and production of speech; and sociolinguistics, which examines the differences found in the use of language in different social groups (Dunbar 1996). To understand the needs of children with disordered speech sound systems, a brief exploration of all three areas is useful, particularly in relation to what is considered normal speech and language development. The next section examines the linguistic features common to a language which children acquire in the normal course of events.

1.1 Linguistics

Most authors agree the basic elements needed for the development of any language are phonology, semantics, syntax and pragmatics (Shaffer 1985; Crystal 1987).

Phonology

This refers to the basic sound system of a language, for example, there are 44 sound units or phonemes in the English language. Phonology, therefore, studies the pronunciation system of any particular language. Each language has its own rules for combining phonemes, and children must learn to pronounce these sounds, to understand what they hear, and in turn to make themselves understood when they speak.

Semantics

The semantic nature of a language is related to assigning meaning to the combined sounds or units of language known as morphemes, as well as to the meaning of words and sentences; in other words, what to say and how to say it.

Syntax

Syntax deals with the structure of a language, how words combine to make meaningful sentences, and how grammatical rules are incorporated into the language to add to its overall meaning. Normally children will acquire and use the basic syntax of their language by the time they leave school. Children with severe learning disability will go through the same stages but at a slower rate (Shaffer 1985).

Pragmatics

Pragmatics is the study of factors which govern a speakers choice of utterances for instance, when someone chooses to speak, turn taking, and appropriate subject matter for the situation. A child must also learn how to use language in different settings, in the appropriate context, so that what they are saying makes sense to those around them. This ability is also known as social editing skill.

Common stages of language acquisition known as linguistic universals, that all children normally pass through when they are in the process of acquiring a first language, are found in all cultures (Leonard 1999). There is, therefore, a distinct sequence to vocal development. Deaf infants and hearing infants alike babble in the same way, although this early babbling does not progress in deaf infants (Shaffer 1985).

The rate of children's language development differs from one individual to the next, and age alone is not considered a good indicator of language ability (Dale 1976). Some children learn faster than others. Because of this, therapists adopted the mean length of utterance (MLU) as an indicator of language ability, defined as the average length of the child's utterance in morphemes (Brown 1973). In recent years the number of meaningful elements in an utterance has been found a more useful indicator (Dale 1976). The meaningful elements may be words, but can also be smaller than words; for example, the word '*cats*' consists of two elements, the word '*cat*' and the plural element '*s*', a morpheme which although it cannot stand on its own, is a unit that can combine with many other words in the linguistic system.

By absorbing the structural and grammatical elements of language, a child can ultimately use these abilities in taking his/her place in society.

Having looked at what a language consists of and what is required to use language efficiently, the next area to be examined is neurolinguistics, which traces the development of speech and language acquisition in the typically developing child, and gives a review of the ideas surrounding the biological basis of language and theories of language development.

1.2 Neurolinguistics and the process of communication

Language has been thought of by some neurologists as a natural by-product of our large brains, needing little explanation other than that. However an exploration of the nature of language has not been helped by biology alone (Dunbar 1996).

Developmental changes

Epstein (1991) considered there were 5 major periods of brain growth: 3-10 months, 2-4 years, 6-8 years, 10-12 years and 14-16 years. In addition to the physical growth of the brain, Piaget (1932) suggested that language development should be viewed in the context of the child's overall cognitive development, which he described as a series of developments in sequence. No direct links between linguistic development and cognitive development have been made (Crystal 1987), although this is a contentious area which has a bearing on the association between intellectual retardation and language ability.

Neurological organisation

Scientific interest in the neurological organisation of language began in the mid 19th century. In the 1860s, Broca identified an area in the lower part of the left frontal lobe of the brain responsible for the production and comprehension of speech, which, if damaged, produced an aphasia where speech was understood but could not be accurately reproduced. Dax in 1865 suggested that in the developed brain, language processing occurred predominately in the left hemisphere. Later work by Wernicke in 1874 showed that, where damage to the top of the left temporal lobe had occurred, patients were able to speak in a grammatically correct and organised way, although what they said bore little relevance to the conversation. This type of aphasia was of a receptive nature, where auditory association could not be fully established.

More recently, Lieberman (1984) questioned the proposition that a brain area dealing mainly with expressive problems ('Brocas area') could also produce grammatical defects.

Bordering the temporal and parietal lobes of the left hemisphere is the *angular gyrus*, the key area for reading and writing. It contains visual word patterns formed from incoming visual stimuli, which are transmitted to Wernicke's area. The auditory form of the input subsequently produced then combines with the visual, and comprehension occurs (Green 1994). Damage to Wernicke's area therefore impairs both hearing and reading.

Hemispheric specialisation

In the 1950s, Sperry reported his work with brain damaged patients, which added to the existing research on hemisphere function (Sperry 1982). Patients with epilepsy studied by Sperry had undergone *commisurotomy* or removal of the connecting bridge between the left and right hemispheres known as the *corpus callosum*. Sperry demonstrated that, in these patients, the right hemisphere could process simple forms of speech such as nouns, and appeared to be more efficient than the left in dealing with pictures and facial recognition.

The left hemisphere of the brain tends to be slightly larger than the right and is dominant for language in most people, especially those who are right handed

(Lieberman 1984). Because of the larger size of the area dealing with linguistic processing, the suggestion has been made that the foundations for language lateralisation are embryological, and hence biological (Scovel 1988). There is also the possibility referred to by Dunbar (1996) that, at the time when speech evolved, there was more free space in the left hemisphere, the right already being concerned with other functions, such as emotional states and their control. However, there is also strong evidence to suggest that some tasks related to language, such as sequential tasks of facial recognition for example, are handled by the right hemisphere, so it seems that language processing is not wholly dealt with by the left hemisphere (Scovel 1988).

Evidence from brain damage

Physical brain growth can be affected by environmental factors such as diet, malnutrition and the amount and type of sensory stimulation to which the child is exposed. Lateralisation arguments move from the idea that the process is completed by the age of five, to a longer timescale for completion before the onset of puberty. Basser (1962) recounts fifty-two cases where removal of the left hemisphere of the brain (*hemispherectomy*) was performed for severe epilepsy and invading brain tumours. The operations were performed on patients between the ages of 1½ and 13 years, with little adverse long term effect on linguistic abilities, suggesting that lateralisation of language is possibly not completed by the age of five.

If an injury occurs prior to puberty, then the right hemisphere can assume the functions of the damaged left area (Lenneberg 1967). Cases of children with left hemispherectomies, or with left hemisphere damage and normal performance. would seem to suggest that the absence of the left hemisphere does not hinder the return of speech functions. The language/speech coding would appear to be adopted by the right hemisphere (Lenneberg 1967). Even so, recovery from brain injury is more likely if the child sustained the injury before the age of five (Shaffer 1985). Both adults and older adolescents who sustain injury require extensive therapy to regain some language in the recovery phase, but recovery is rarely complete.

Steps in speech production

Conceptualising is the first step in the production process, when the speaker thinks of what he or she wants to say. Varying amounts of planning go into this stage, and it is not uncommon for some people to speak first and think later (Zimbardo, McDermott, Jansz and Metaal 1995).

The second step in the production process translates conceptual structures into linguistic form. How this is achieved is open to debate in terms of what the stages are in the speech production process. Some believe the first stage involves the syntactic structure of what is to be said, to which are added content words (Crystal 1984). Others view the first stage as more concerned with choosing the right words from the mental lexicon or vocabulary store (Zimbardo et al 1995). What we want to express is first encoded at a grammatical level, which triggers a syntactic structure for the utterance, which is then produced at a phonetic level. Whichever comes first, the brain ultimately processes the message so it can be sent through the nervous system, which then becomes the neurological stage of encoding transmission.

Step three, the physiological stage, is when the message reaches its destination, and includes gestures. Step four is anatomical, where the muscles move the body structure, mouth and tongue to produce speech.

Similarly, there is a three-stage process in the reception chain, where anatomical structures of the ear and eye (and hand for a blind person) receive input. This gives rise to the second stage, where physiological processes come into play e.g. the bones of the middle ear moving to form nerve impulses. The third stage involves neurological decoding.

Language difficulties can be part of a general learning and cognitive dysfunction. They can also be due to dialect, conductive or sensori-neural hearing loss which affects language comprehension, a deficit in the neuromotor control of vocal chords affecting language production, or inadequate early learning experience (Beveridge and Conti-Ramsden 1987; Dockrell and McShane 1992). For children with Specific Language Impairment however, there appears to be no specific link to any of these features. The underlying aetiology of SLI is still unknown and it is a category defined by exclusion of known causes (Donaldson 1995; Crystal 1984).

1.3 Language development in typically developing children

Almost from birth, most babies are responsive to speech. They react by moving their limbs, opening their eyes and recognising their mother's voice from as early as three days of age (Shaffer 1985). It has been shown that, even at this early stage, speech sounds tend to elicit more electrical activity from the left cerebral hemisphere than from the right, a phenomenon which persists into adult life (ibid). Between 10 and 13 months of life (before they can talk) babies and infants begin to pay more attention to speech sounds than to other sound patterns such as music. Typically developing infants can cry, coo and begin to combine consonant and vowel sounds by roughly 3 to 4 months, as they progress to a stage of babbling at around 6 months, where phonetic combinations such as '*baba*' and '*papa*' are produced.

Before the arrival of the first words, children will produce sounds or *vocables*, which they attach to objects or actions, having discovered that some speech sounds have consistent meanings. Later stages of babbling and early vocables are composed of approximately the same sounds

By 7 to 10 months, the sounds begin to appear as meaningful speech, leading to the first word utterances containing the phonemes or sound units that occur in the language the child has been hearing. Gestural language becomes obvious at 8 to 9 months, and is characterised by the child opening and closing its hands while reaching out for something. Pointing is accompanied by noises to emphasise the request. Deaf children exhibit similar gestures, and children with Specific Language Impairment (SLI) can display these features long after this stage of language development has passed. What is not yet known is whether the use of gestures is delayed in children with SLI..

Children as young as 18 months show adult-like gaze patterns when interacting with a parent, looking away when it is their turn to speak and looking back again when it is the parent's turn to speak. Children as young as two can adapt the form of their language to the situation they are in or the person they are talking to, and four year olds can use different language when speaking to younger children or to adults. Sociolinguistics has established that children in all cultures show a similar pattern of phonological development, with consonants from the back of the mouth such as *'k'* appearing before frontal consonants like *'m'* or *'b'* (Shaffer 1985). The sequencing of vowels is reversed; frontal vowels such as '*e*' emerge before back vowels, e.g. '*a*' as in '*mama*'.

The period towards the end of the first year consists of single words or *holophrases,* which represent an entire sentence worth of meaning. These single words may only be intelligible to one or two close family or companions. Pointing and expressions such as '*awa*' for 'I want' or *'ba'* for 'ball' can accompany them.

The *telegraphic* period at 18-24 months of age is characterised by utterances resembling the abbreviated form of a telegram, where high information words are retained, and low information words are dropped. Adults also encourage the child to expand its telegraphic utterances in a grammatically improved form. Dale (1976) suggests that children are able to analyse adult speech and adapt this to their own limited span.

There is a basic difference between child language and adult language. Child language is simpler, containing for example, nouns, verbs and adjectives, but omitting other types of words such as prepositions and conjunctions, and endings such as plurals (ibid). The reason for such omissions may be due to the child's naturally occurring short term memory capacity. There is also the suggestion that the child is aware of these elements in adult speech, as well as knowing their meaning, but simply leaves them out, much as adults make mistakes in their speech (ibid).

Once the child starts to speak, they begin with one or two intelligible words, increasing over the next 3 to 4 months to roughly ten words. Once this milestone is reached, their vocabulary increases more rapidly until, by 19 to 20 months, there can be as many as 50 words or more. The increase appears to be linked to the language the child is exposed to, in that the more a mother or familiar caregiver talks to the child, the greater the vocabulary will be (Shaffer 1985). It has been shown that, by 24 months, children can have a vocabulary of 186 words on average, by the age of three be able to use about 1000 words, and, by the age of six, can use and understand approximately 13,000 words (Dunbar 1996).

1.4 Theories of language development

How humans develop language and speech is open to continuing debate. The behaviourist view was that language developed through a series of steps from stimulus-response through trial and error, to reinforcement and reward. Dale (1976) put forward a communication pressure hypothesis, suggesting that children have to learn to speak clearly and grammatically because, unless they do, their needs are unlikely to be met. In reality, parents are likely to respond to the child's needs no matter how grammatically incorrect their utterances are (Brown, Cazden et al 1969), thus reinforcing both correct and incorrect speech while attending to the child's expressed needs. Where there is a complete absence of speech sounds or where utterances bear no resemblance to sounds made by a typically developing child, parents still respond to the child's needs by following non-verbal cues.

The behaviourist theory, in particular that of Skinner (1957), suggested that adults recognize sounds in the child's speech which are similar to those in adult speech patterns. By selectively reinforcing these sounds, adults encourage the child to produce more grammatically correct utterances, until eventually the child will talk like an adult. However, a child may come into contact with adults who do not produce such grammatically correct utterances the effect of which is difficult to define, particularly in relation to home and other environments. In addition, competence in speech sound reproduction needs to be considered along with the meaning contained in the utterance. Adults often seem more concerned with the correct meaning of an utterance than its grammar. Overall, whether or not parents shape their children's speech seems to centre around the semantic content of the utterance rather than on its grammatical correctness (Brown, Cazden and Bellugi 1969).

Empiricist view

Since the early philosophers, the empiricist/nativist debate has continued to search for the reason why human language develops in the way it does. The empiricist argument considers that children learn a language by listening to and imitating the words they hear, until they can eventually reproduce the language and dialect of their families and peers (Shaffer 1985). However, if children were to imitate the sounds and language they hear from birth, they would reproduce adult grammar from the outset, which does not happen. The child therefore does not learn the rules just by mimicking them (Shaffer 1985)

An important stage in the child's language development. which is not linked to imitation, is shown by some of the earliest utterances. Phrases like '*I goed*' instead of '*I went*' or '*mouses*' instead of '*mice*' show creativity and deductive thinking. and could not have been learned by imitation because they do not usually appear in adult speech (Crystal 1987; Shaffer 1985). Neither can these be considered simplifications of adult speech. A child who watches a door being closed and says '*allgone outside*' has constructed a novel utterance (Dale 1976). This conveys meaning within a grammatically incorrect context, marking the difference between adult and child language

There is a suggestion that maturation of the child's own grammar system is more likely to have an effect than imitation on its own (Crystal 1987). Goodluck (1991). who proposes that the child has an innate knowledge of the particular linguistic system, supports this view. This knowledge then bridges the gap between what the child hears, and the grammar system they eventually use.

Adult sentences are longer and more complex than the child's. Parents and others tend to adjust their speech accordingly until the child understands it. *Baby talk*, *motherese*, or *caretaker speech* refers to modified adult speech with altered intonation patterns, which are attention getting and are also an attempt to invite responses from the child. Simple questions or statements are repeated several times, with the adult becoming more adept at knowing when and where to use such means to produce a response from the child. Intonation patterns rather than grammatical or semantic considerations seem to be what the child responds to initially.

It seems that, for language to develop in the child, they must be engaged in conversation and not merely be a passive recipient of language through, for example, the medium of television. Normally, all the child needs is someone to communicate with and linguistic data to process. To understand its grammatical structures and syntax, the language must be tailored to the concepts that the child is expressing. This sequential progression in language development in children is regarded by some as an innate ability to distinguish sound, to respond to it and to emit meaningful structured utterances in keeping with the mother tongue (Shaffer 1985). The possibility that each child is born with the ability to extract appropriate data from linguistic input allows a system of language organisation to emerge. This organisation is dependent on sensory and motor associations from sensory stimuli to concept formation, imagery, attention, and emotion, to co-ordination of muscle movements as in the communication process itself.

Nativist view

Nativists such as Chomsky (1968) suggested the possibility of an innate neurological programme or Language Acquisition Device (LAD), which becomes activated with the minimum of stimulation. Crystal (1987) suggests that this device combined with exposure to language is how the child learns the grammar elements of a language, for example, selecting the subject and object in a sentence and positioning verbs correctly. Maturation and imitation are contributing factors, but neither on its own is the complete answer (Crystal 1987). This is at the centre of the nature vs nurture debate in psycholinguistics. Nativists argue that in certain circumstances, for example, concerning the rules for pluralization, children, by their grammatically incorrect utterances of *'tooths', 'sheeps'* etc are demonstrating that they are aware of the rules and show this in creative sentences. These plurals do not appear in correct adult speech. Parents gradually adjust the complexity of their own speech as the child's language progresses; the LAD picks up on the new linguistic features, and the child's own speech will be progressively modified accordingly. Features, which spur the adult on to increase the fluency and improve grammatical content, are either absent or unrecognisable in the child with SLI.

Some theorists question the presence of a LAD, using evidence from adults learning a foreign language. Although some adults can acquire levels of fluency after 250-500 hours of tuition, they often fail to achieve complete proficiency of the second language, despite acquiring knowledge of its semantics and syntax (Shaffer 1985). If a LAD were the basis of this process, it should be possible to become as fluent in the second language as in the first or native language. The deep level grammatical structures already in place from one's native language may also contribute to the ability to grasp a second language.

Shaffer (1985) therefore argues against the presence of an innate learning device or LAD, seeing it more as a description of language learning than a true explanation. Shaffer also questions how an innate language processor could sift through linguistic input and infer the rules that govern language. Shaffer argues that this is almost like saying that physical growth is biologically programmed, while failing to identify the underlying factors of nutrition and hormones.

Scovel (1988), who suggests there is a danger in oversimplifying the dichotomies, has also questioned the suggestion of a critical period for child first language acquisition, particularly in relation to learning a second language. He compares this to the 'chicken and egg' riddle, with the comment that this is inherently unanswerable. He proposes that it is neither nature nor nurture, genetic endowment nor environment that governs linguistic development, but a combination of both *over time* that lays the foundations for all human learning.

In an examination of neurological processes concerned with communication, Gordon (1979) suggests that intelligence at a higher level allows the sensory impulses reaching the brain to be given meaning, thereby allowing integration into various cerebral functions. Lieberman (1984) also indicates that humans have particular neural devices that are tuned to the acoustic properties of human speech, and which appear to be species specific. Where a child displays a communication disorder, both environmental and biological factors need consideration. It is possible there is a delay in 'switching on' the various neurological pathways or a problem occurs in the child's language environment. This can lead to verbal language being denied to the child, resulting in social isolation and exclusion from the social group. This is further discussed in the next section, which explores sociolinguistics and the function of language.

1.5 Sociolinguistics and the function of language

Speech is the most common form of communication which we, as a society, use. Language is the abstract system of symbols underlying speech, writing and other forms of symbolic communication (Scovel 1988). Language is considered by Forrester (1996) to be systematic, structured and rule governed, while the actual transmission of language can take many forms. Although normally vocal, it can also be achieved through visual or sign language, through written language, body language and non-verbal communication (Crystal 1984). Language in its written form adheres to specific grammatical rules, for example sentences begin with a capital letter and end with a full stop. Conversations in written form do not really reflect the ordinary informal nature of everyday conversation.

Language in its spoken form is far removed from such restrictions and provides a more realistic picture of how people actually communicate with each other. Informal or colloquial styles of speech are important, as it is precisely these forms of speech that a child is exposed to in the home, and they dominate the language experience in the pre-school years (Crystal 1987). In absorbing the structural and semantic elements of language, a typically developing child can use these abilities to become part of a wider social group.

Dunbar (1996) suggests that it is the way we use our capacity for language that sets us apart from other species. No animal species has evolved a similar system (Shaffer 1985), although recent studies have shown that, in certain circumstances, primates exhibit emotion in their vocal exchanges which is anything but 'mindless gibberish' (Dunbar 1996). However, linguists still consider these exchanges among non-human species to be just an expression of an emotional state, (for instance, a dog barking if it is excited) lacking the features of true language. Lieberman (1984) suggests that the human brain contains the same neural components as the brains of other animals and as such is not qualitatively different from other higher mammals.

What makes humans unique? Some of the features of true language proposed by Hockett (1967) and cited by Dunbar (1996) showed that a syntactical or grammatical structure along with learned as opposed to instinctive features were only found in humans. Studies since the 1950s have shown that when babies and chimps are brought up under the same conditions, even with language training, apes only progress to using 2 or 3 word sentences typical of 2 year old children. The rest of their communication is confined to imitation of their human carers (Dunbar 1996). It would appear that, for example, chimps who had been taught sign language were able to reproduce the symbols of the language, but there was some doubt as to whether or not the chimps were in fact capable of using language inventively to create new sentences (Shaffer 1985). Another reason that apes are unlikely to develop a language sound system is the fact that the anatomical structure of their larynx is unsuited to the production of speech and they do not have the necessary brain structures (Dunbar 1996).

Dunbar (1996) suggests that language arrived in three stages, becoming more complex as group size increased. It began with the conventional contact calls as demonstrated by groups of apes and monkeys. With the arrival of Homo Erectus 2 million years ago, vocal grooming started to replace physical grooming as a bonding mechanism. Group size became larger and there was a need for language to develop further in order to protect food supplies and to guard against predators. From its earliest beginnings, the main function of language has always been as a social support system. Dunbar (1996) also suggests that language is what provides us with the opportunity to share knowledge and experiences in a way that no other species can, thus making us members of a community.

Possession of language puts an individual on a par with his/her peers, providing the means to display cultural competence at a basic level (Manning 1987; Walsh 1989). A person's social worth is determined by their language, upon which rest their chances of social acceptance, intellectual, personal and character worth (Stubbs 1983). Because language is essentially a communicative process, it is generally inseparable from its social contexts. It enables humans to manipulate ideas, communicate them to others and effect change in so doing.

We use language to establish and service our relationships (Dunbar 1996), to exchange information on the social events in our lives, as well as the more weighty intellectual matters of politics and science. Two thirds of conversation time is devoted to social topics concerning personal relationships, personal likes and dislikes, what other people around us are doing, or, as Dunbar (1996) suggests, language and speech fulfil our basic need to gossip. We use language daily to influence the lives of other people; for example, the work of Fishman (1978) shows the contrasting power relationships evident in male and female discourse that reinforce the dominant position of the male. Language also provides us with a device for influencing what people think about us. We notice not just the words that are used, but also infer what is behind the words.

1.6 Implications for the study of children with SLI

Examination of the biological aspects of language development and its structure in relation to typically developing children gives little help in establishing the aetiology of Specific Language Impairment (SLI). The diversity of characteristics associated with SLI adds to its mystery. Consequently, it can be difficult to secure an accurate diagnosis for SLI, particularly in the early pre-school years. This situation is not helped by the fact that up to 60% of speech and language problems in children are seen to resolve spontaneously by the age of three (Bamford, Davis, Boyle et al 1998). Parents and professionals may therefore adopt a 'wait and see' approach to SLI in very young children, in the hope that the problem may be self-correcting.

In SLI, delays in speech and language development are evident in what are considered the early stages of language acquisition, which may suggest a defect in the developing brain. The empiricist view that children reproduce the language they are exposed to also depends on their ability to hear and to process that information. Hearing loss and/or brain damage can result in expressive or receptive difficulties or a combination of both (Rapin 1979).

Genetic predisposition may contribute to the condition. In the last decade, genetic studies of SLI have suggested a degree of *familiality*, in that parents and siblings of affected children show a higher prevalence of SLI than relatives of non-affected children (Rice 1996).

To what extent SLI outcomes are helped by environmental factors is another issue. An impoverished language environment may be one reason for SLI to occur, although nativists contend that only a minimal amount of stimulation is necessary for innate language processors to develop. In addition, siblings exposed to the same language environment may not exhibit SLI. The general view is that the problem of SLI is not related to a lack of linguistic opportunity in the home (Tomblin 1996).

When there are problems with speech and language production or reception, the opportunity to develop usual social networks can be restricted. Society itself depends on communication to service its needs. Since language and speech are the usual means of accomplishing that communication, an inability to communicate using language or speech, or both, increases the risk of isolation from our social groups (Donaldson 1995). Alternative or augmentative communication systems, such as manual sign languages or electronic systems, which are more elaborate, can help in reducing that isolation. However, Donaldson (1995) suggests that these systems are less widely understood, less socially acceptable and are less flexible than spoken language.

The presence of SLI reduces the opportunity for parents and others to gain insight into the thinking and memory of the child. Donaldson (1995) suggests language is a powerful cognitive tool, which serves as a means of mental representation, which, if severely restricted, results in difficulties that are not just confined to the area of communication. Some authors are also of the opinion that SLI automatically includes a degree of cognitive impairment, which is detected if testing is sufficiently rigorous (Bishop 1997).

In the next section, a review of what constitutes SLI is examined, including the array of definitions used to describe the condition. The terminological convention used for this study is established. Outcomes identified in follow-up studies of children with SLI in both the United States and in Britain are reported, which give some indication of the extent to which children are likely to grow out of the condition or need continuing help with speech and language.

CHAPTER 2

SPEECH AND LANGUAGE DISORDERS

2.0 Introduction

This section explores the nature of speech and language problems, taking account of the variety of ways in which these problems have been defined. Factors associated with speech and language difficulties are examined, namely conductive hearing loss and genetic endowment, together with short and long term outcomes of specific interventions in follow up studies of SLI children. This background to the condition of SLI will show the importance of early diagnosis, appropriate intervention and the need to see the condition, not just in terms of a functional disorder, but more as something that has the potential to affect every area of a child's life.

2.1 Definitions

There is confusion generated by the tendency for an interchange of terms, which do not have a uniform meaning. Some clarification is found in the definitions laid down by the World Health Organisation (WHO):

> " *Impairments* are concerned with loss or abnormalities of body structure and appearance and with organ or system function resulting from any cause;
>
> *Disabilities* reflect the consequences of impairment in terms of functional performance and activity by the individual;
>
> *Handicaps* represent the disadvantages resulting from an impairment or disability that limit or prevent the fulfilment of normal roles in life" (WHO 1980).

Looking at the above definitions, it is easy to see where the tendency to interchange terms arises. 'Impaired' speech and language can be the result of a system failure, for whatever reason. It can also be a 'disability', hindering social functioning and communication, and can result in 'handicap' preventing an individual from fulfilling his/her life roles. Collectively, the terms denote an overall loss of functional ability and as a result may become interchangeable. However, a disability only becomes a handicap in a particular social context, and a communication problem affecting all areas of a person's life probably has the greatest potential to become a handicapping condition. As to the cause of the condition known as Specific Language Impairment there is as yet no known aetiology and it is not secondary to any medical condition in the majority of cases (Crystal 1984).

For the purpose of this study I will use the term 'impairment' to cover the system failure the children experience, which is not explained by biological, environmental or medical factors.

2.2 Diagnosis of SLI

SLI is one of a range of developmental language disorders. It is characterised by a delay in the development of language that occurs in the presence of normal non-verbal cognitive skills and normal physical abilities. For example, a child with a non-verbal performance IQ of 100 and a verbal IQ of 65 would be said to have SLI because of the gap in performance between the verbal and non-verbal tests.

Children with SLI who start speech therapy at 7 or 8 years have usually had their problems attributed to other sources such as shyness, withdrawal, introversion, rude and unco-operative behaviour, or behaving badly towards other children (Crystal 1984). Speech production problems are easier to detect than reception problems. In the majority of cases as has already been stated there is no known aetiology and no medical condition.

In the early pre-school years, initial diagnosis of speech and language disorders rests with the medical profession. The doctor as 'expert' is consulted in the search for a reason for the condition, which seems to be what parents want (Corbett 1994). At this stage, doctors are reluctant to commit themselves to a diagnosis because of the high rate of spontaneous remission, particularly in specific expressive delays, before the age of 3. As many as 60% of these children may recover without treatment by this age (Bamford, Davis, Boyle et al 1998; Law, Boyle, Harris et al 1998).

Screening procedures before the age of 2 years are of doubtful value because of the wide range in test performance found. In systematic reviews of the literature, Bamford, Davis, Boyle et al (1998) reported a screening sensitivity range of 17%-100% and specificity range of 43%-100%, concluding that it may be easier to identify children who are not cases than those who are. The same authors found few studies where a comparison of screening tests had been made using the same population, making it difficult to judge the relative value of the tests or to say which was the most effective. What was interesting was the comment that screens, which used parents as informants, were just as accurate as those where formal testing procedures had been used (ibid). Most screening procedures therefore are used after the age of 2 years, when the reported accuracy of screening is greater (ibid).

2.3 Incidence and prevalence of SLI

Speech and language problems in the pre-school years reportedly outnumber any other single developmental difficulty (Drillien and Drummond 1983: Bamford, Davis, Boyle et al 1998). Recent estimates of general speech and language delay put prevalence at around 6% of children (Bamford, Davis, Boyle et al 1998). Again, the term 'language delay' is very broad and actual figures are difficult to establish.

Earlier estimates show the prevalence of SLI in school age children to be 10% in both the USA and UK (Conti-Ramsden 1993). However, estimates by Conti-Ramsden (1993) drew from a range of school-aged children in both the United States and the UK, which make a true comparison impossible.

Controversy exists over the classification of children with secondary language delay due to other conditions and children with specific language delay. In UK studies in the past, a variety of inclusion criteria resulted in widely differing estimates. In 1986, Enderby and Philipp commented on these conflicting reports, which they regarded as being in some way standardised by the detailed nature of the National Child Development Study (Sheridan and Peckham 1975). This study was based on a longitudinal survey of over 15,000 seven-year-old children born in one week in 1958. It was found that 10% to 13% of those children had some degree of speech impairment, based on teachers and doctors' ratings of the intelligibility of the children's speech. There were more males than females and the majority was from manual social backgrounds.

A study of 500 children born in 1974-5 and living in Dundee showed that 5.7% of the children had a language impairment between the ages of 2 and 5 years (Drillien and Drummond (1983). For 4.2 % of the children, the impairment was moderately severe or severe. The figures excluded children whose language impairment was secondary to another disability.

Enderby and Philipp (1986) showed the prevalence of severe speech and language handicap to be approximately 690 per 100,000 general population pre-school and 400 per 100,000 for school age. Intervention strategies and maturation were thought to be the most likely causes for the drop in figures for school age children. The definition of severe speech and language handicap in that study was where the individual *'had difficulty in making themselves understood by anyone other than their immediate family'* (p153). Children whose speech was not understood by their own families would presumably also fall into this category. In addition, Enderby and Phillips (1986) comment that in some studies it was not made clear to what extent such cases were associated with medical conditions.

2.4 Conductive hearing loss

Conductive hearing loss resulting from middle ear effusion is more common in the pre-school population, and occurs at the time of language acquisition when auditory discrimination is needed to help in the decoding of speech (Rapin 1979; Hall and Hill 1986). Rapin comments how difficult it is to measure threshold of hearing using behavioural audiometry in very young children and also feels it is necessary to exclude any suspected interaction between middle ear effusion and unfavourable linguistic environment or a bilingual environment.

Hall and Hill (1986) conducted a study examining middle ear infections (*otitis* *media)* and the effect on language development. Some children who attended for audiological examination were found to have secretory otitis media without any abnormality of language development, while there were others that did have a language problem in the absence of the disorder. The effects of the middle ear infection on children varied from severe problems to very little disturbance. The authors felt these differences could be attributed to various factors: the age at which the disturbance occurred, the duration of the episode, the severity of the hearing loss, intrinsic qualities of the child and the child's environment. The effect of otitis media on language development was therefore not conclusive.

Another study by Bishop and Edmundson (1986) sought to establish the effect of otitis media on language delay. No evidence was found for any differences between language-disordered children with a history of otitis media and those without, on a wide range of language measures. Bishop and Edmundson (1986) did suggest however, that otitis media, when combined with other adverse factors such as poor perinatal history, has a greater potential for causing specific developmental language disorders.

There is, therefore, some evidence to suggest that conductive losses, whether intermittent or mild, can cause delay in language acquisition and learning. In children with communication problems, the delay may be attributed to hearing loss, particularly if it is persistent over the pre-school period, and this may lead to a delay in the diagnosis of SLI. If a child develops a hearing loss before learning to talk, there is a much greater detrimental effect on language development (Hall and Hill 1986; Donaldson 1995). The severity of the hearing loss can vary from day to day and the greater the severity the larger the effect on language development

2.5 Features of SLI

It has already been shown that some confusion exists in the literature regarding the varying definitions of speech and language disorders. In the case of SLI, the diagnosis is arrived at mainly by exclusion, that is to say, the child is not hearing impaired or not mentally retarded (Rapin 1979; Lahey and Edwards 1995; Bishop 1998). There are so many different symptoms displayed by children with SLI that it is difficult to find an explanation for the problem, which may indeed have multiple causes. The importance of identifying subgroups is an issue highlighted in the SLI literature so that appropriate intervention can be tailored to the individual needs of the child (Bishop 1997; Conti-Ramsden 1993).

Some authors have speculated that children with SLI can display a global cerebral dysfunction, despite giving the appearance of normality or will have some degree of cognitive impairment if testing is sufficiently rigorous (Inhelder 1976; Bishop 1997). Conti-Ramsden (1993) suggests that children exhibiting problems in any or all of the areas of phonology (sounds that make up a word), syntax (the organisational rules for generating and interpreting sentence structure), semantics (how meaning is structured in language) or pragmatics (the use of language in different situations) are considered to be suffering from SLI. These four areas, as stated earlier (section 1.1, p7-8), are the basic linguistic requirements of any language. If a child does not have these capabilities, it may lead to language comprehension (receptive) problems and/or speech and language production (expressive) problems. Children with expressive problems may or may not also have comprehension problems and vice versa. The question however remains as to whether it is to be seen as two separate issues of a) speech disorder or b) language disorder.

Various indicators are used to establish language difficulties, but these can be subtle and not always revealed by the measurement devices that exist (Dockrell and McShane 1992; Bamford, Davis, Boyle et al 1998; Bishop 1998). Bishop (1998) points out that most language tests measure complexity and comprehension of language and verbal memory, although impairments considered diagnostically important in the clinical literature are not identified on such measures e.g. verbosity or over-literal responding to questions. In addition, formalised testing may not convey the true impact of the condition on a child or his/her family and wider social group (Eastwood 1988).

2.5.1 Causes of SLI

Some authors have tried to establish a genetic link between SLI and a family history of speech, language, or learning problems (Smith and Pennington 1987). The condition predominantly affects more males than females, which appears to be true of a range of learning disabilities. Some genetic syndromes, associated with learning disability, demonstrate *x*-linked recessive disorders, which feature expressive language deficits and disproportional expressive language delay (Smith and Pennington 1987). However, the actual mechanism of transmission is unknown, and the clinical use of genetic information in learning disability generally is still limited.

Lahey et al (1995) studied a group of 53 children from the New York and Boston areas who exhibited difficulties in language learning. The children were of normal non-verbal intelligence with normal hearing and normal social, emotional and motor development. The children ranged in age from 4 to 9.6 years (mean age 6.6 years), 33 males and 20 females, from different ethnic backgrounds, but all from monolingual English speaking backgrounds. On formalised testing, 14 children had expressive disorders, 29 had mixed receptive and expressive disorders and 10 showed mild disorders but did not meet the expressive, receptive or mixed classifications.

Of the 53 children studied, 20 reported that at least one parent had a history of Specific Language Learning Deficit (SLLD). Children with expressive language deficits only were more likely to have family members with a history of SLLD than children with a mixed or mild disorder. SLI children of affected mothers were more likely to have disorders of expressive language only than to have both expressive and receptive problems. Both of these findings could arguably be attributed to either genetic or environmental influences. SLI was not associated with affected fathers, which again could be a genetic or environmental influence, given that a child may spend more time with its mother. If she is the main caregiver, the child will have more exposure to her speech and language patterns. However, a child can also spend considerable time with other caregivers outside of the family, such as nursery staff and childminders, and may also absorb their speech and language patterns to a degree.

In the Lahey (1995) study, the numbers were small and when divided into subgroups the numbers were even smaller, so firm conclusions cannot be drawn from it. Possibly, the most interesting finding was that of affected children being last born, although this does not account for children who were only children, or explain to what extent they featured in the study.

2.5.2 Developmental outcomes

Follow up studies of children with speech and language disorders provide information on developmental outcomes. A variety of definitions are present, although all appear to refer basically to the same disorder in such studies. Some authors use the terms 'disorders of speech development' (Garvey and Gordon 1973; Griffiths 1969), 'language disordered' (Aram and Nation 1980), 'disorders of speech-language development' (King et al 1982) while yet others refer to 'specific language impairment' (Records, Tomblin and Freese 1982; Conti-Ramsden 1993). It is difficult to assess developmental outcomes as samples have often been ill defined and measures have been limited. For example in Griffiths' (1969) study, the sample was drawn from children attending a residential school and it is likely that they were unrepresentative of the population of children with SLI. As knowledge of the condition grows, increasingly sophisticated detection and intervention measures are reflected in changing terminology and a more specialised approach to this whole area of child language acquisition.

Most studies have concentrated predominantly on educational achievement outcomes, particularly on areas of reading and spelling (Hall and Tomblin 1978; Griffiths 1969; Aram and Nation 1980; King, Lasky and Jones 1982). Less attention has been directed at the psychosocial aspects of SLI.

It is important to note that US studies differ from those in the UK. Children in the

USA attended speech and hearing centres and children in the UK were drawn from residential schools (Griffiths 1969), language units (Parkes 1990; Stone 1991) and hospital or community based speech therapy services (Garvey and Gordon 1979). In addition, there are no reports of children attending language units in the US literature, although there are a limited number in the UK. For these reasons, studies from each country will be addressed separately.

2.5.3 Follow-up studies from the US

In the United States, Aram and Nation (1980) followed up 63 children who had attended the Cleveland Hearing and Speech Centre from 1973-74. Age at initial diagnosis ranged from 8 months to 60 months, with a mean age at follow up four to five years later of 7:11 years. Information was obtained from the children, their parents and current class teacher.

Although all 63 children had been diagnosed as language disordered during the pre-school years, 23.9% received no therapy during those years and 38.1% received no therapy during their school years. In addition, the duration of pre-school therapy was not related to either the severity of the language disorder or to any measure of subsequent speech, language or academic abilities. Duration of school therapy, however, was shown to be related to the severity of the phonologic deficit rated at the time of initial diagnosis, and to all follow-up ratings of speech, language, and academic abilities. Outcomes of pre-school intervention could not therefore be established.

The authors suggest that severity of the disorder is not the only reason children do or do not receive pre-school therapy. Time, money and effort on the part of parents and professionals is needed, and a greater priority be given to pre-school speech and language disorders. This study showed that even with pre-school intervention, 40% of children four to five years later were not in 'regular' classrooms, had not 'grown out' of their condition and were showing below normal achievement in reading and maths.

King, Jones and Lasky (1982) undertook a 15 year follow-up study of 50 children, 36 males and 14 females, who had formerly attended a Speech and Hearing clinic between 1965 and 1969. Initially the children had problems of language disorders, delayed speech, articulation problems and combined language and articulation problems with the age of diagnosis ranging from 3:0 years to 5:11 years. Speech-language service intervention for these children had been in various settings, i.e. university affiliated speech and hearing clinic, public school, rehabilitation centre and private practice.

The aims of the study were to establish educational levels achieved and reveal any communication problems that existed into early and late adolescence. There was an expectation that not only would these children show an overall reduction in academic achievement during their school years, but that reading and writing skills would be particularly affected.

Telephone interviews with family informants (usually the mother) revealed that 42% perceived their offspring still had some kind of communication problem, whereas only 24% of the participants themselves felt they still had speech-language problems. However, it seemed that despite the persistence of speech and language problems, there was good academic progress overall. Some had also been involved in activities that required sophisticated levels of communication, such as acting and membership of the school council. One had taken first place in a national debating contest.

In contrast to Griffiths' (1969) study, only four of the young people (8%) reported problems with interpersonal relationships i.e. problems with both family and peers. These four had been diagnosed with language disorder/delayed speech. Three of the 4 had residual speech/language problems; 1 had had difficulty in relationships with family, peers and siblings and had received professional help.

Those diagnosed as 'language disordered' appeared to have the highest risk of continuing difficulties into adolescence and young adulthood. On the other hand, the children with an articulation disorder showed the best prognosis for correction of the problem. King et al (1982) comment on the discrepancy between offspring and parent views of continuing communication problems, suggesting that each group may adopt different bases of what is considered acceptable communication.

An earlier study from the United States carried out by Hall and Tomblin (1978) followed up 36 children, (18 Language Impaired (LI) and 18 Articulation Impaired (AI)) 13 to 20 years after initial diagnosis. These were drawn from clients who had attended a university based speech and hearing clinic in Iowa between 1955 and 1962. Information was collected relating to their communication abilities and treatment history as children, their communication status as adults, and their educational, social and occupational status. The information was collected from two sources: the parents and a standardised achievement test for the young people, who were then aged 22-23 years.

Fifty per cent of the parents of LI children thought that their son or daughter continued to exhibit some form of problem with articulation and language skills, whereas only one of the AI group thought there was a persistent problem. More AI than LI young people had had higher education. More of the LI group received remediation than the AI group, but at the time, LI was not fully recognised, so the type of remediation may not have been appropriate for the condition. The authors comment that their diagnosis of 'language impairment' was retrospective, because the term did not exist at the time that information was obtained from clinic records.

In contrast to the King et al study, reduced educational achievement across all academic areas, especially reading, was a feature of LI children. Hall and Tomblin (1978) speculated that there may be two explanations for this. First, teaching was carried out by means of the spoken or written word, and if alternative means were established, these children would learn normally (exactly what alternatives are not suggested by the authors, but one could assume the use of sign language may be one). Secondly, LI may imply deficits of cognition extending beyond language. In addition, the authors felt that the data had been obtained from advantaged homes with committed parents who were willing to travel some distance. This was considered a confounding factor by the authors when only clinic groups were used, who may not be representative of the population at risk.

One of the few studies concentrating on non-educational outcomes was that of Records, Tomblin and Freese (1992) in the United States. Their Present Life History Survey examined the reported quality of life of young adults with histories of SLI. Participants were again drawn from the case files of speech and hearing clinics in Iowa. The children had been diagnosed 'language impaired' at 8:6 years, which is relatively late in comparison to both the King et al and the Hall and Tomblin studies. It is possible that the nature of the SLI had not been sufficiently severe to signal early (i.e. pre-school or early school age) intervention.

The age-matched control group had no known history of speech-language treatment, learning disabilities, or hearing problems.

The findings showed little significant difference between the SLI subjects and the control group in reported personal happiness, satisfaction with life, or in satisfaction with different areas of their life such as family, job, social life, or living situation. They assigned locus of control to themselves, despite persistent mild to severe language impairment. More of the SLI group worked full time than controls although reported income was the same for both groups, i.e. a lower earning potential for SLI individuals.

The authors suggest that one explanation for these positive outcomes could be this particular group of SLI subjects may have been in 'the world is my oyster' phase of their lives, (range 17 to 25 years, mean age 21:6 years,) without the added responsibilities that later adulthood brings.

Felsenfeld, Broen and McGue (1992) reported a 28 year follow up study of 37 adults with normal non-verbal intelligence whose diagnosis had been a significant phonological delay in childhood. Controls were matched for articulation, expressive language and language comprehension. Non-verbal reasoning was tested to determine if those deficits were specific or part of a more generalised pattern of disability.

Adults in both proband and control groups had similar scores of wellness on the Eysenck Personality Inventory (Eysenck 1968). Adults in the study continued to display poor linguistic outcomes based on standardised tests, although data did not include how the adults noted their own linguistic performance.

A later study from the same authors using the same study population showed that where phonological disorders persisted at least until the end of the first grade, there were also lower grades in exams, fewer years of formal education and more remedial help was needed. Occupations were semi or unskilled, more so than controls, but both groups were satisfied with their lot in educational and occupational terms, although none of the proband group had 4th year degrees.

In concluding the results of the US studies, most notable are the reports that SLI does not appear to be a condition that resolves as children get older and move into adulthood. This was demonstrated in all of the above studies. However, the majority concentrated on clinic populations which may have been the most severe cases of SLI and for whom outcomes may have been poorest.

The youngest child with SLI in the study by Aram and Nation was 8 months old, which was particularly young in terms of diagnosis. The amount of speech therapy the children received pre-school and during their school years was variable, with severity of disorder not being the only reason they did or did not receive speech therapy. There were discrepancies between parent and offspring views on continuing problems, with parent estimates consistently higher than their offspring. Despite their difficulties, they took part in sophisticated communication activities such as acting or debating.

There were conflicting reports of reduced educational achievement outcomes, although in general, the children with language impairment fared worse than their articulation impaired peers. They had fewer reports of continuing into higher education and earning potential for the SLI group was generally reduced. However, all reported satisfaction with their education, occupations, and with life in general.

2.5.4 Follow-up studies from the UK

The availability of Language Units (LU) in the UK allows a more focused and in-depth view of the child to be developed. The emphasis has still mostly been on academic outcomes and few studies have looked at how children fare when they move from a language unit into mainstream school.

Urwin's (1988) follow up study was of 25 children from a pre-school language unit. Admission criteria for the unit were related to four main areas which were

a) performance abilities within the normal range, based on standardised tests and detailed clinical observation

b) severe and unremitting expressive or receptive language disability, sufficient to disrupt normal progress

c) condition not related to emotional or environmental factors

d) neurological or hearing loss, not sufficient to account for the language problem.

The authors found that 84% who had suffered serious language difficulties in early life were almost exclusively within the mainstream of education with minimal support. Teachers saw these children as no different from their peers and considered them well-integrated members of the class. Agreement was shown in parent and teacher ratings of social, emotional and academic progress. Differences occurred in parent and teacher estimates of speech and language ability. Parents reported residual difficulties in speech and language, which were not found in teacher ratings. These continuing problems did not appear to have a significant effect on educational outcomes. The authors suggest these findings support the view that pre-school intervention has better educational outcomes in the long term.

In contrast, the study by Parkes (1990) painted a more dismal picture of continuing communication problems, both expressive and receptive, and difficulties in social integration a year after leaving the unit. Gradual integration had not been a consistent feature in this study, varying from a single visit to a term and a half. Only one of the parents visited the new school prior to the transition. Parkes (1990) suggested that the convenience factor might have been uppermost in the integration process. Due to the small number of children in the study however, no firm conclusions can be drawn regarding this issue.

Stone (1991) conducted a 10-year follow-up study of children who had attended a language unit in Coventry. Initial diagnosis had been for both expressive and receptive disorders, although a more precise description of the group was not available. Age at diagnosis was not given, but the 37 participants interviewed ranged in age from 12 to 21 years. Of the 19 young people over the age of sixteen who had left school, 7 were in full time employment, four were unemployed, one was at university and the remainder were either in apprenticeship or sheltered employment. Of those who were employed, one had a skilled job as a motor mechanic; the others all had unskilled jobs. The impression from all participants was that they were hard and persistent workers. Those who were unemployed were persistent seekers of work although some who had been unsuccessful at interview felt that attendance at a special unit or the presence of a speech and language problem prevented them from getting the job.

From the whole group, 26 had received or were still receiving remedial tuition after they had left the unit and 13 felt they still needed some sort of help. Twenty-four appeared to communicate adequately, 4 had residual comprehension problems, and 9 had poor expressive language.

Socially most appeared to be progressing well, although there were some who had difficulty in using the telephone, and some that were unable to develop long term relationships. The type of support valued most by all participants was the opportunity to refer to someone who understood their former difficulties and assured them of their progress. Residual speech and language problems were a feature of the group, which is consistent with findings from earlier studies.

Also in the UK, Garvey and Gordon (1973) followed up 58 children whose presenting symptom was delayed speech development. The group included children with both secondary speech disorders and specific disorders of language development. It is not clear where the children were drawn from, but the source was presumably the case records of the Royal Manchester Children's Hospital. The aim was to identify the placement of the children and establish their then levels of comprehension and speech development using standardised tests.

Of the 58 children, 23 were in primary schools and 2 in secondary schools. The remainder were attending special units or schools, mental subnormality hospitals or being taught at home. Three had left school.

Of those attending LEA schools, 13 had language levels within normal limits for their age and 12 had language levels below average for both receptive and expressive language. High positive correlation between comprehension and expressive speech supported the theory that expressive speech facilitates comprehension after the early stages of development of the latter. This sample included children whose difficulties were secondary to a more global problem, although it was not clear if any of those children were in mainstream school with support. However, given that the study took place in the pre-Warnock years, this was probably not the case. Those in mainstream school with below average language ability may have been in this group, but a clear explanation of diagnostic categories was not recorded in this particular study.

The focus in earlier studies has mainly been on communication status and academic outcomes, with little on issues of integration and psychosocial adjustment to mainstream education. One exception is the National Child Development Study (Sheridan and Peckham 1975) the results of which showed that over 50% of children with language problems at 7 had residual difficulties with language, learning, social, and emotional problems at 16. This early work covered all types of language disorders and may not be particularly relevant to SLI. However, it is important from the point of view that it looked at areas other than academic variables.

In comparing the results of the UK with the USA, the most striking difference was that of the Urwin (1988) study who reported 84% of pre-school language unit attendees within mainstream education while Aram and Nation (1980) in the US reported a lower 60% in regular schools. The presence of pre-school language units in Britain may have contributed to this contrast.

Competence in oral language skills measured on standardised tests alone does not cater for the different situations in which a child is required to use language in both school and home (Parkes 1990). The preceding studies show that for those whose communication is disordered, there is the possibility that there may be continuing difficulties throughout the school years and into adult life, with implications for social, emotional and academic development. It is useful therefore, at this stage, to examine the provision made for children with SLI in the educational system, and to see if that provision addresses the difficulties already highlighted. The presence of any special educational need since the time of the Warnock report (1978) requires educational legislation to cater for the individual needs of the child. Various Education Acts since that time have sought to further develop provision available to all children in the special needs categories.

The next chapter traces the origins of special education, and presents the relevant legislation in force at the time of this study. Particular attention is given to the statementing procedure, which is available to all children with special educational needs. By showing the background to the child's schooling, it is hoped to provide some indication of how the educational system addresses the needs of the child as they progress through their stages of development, particularly language development and SLI.

CHAPTER 3

EDUCATIONAL POLICIES AND PROVISION

3.0 Introduction

This chapter gives a description of the historical development of Special Educational Needs (SEN) provision. Particular reference is made to the Education Acts from 1944 onwards and their impact on general as well as special needs education. The changing approach to special needs policy is highlighted, as demonstrated in the various Education Acts following the Warnock report (1978).

Provision of speech and language support for children with communication difficulties is also examined. This provision includes language units in all their different forms, which are discussed in relation to the Local Education Authority (LEA) role as enforcer of government policy on special educational needs.

3.1 Early Education Acts

The Education Acts of the late 19th century used a generalised approach in classifying children who were different from the majority of pupils. The three categories of 'blind', 'deaf' and 'epileptic' were catered for, but in other conditions the blanket term 'defective' was used. It was only in 1971 that Britain brought the last category of its handicapped children, the mentally handicapped, into the education system to be educated in special schools (Conti-Ramsden 1993).

Children in these categories were relegated to special schools. Allen (1995) suggests that the reason for this was reluctance on the part of many educators at the time to place the children in ordinary schools, seeing that process as an inefficient use of resources. Interestingly, the persistence of a resource-led philosophy can still be seen in more recent Education Acts (notably the Education Act 1988) applying not only to special needs education, but also to education in general. This is an aspect of the education system, which the present study explores.

Central authority for education lay (as it still does today) with the Secretary of State, with administration of this authority carried out by the Department of Education. Responsibility was placed on the parent to present their child for medical assessment to the appropriate examiner, whose assessment would determine the subsequent educational placement. Local Education Authorities (LEAs) were required to provide a suitable means of educating the child, usually in conjunction with health services.

The Education Act of 1944 began to adopt a more egalitarian approach to special needs education. Each child was entitled to the best education or at least a chance of it. The Department of Education allocated funds to Local Education Authorities (LEAs) who in turn had a statutory duty to provide a satisfactory education for all children in their area, including those with special needs. LEAs determined under the Education Act 1944 the number and size of schools in their area, which before had been determined centrally.

3.2 Changes in legislation - The Warnock Report

The Warnock Report (1978) provided a foundation for the most radical changes in legislation relating to special needs education. No longer were the needs of the child seen in isolation, but they were identified in an educational context. The child was identified, not by handicap or disability, but by Special Educational Need (SEN), the terminology used in the Warnock Report. The recommendations of the Warnock Report were embodied in the 1981 Education Act. In this sense, the 1981 Act was a landmark for special needs education. LEAs were required to identify children with SEN in their areas, to assess them, and provide for their educational needs. The onus for identifying the children shifted from parents to the LEA. Suitable education for these children became more tailor-made to their individual needs. However, in this as in later legislation, the definition of special educational need depended on its interpretation by the LEAs, a point examined further in a later section of this chapter.

Subsequent legislation following the Education Act 1981 was considered to have undermined the good intentions of the 1981 Act and their practical effectiveness (Anderson-Ford 1994). This was notably the Education Reform Act 1988, whereby a market driven system was introduced. Central planning of resource allocation was minimised (Allen 1995). Schools became budget holders and, instead of the child's needs being viewed in context, funding of schools became the focus of attention. Parents became consumers of the service and ultimately decisions of resource allocation rested with consumers rather than administrators. Funding of schools depended on roll numbers, and schools were encouraged to increase their pupil numbers, although LEA budgets had been reduced and central funding for SEN had also undergone cutbacks (Anderson-Ford 1994). Parental choice was informed by tables of grades produced by each school from which the Department for Education (DFE) as it became known, compiled league tables of achievement in the National Curriculum. Allen (1995) points out that much criticism has been levelled at this system because such tables are used in their 'raw' state and do not reflect the school's resources, its' catchment area or staff-student ratio. There are also those who believe that the National Curriculum did not include children with special educational needs in its original planning (Hinchcliffe 1994). An equally important issue and one directly related to the present study. is the risk that the Education Act 1988 presents to children with SEN.

The pressure put on schools to attract pupils and secure certain levels of funding depends on roll numbers. This can lead schools to see pupils in a 'cost-benefit' way (Allen 1995). If children with SEN demand more resources than other children, then the child with SEN represents a 'loss' in financial terms. In addition, if the academic performance of a child with SEN reflects badly on the school's overall ability to produce good results, there is more of an incentive for schools to refuse admission to these pupils. Parents in general do not regard SEN provision as important in choosing a school. Leagues tables do not reflect the efforts of the school in carrying out their duties to pupils with SEN. Schools therefore have little incentive to provide adequately for those children who do integrate to the mainstream system (Allen 1995 cf Copeland 1994 p77). The present study will examine these factors in relation to children with SLI once they have integrated from a specialised unit to their own local schools. Requirements of the statutory provision are couched in broad terms. It is largely up to each individual school how it interprets the legislation within the general requirements of each LEA. Children moving from specialised units to a mainstream school as in the present study, may therefore encounter varying levels of provision.

The Education Act 1988 threatened equality of opportunity in an educational sense, which had been visible since the Education Act 1944. The arrival of school performance indicators lay at the heart of this threat. The numbers of children with a statement of special educational need rose as a result. If schools had been previously unable to secure funding through the normal channels, this statement made sure that they could (Anderson-Ford 1994). (The statementing process and its implications will be discussed later in this chapter.)

The Children Act 1989 went some way towards reinstating the philosophy of equality of access to education for children with special needs, with its emphasis on placing the needs of the child paramount. From 1st September 1994, the Education Act 1993 came into effect. From that date the Education (Special Educational Needs) Regulations 1994 or Code of Practice, laid down in conjunction with the Act, required LEA governing bodies and those who assist them to have regard to the Act. Most provisions of the 1981 Act were then repealed. The Education Act 1993 reinstated the 1981 Act, particularly the section on special needs education, redressing the imbalance caused by the 1988 Act. The opportunity for LEAs to take resources as their starting point as opposed to the individual needs of the child was reduced, and parental involvement was extended.

Anderson-Ford (1994) suggests the reason for this turnaround rested on the growing number of instances where statute was changed by case law, when LEAs were found to be negligent in identifying children with special needs. However, Allen (1995) argues that it is only in clear cases of negligence where there has been procedural error or misreading of the statute that parents are likely to succeed in seeking redress. The courts are unlikely to reverse decisions made by the LEAs or the Secretary of State. Parents are further discouraged by the workings of the appeals procedure, which again seems to work in favour of the LEAs. Under the Education Act 1993, the Tribunal set up to hear appeals, categorically stated that legal aid would not be available to parents who bring appeals. Furthermore, the Tribunal has the power to award costs against the parents (Allen 1995). Both of these factors may discourage parents from seeking redress through the legal system. Therefore, it has yet to be seen whether the situation has really changed within a system where the task of defining a special educational need rests solely with the LEA, and judicial review favours the final decision of the LEA (Allen 1995).

3.3 Establishing a special educational need

For the purposes of the Education Act 1993, a child has 'special educational needs' if he/she has a learning difficulty which calls for special educational provision to be made (s156(1)). (Throughout the Act the child is referred to as male).

The learning difficulty is defined as

a) *a significantly greater difficulty in learning than the majority of children his age*[1],

b) .... a disability which either prevents or hinders him from making use of educational facilities of a kind generally provided for children of his age in schools within the area of the local education authority, or

c) he is under the age of five years and is, or would be if special educational provision were not made for him, likely to fall within paragraph (a) or (b) when over that age. (Education Act 1993:156)

As Allen (1995) points out, the definition of SEN itself is problematic. A learning difficulty is related to the individual needs of the child as in *a)* above. This 'difficulty' only becomes a 'need' if it calls for special educational provision to be made for the child by defining need in terms of the general provision available in the area (see *b)* and *c)* above). Provision in turn is related to resources available to the LEA. This leads Allen (1995) to argue that the LEA could define children with SEN as needing more in the way of resources than other children in the education system. The circularity of this argument highlights the link between SEN and available resources, showing that little has changed since educators in the last century relegated 'defective' children to special schools in order to preserve the efficiency of the then mainstream educational system.

Further confusion exists over the definition of the term 'special educational need'. An Audit Commission Report published in 1992 found that LEAs interpretation of the term varied considerably in relation to what was defined as serious enough to warrant the statutory definition of 'special need'. Allen (1995) concludes that this confusion over the scope of the definition could potentially work against parents and children.

The Code of Practice (1994) states that the '*knowledge, views and experience of parents are vital'* (p2) and it encourages partnership between parents and their children and schools, LEAs and other agencies. Because parents of a child with SEN have no legal right to make representations to the LEA during its policy-making process, their statutory rights turn on a definition, which is solely within the power of the LEA to determine. Partnership in that regard becomes a myth.

When the LEA have concluded through professional assessment that a child has a

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[1] This does not apply to children whose mother tongue is different from the language they are taught in.

special educational need, they are then required to follow the procedure which confers a formal statement of special educational need on the child. Assessment of the child's educational needs may also be requested by the parents and must be carried out by the authority within six months from the date of that request (Education Act 1993, Section 173). Regardless of the background to that request, parents can request assessment procedures purely because they as parents are concerned. Parents have a greater opportunity for involvement in the assessment process, which supports efforts to promote partnership between parents and statutory organisations involved in the care/education of the child. Written evidence is then requested by the LEA from headteachers, medical officers, educational psychologists or other agencies previously involved with the child before a decision is made to proceed with the assessment. In the case of a child who is not already known to these agencies, each agency is notified by the LEA of the parental request for assessment.

This procedure was first introduced in the Education Act 1981. Parents are informed of the proposed assessment, the procedure to be followed, the named person for them to contact, and the length of time available for them to make representation if they so wish (Education Act 1993, Section 167). The LEA must then produce a formal statement of provision required for the child if it is considered necessary by the LEA (Education Act 1993, Section 168 (1)). Reviews of statements and their frequency are subject to parental requests under Section 167 of the Act, or if such an assessment has not been made within six months from the date of request, or if the authority needs to make a further assessment under that section.

The numbers of children with a statement of educational need are quite small. Figures are set against general background estimates of special educational need, which, in the Code of Practice accompanying the Education Act 1993, are stated at 20% of the school population who will have such needs at some time in their school career. It was originally estimated when the process began that approximately 2% of children would receive a statement and this has proved to be reasonably accurate (Audit Commission 1992, p20). Once again, as the Audit Commission (1992) points out, the likelihood of a child receiving a statement depends largely on how LEAs interpret the legislation.

3.4 Provision for children with Special Educational Needs

Statutory provision under the Education Acts should be made by '*the most appropriate agency*', in most cases the child's mainstream school, working in partnership with the child's parents. It is considered in the Code that special needs provision will be most effective when the wishes of the child concerned are taken into account, considered in the light of his or her age and understanding. An annual review of provision for the child and the updating and monitoring of educational targets is required. If a child is deemed to have a SEN that requires special educational provision within a school that is not a special school, it must take into account

> *a) his receiving the special educational provision*[2] *which his*

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[2] Special educational provision relates to children of 2 years and over and is in addition to, or otherwise different from, the educational provision made generally for children of that age. When a child is under the age of 2 years, the authority may make an assessment of educational need, and can also do so at the request of the parents. A statement of educational need can be made and maintained as a result (Education Act 1993, Section 178). In practice, this rarely happens in cases of delayed or disordered communication because of the tendency to rely on maturation for spontaneous recovery (Bamford, Davis, Boyle et al 1998).

learning difficulty calls for,

b) the provision of efficient education for the children with whom he will be educated, and

c) the efficient use of resources.

(Education Act 1993: s160)

Despite what appear to be comprehensive procedures for special needs provision, controversy exists over LEAs tailoring assessments of a child to the available resources (Anderson-Ford 1994). This is echoed in anecdotal accounts of parents whose concerns partly gave rise to the present study. Some concern has been expressed that LEAs in effect 'gag' certain members of the assessment team, in particular the educational psychologist, in order to curtail the reported needs of the child so that LEA resources and subsequent provision are the first consideration (Anderson-Ford 1994). How widespread this practice might be has not been established. However, the strong links between SEN provision and LEA resources are well established, and are reinforced in the Education Act 1993 (see *c)* above)

Accepting a child with SEN should have no financial repercussions for the school itself. The statutory duty of the LEA to provide funds under the statement to the school should avoid this. However, intangible costs such as the effect of academic performance on school league tables is something the school may consider. There is also some evidence to suggest that statements often fail to meet the full cost to the school of a statemented pupil (Allen 1995). The result is reluctance on the part of the school to accept the pupil, although to what extent this actually occurs is open to speculation.

The LEA informs each school of the child's special needs, and they in turn must ensure that the provision is available. The main function of the Code of Practice accompanying the Education Act 1993 is to guide schools in making effective decisions. It does not lay down what to do in each individual case, therefore the detail of how schools implement the Code may vary according to the size, organisation, location and pupil population of the school.

In-service training and professional development of staff is recommended, and should be part of the school's overall development plan. All staff having contact with the child are required to be aware of the special need and provide for it (Section 161). Since the 1988 Act, the school's SEN policy has depended on teacher time for its development but as (Garner et al 1995) point out, this time is not always available. However, the Special Educational Needs Co-ordinator (SENCO) now has the greatest share of responsibility for Individual Education Plans (IEPs) for children with special needs, which theoretically is less time consuming for class teachers. The danger is that teachers can see the SENCO as having sole responsibility for the child's special educational needs, which goes against the requirements laid down by the Education Act 1993 for all staff to be aware of the child's difficulties and provide for them.

The Code of Practice recognises that the needs of most children can be met effectively in mainstream schools, with outside specialist help if necessary, but without a statutory assessment or a statement. The fundamental principles of the Code of Practice also recognise that children with special educational need can have a continuum of need, and therefore a continuum of provision is required to meet those needs. In the next section, specific provision for children with SLI is examined in relation to assessment and subsequent placement of the child in the educational system.

3.5 Legislation concerning speech and language difficulties

The Code of Practice recognises that most speech and language difficulties will have been identified before a child reaches school, but where these problems persist, there is the possibility that the child's ability to participate in the classroom will be impaired. This may in turn give rise to emotional and behavioural difficulties, and have an effect on the child's academic attainment.

> *The early identification of such speech and language difficulties and prompt remedial action are therefore essential.* (Code of Practice, 3.85)

The LEAs are required to seek clear recorded evidence of both the child's academic attainment and the nature of his /her communication difficulty, asking, for example, whether

> *i) there is a significant discrepancy between the child's attainment, as measured by National Curriculum assessments and tests, and teachers' own recorded assessments of a child's classroom work, including any portfolio of the child's work, and the attainment of the majority of children of his or her age*
>
> *ii) there is a significant discrepancy between the expectations of the child as assessed by the child's teachers, parents and external specialists who have closely observed the child, supported, as appropriate, by the results of standardised tests of cognitive ability, and the child's attainment as measured by National Curriculum assessments and tests.*
>
> *iii) the child's expressive and/or receptive language development is significantly below that of the majority of children of his or her age as measured by a standardised language assessment test, or there is a major discrepancy between the child's expressive and receptive levels of functioning.*

There must also be

> *Substantial evidence based on specific examples, that the child's communication difficulties impede the development of purposeful relationships with adults and/or fellow pupils and/or give rise to other emotional or behavioural difficulties.*
>
> (Code of Practice 3.86).

The implications are that children, once they are in a school environment, can have their communication difficulties identified, using both standardised tests and National Curriculum assessment tools. However, the Code pays little attention to children who have had their communication problems diagnosed in the pre-school years. This may relate to the view that many children from 3 years onwards grow out of the condition. However, some children may have attended specialised language units before integrating into the mainstream system. If their statement of special educational needs terminated on or shortly after integration, reviews of the child's progress can potentially become a much more *ad hoc* arrangement, as the present study seeks to explore. Children who regress in speech and language ability as a result and display poor progress in academic subjects, may receive extra support only when the problem has become so obvious that teachers and other pupils become aware of it. Pre-school intervention has, in a sense, been wasted if continuing support or at least monitoring does not follow.

If a child has special educational needs, which cannot be assessed fully by the LEA, assistance may be sought elsewhere from the District Health Authority (DHA) or local authority. This can be seen in the area of speech and language services for children. The DHA has a duty but not a requirement to provide speech therapy (McKinlay 1996). Prime responsibility for the provision of speech and language therapy services to children rests with the National Health Service (NHS) speech and language therapists. Where the NHS does not provide such support, the responsibility rests with the LEA to provide that support, the aim being that early intervention should avoid the escalation of the difficulty into a major special educational need.

The majority of speech therapists are employed by the NHS, and work with LEAs to provide clinic and school based services. In times of staff shortages, or where the needs of the DHA are more pressing, the requirements of the DHA take priority (Education Act 1993: Section 161)

The potential is there for a child to wait for the requirements of one service to be met before his/her own special educational need is given consideration. This goes against the spirit of the Education Act, which advocates the early identification and assessment of SEN (Code of Practice). Should such a situation occur, there appear to be no alternative solutions for early identification and assessment, and parents and children merely have to wait for speech therapist availability.

The focus of the present study is children who have been assessed by a speech therapist in the pre-school years and have subsequently attended a specialist language unit before integration into mainstream school. This type of provision has its advocates as well as its critics, and will be examined further in the next section.

3.6 Language unit provision

Until the mid-1960s, special language provision tended to be limited to Special

Language Schools, mostly residential, catering for approximately 150 children. A combination of professional interest and pressure from parents resulted in the opening of the first local language unit in 1965 (Hutt and Donlan 1987). Since then there has been considerable growth in the number of language units, through pressure on Health and Local Education Authorities to co-operate in their establishment. A survey of language unit provision by Hutt and Donlan (1987) showed a marked increase between 1980 and 1985. This increase was surprising in view of the general notion of Special Needs, with an emphasis on the needs of the child in the educational system, outlined in the Warnock Report (1978). The categorical nature of language units appeared to promote the notion of segregated education in meeting the needs of these particular children.

In 1998, Conti-Ramsden and Botting estimated the total number of Year 2 children (6:6 to 8:0 years) spending 50% or more of their school week in primary school-age language units throughout England was approximately 500 children. Ten years earlier, estimates of primary and secondary school language unit places in England by Hutt and Donlan (1987) showed there to be some 1800 places available, which excluded special units. For the North-West alone, Hutt and Donlan estimated there were 287 places in primary school language units, that is units situated within a host mainstream school. Conti-Ramsden and Botting (1998) made telephone contact with all primary school language units to establish number of places, although the authors do not specify the source of the information. Hutt and Donlan (1987) gathered their information from the Invalid Children's Aid Association (ICAA) list of language unit provision, and figures covered the whole of the primary school population from 4-11 years, which may account for the discrepancy in estimates. What is clear is that the numbers in this population are generally low, although the numbers do not necessarily reflect the need for such provision.

Various types of language units exist. They can be found in community clinics, nurseries, social services Under Fives Centres, attached to mainstream schools or special schools, and, very rarely, attached to secondary schools. The units sited outside educational settings have usually been set up by speech and language therapists, and are staffed by them and nursery nurses (Law and Elias 1996).

The size of the units can also vary. Small units tend to have one class with one FTE teacher, one nursery nurse (NNEB), or other classroom assistant, and one part-time speech therapist (Conti-Ramsden et al 1997). These small units cater for on average 10 children, and Conti-Ramsden et al (1997) found approximately 58 such units throughout England. Similar numbers of larger units were found in the same study, catering for twice the numbers of children, and consisting of more than one class and more teachers, speech therapists, and assistants. The units in the present study were the smaller variety.

Language units attached to, or within the building of, a mainstream school provide access to the National Curriculum for children with speech and language difficulties. Target areas are broken down into clearly defined stages of learning. Class size is usually between 8 and 12 children, and curriculum planning involves both teachers and speech and language therapists (Law and Elias 1996). Teacher expertise in communication problems develops, which has also been highlighted as an advantage in American studies by Koniditsiotis and Hunter (1993) and the development of a

Language in the Classroom (LIC) programme in response to US legislation reported by Prelock, Miller and Reed (1995). In the latter study, a transdisciplinary model with planned rôle reversal added to the knowledge and skills of both groups and brought an awareness that, although terminology may differ, goals for student learning were the same.

Koniditsiotis and Hunter (1993) comment on the success of one inclusive educational day-care initiative in the US which has been in existence for 15 years and caters for children from 1-6 years. Children with and without special needs, including speech and language impairment, are all educated in the same environment. Teachers and speech-language pathologists collaborate to promote a systematic communication programme within the classroom which meets the needs of all children, not just those receiving speech and language therapy. One advantage of this model is that teachers with little formal training in speech and language are able to recognise problems through working with speech-language pathologists over the years. Each has become familiar with the other's discipline and perspective on child development, and has grown in confidence as a result.

Parents also take an active part in the collaborative model by making audio tapes of their children, and using them to see what aspect of language is worked on. The authors conclude that such inclusive education depends on this collaboration for its success. The collaborative partnership between professionals highlighted the trust and co-operation which developed through regular contact and which ultimately benefited the children.

These reports of collaborative partnerships between teachers and speech therapists are mirrored within the structure of language units in the UK. Teachers, speech therapists and in some instances educational psychologists design strategies to enable the child to participate in successful communication, which in turn enhances confidence and self-esteem (Donaldson 1995). However, the availability of language unit places is not sufficient to meet the demand. Although criteria vary across the country, language units will normally exclude children who are below the average range on non-verbal ability, have profound hearing loss, or who have major physical, psychiatric or behavioural difficulties (Bishop 1998). Children admitted to the units usually have a statement of special educational need, which helps them to secure a place, but some units admit children who are not statemented.

Children are taught by whole class, small group, or individual means depending on their needs. Sometimes a tape recording is made of the child's speech, which is used in making the child aware of how they sound. Because they are in an environment where communication problems are understood, presenting difficulties such as behaviour problems are managed on a one to one basis, until the child has developed the appropriate means to communicate their needs. Units based within a mainstream school give the opportunity for the child to join mainstream peers in whole school activities and playtime, which helps the child adjust and subsequently to integrate.

Little research is available on the advantages of language units in terms of long term outcomes. Urwin's (1988) follow up study of children who attended a pre-school language unit found that the children who had suffered serious language difficulties in early life were almost exclusively within mainstream education with minimal support.

However, professionals sometimes dispute the value of units that segregate children from their mainstream peers, thus depriving them of a language rich environment (Law and Elias 1996). However, children with speech and language impairment are likely to be more confused and frustrated in trying to cope in a mainstream class. In another sense, children with SLI who attend a language unit are also exposed to a language rich environment, but in a different way, in that the structure of the language environment within the unit is tailored to the individual needs of the child.

Another criticism is that children attending language units miss the opportunity to attend their local school and develop social networks with their neighbourhood peers. Local schools are no longer required to keep secured places for children returning from special needs provision, which means the child may attend a different school from siblings or local peers. However, the social integration of children with SLI can be hampered by their impairment, and may lead to difficulties in developing relationships both within and outside of their local area. This is one aspect of the psychosocial integration of children with SLI that the present study explores.

The availability of Language Units (LUs), and subsequent integration of the language impaired child into a normal social world may be limited, as language unit provision does not appear to be uniformly available, at least not throughout England (Hutt and Donlan 1987; Wright 1990). Department of Education and Science figures (DES 1985) showed an inconsistent pattern of language unit provision across Education Authorities at primary level, with many regions offering no secondary units at all. The National Health Service employs the majority of speech therapists and so the responsibility for providing language unit staff is shared between health and education authorities

(Wright 1990). Therapists working with school age children are therefore subject to government legislation from two sources, a situation not helped by the fact that DHA and LEA boundaries are not always coterminous.

Language units in some areas integrate the child into the host school, and from there into the local school. Hutt and Donlan (1987) found this to be the case in 91% of the 108 units in their study. Parkes' (1990) study of integration from a language unit to mainstream school showed a strong reliability on the 'convenience factor', which depended on teacher availability and ease of organisation rather than on the needs of the child. Planning was haphazard, but the most successful or least stressful method for the child happened gradually over half a school year. One parent in the study argued that a transition period of psychological rather than linguistic support was needed.

3.7 Integrated vs segregated education

The emphasis on inclusive education is clearly stated in the Education Act 1993 Code of Practice, allowing for the views of all concerned to be considered. This appears to be part of a wider pattern of special needs education which was also highlighted in the UNESCO report (1996). Integration of pupils with disabilities was reported in the documented legislation of 27 out of the 52 countries surveyed, where provision for this type of integration was either wholly or partly in place. There was a strong emphasis on dealing with the individual needs of each child, assuming that the capacity of a mainstream school could meet those needs (UNESCO 1996).

Those in favour of the process advocated its benefits for special needs children, particularly in relation to social and academic benefits. Models of appropriate behaviour are more readily available in mainstream classrooms, as is the opportunity to develop relationships with non-disabled peers. Inclusion mirrors the wider society to which all children are exposed. In practical terms, inclusion avoids both the sometimes long bus rides to special units and the stigma that goes with special needs education.

Daniel and King (1997) question the philosophy of inclusion. They regard inclusion as a system which does not serve the individual needs of the child, but does reduce the cost of special needs provision. In a study of integrated or inclusive education, Daniel and King (1997) reported that parents in the study were concerned about the suitability of their children's school programme, bad behaviour in the classroom, academic performance and the self-esteem of the children. Parents and teachers in inclusion classrooms reported more behaviour problems. It was suggested that teachers might be so concerned with the concept of inclusion, that they neglect the general management of the class. They may also be giving so much attention to certain children that the others get bored and frustrated and general behaviour deteriorates.

Study outcomes showed little difference between inclusive and non-inclusive arrangements, suggesting that consistent academic gains are not an advantage of the inclusion classroom. Lower self-esteem was found in inclusion classrooms for the group as a whole, which may inhibit academic achievement.

The trend for widespread inclusive education appears to be diminishing in Britain, especially at the changeover from primary to secondary schooling, when certain groups such as children with Down syndrome are being transferred to segregated special schools (Begley and Lewis 1998).

The debate continues on whether any child with special educational needs should be educated in a mainstream classroom. The Education Act 1993 favours such an approach, although the definition of special educational need and subsequent provision for that need, as reported earlier, are variable within the current legal/educational system. Ultimately, the needs of the child should be the focus of IEPs and the somewhat ideological stance of clear-cut segregation/integration defies simple resolution. Some children may benefit from total segregation and others from integration. To some extent, children going from a specialised language unit into mainstream school have had the opportunity to experience both, but within a rigid framework whereby once integration to mainstream school is achieved, there is little opportunity to go back.

One question of both theoretical and practical importance is how far children with SLI ‘grow out’ of the condition, how much they can be helped by particular intervention programmes, by segregated or integrated education, and how far their lives are continuously affected (e.g. in school and later in employment) by their impairment.

Children with special educational needs, already in a vulnerable position, face an even greater struggle to have their need established and provided for to a satisfactory level. The wide scope given to LEAs in determining what constitutes a SEN together with the lack of a minimum level of provision in the English system is not very reassuring. Some protection is offered under the statementing process, although even then there are still problems when schools refuse to accept pupils.

There appear to be contradictions in relation to the aspirations of the post-1981 Education Acts in terms of individual assessments and education plans and the almost blanket policy of integration. Consumerism as the underlying philosophy of education is therefore questionable.

3.8 Rationale for the present study

When the present study began in the latter part of 1994, changes to the education system had only just been implemented (Code of Practice 1994). The new legislation sought to redress the balance within the climate of consumerism in the education system, which had been present since the 1988 Education Act. Parents were to have a greater involvement in decision-making regarding their children's education, which was particularly relevant to special needs education. However, commentators at the time felt that the system would favour the articulate and in particular those parents who could manage to engage successfully with an increasingly complex appeals procedure when problems did occur (Allen 1995).

The 'consumer' perspective had rarely been considered in studies both in this country and in the US, and only a small number of studies had examined integration from language units to mainstream schools. Reviews of the literature had paid little attention to social and emotional issues surrounding the condition of SLI. Researchers in this area had focused on speech and language development, together with academic achievement outcomes. In a sense, they had reported what they viewed as important in such work.

The narrow focus of SLI studies together with the market driven ethos of school league tables by politicians had the potential to neglect the broader issues surrounding SLI. It raised the question of what has happened or what is now happening for children with SLI. Equally important for quality of life are social and emotional development, and how the child feels about him or herself. It seemed appropriate therefore, at that point in the history of educational provision for children with SLI, to look at these unexplored issues. In addition, it was considered important to examine family and child perspectives on the services they had received and were receiving. This exercise seemed all the more relevant because it had been parent dissatisfaction with services that had initiated the study.

The continuing debate within the education literature surrounding the merits of integrated versus segregated education for children with SLI was further explored in the present study. The process of integration from 2 segregated units into mainstream education would provide information on satisfaction with services and on the process of integration itself.

The present study sought to establish what happens to children with SLI on integration from specialist language units into mainstream settings. This was studied from the points of view of parents, children, and teachers. In addition, the neglected area of psychosocial adjustment was explored.

CHAPTER 4

METHODOLOGY

4.0 Introduction

Both phases of the study examined the experiences of children and their parents from when the child first presented with symptoms of a communication disorder to their subsequent language unit placement and later integration into mainstream school. Teachers of these children were also involved in providing information on the academic and social progress of the children. This chapter outlines the theoretical issues which informed the study design and choice of method. The selection of instruments used in the study is also discussed, together with details of the conduct of the study itself. A different approach to data collection was chosen for each group and this combination of methodologies will be further discussed in relation to those groups.

4.1 Research design

Research designs may be qualitative or quantitative. Quantitative methods utilise approaches that involve the testing of hypotheses and the manipulation of conditions (Burns and Grove 1985). Experimental and quasi-experimental designs along with survey-style research can handle large bodies of data, and reduce and quantify phenomena under study. Rigorous controls can be adhered to in this type of research, with certain variables held constant while others are manipulated. Much has been made of the objectivity of the quantitative approach to research, although critics of this approach have suggested that a belief in such objectivity is naïve because no research can ever be value-free (Spencer 1983).

Qualitative research on the other hand allows for more person-centredness and holism in understanding phenomena. It is less reductionist in its analytical approach and can portray the range and diversity of individuals' experiences without relying solely on number and proportions (Burns and Grove 1985).

The qualitative/quantitative debate as to which is the best or most rigorously scientific approach to use is one that persists among researchers. Many see qualitative and quantitative research as two different epistemological conditions (Kuhn 1970). They have also been viewed as separate paradigms or mutually exclusive models of the research process (Bryman 1988). As such, certain authors have concluded that under no circumstances can the two approaches be combined, because in doing so there is a failure to identify the distinction between a paradigm and a method (Guba 1985). A more pragmatic account put forward by Bryman (1988) suggests that the differences between qualitative and quantitative research rest on 'technical' and 'epistemological' accounts. The choice of either approach in a technical sense, rests on the different kinds of research problem, and the style of research employed should be informed by the research issue. The epistemological account on the other hand, poses more problems in that qualitative and quantitative research, if viewed as distinct paradigms, are fundamentally different in their approach to studying the social world and to the knowledge they produce. In that sense, they are incompatible.

Not all authors subscribe to the opposing positions of qualitative and quantitative research (Bryman 1988). There are also those who consider the controversy regarding differing virtues of qualitative and quantitative approaches seems to lead nowhere (Krampitz and Pavlovich 1981). Ultimately, the design most appropriate to answer the research question may be the design to be utilised (Myers and Haase 1989).

The present exploratory study was carried out in a naturalistic setting using a predominantly qualitative design, but employing some quantitative measures. It was designed to explore the experiences of children with Specific Language Impairment during and after integration into mainstream schools from a child-centred and holistic perspective.

Phase 1 was a retrospective study of children from two Local Education Authorities who had integrated from language units into mainstream schools over a fifteen year period.

Phase 2 was a prospective study of children from one of the LEAs, beginning in the language unit and continuing through to mainstream school for up to one year later.

As stated earlier, parents and teachers of the children were also involved in the study. There were certain specific considerations to be kept in mind in designing the research, given that a third of the participants were children. These considerations are discussed in the following sections which deal with each of the groups involved, i.e. children, parents and teachers.

4.2 Theoretical issues informing methods selected for children

When conducting research involving children some considerations are ethical in nature. Children as a group are comparatively powerless, and the unequal power between researcher and the researched may be intensified by the setting in which the research is carried out (Begley and Lewis 1998). Data collection in the school can mean the child sees the researcher as another teacher and the research as a school test. The usual experience for children with SEN is for them to be assessed in clinics or schools and more infrequently, in the home (Cook, Urwin and Kelly 1989). In addition to equipment issues, other reasons include the fact that it is possible for professionals to see more children in one clinic session than it is to spend time going to the home. The same argument has been put forward by Wright (1990) in her discussion of speech therapy in 'clinic versus school' settings.

Children in this study were seen in their own homes in both phases of the study. In their own home surroundings children are less likely to feel they are being 'assessed' or 'examined' in the way to which they, as children with SEN, have become accustomed. In addition, because they were considered to be a vulnerable group who may have had a continuing communication problem, or were in the process of integration to a bigger class from a language unit, it was felt that contact in the home rather than school reduced the unequal power distribution between the researcher and the children.

Most children are more relaxed in a home setting. As the numbers in the study were small, it was possible to spend time collecting qualitative data from parents and children in their own environment, which was less intimidating than a clinic setting. The children already knew from their parents that they were going to be asked some questions about the language unit and about mainstream school. Nevertheless, each child was asked at the beginning of the interview if they wanted to talk to me.

In order to give the children more power over the research process, they were allowed to withdraw their participation at any time. They were also given the time to complete the instruments used in the research at their own pace, and could talk about non-task items during the interview if they so wished. The intention was to make the children feel as relaxed and comfortable as possible. In the home environment, parents also retained a measure of control over the interview situation with the researcher as invited guest.

In the present study, all of the children had been diagnosed by speech therapists as part of the statementing process to establish their special educational need status. The response to speech therapy can be approached in a purely scientific way by measuring clinical outcomes or can be broadened to take account of the dynamic nature of the process not least of which involves social support. An extension of clinical interventions using naturally occurring situations reinforces the child's learning and allows parents to feel more involved in their treatment. Speech therapists using naturalistic intervention methods frequently enlist the help of parents in treatment programmes to provide support and encouragement for child in the home (Donaldson 1995). Sometimes the speech therapist relies on the ability of parents to provide this support.

Quantitative experimental designs are one way of providing a fuller understanding of a communication disorder. However, what it means for a child to have a communication disorder can differ from one child to the next and one family to the next. Standardised tests and experimental designs therefore, only measure one part of the phenomenon. This point was further emphasised by Law (1995) in a review of available literature on speech and language interventions and their outcomes. Social support networks for example have an impact on the individual from a physiological and psychosocial perspective and are therefore important in any examination of speech and language disorders. Non-clinical influences are just as important as clinical markers of speech and language development when taking into account that a child may only speak where and when they feel most comfortable (Tizard 1975). The use of purely quantitative experimental methods in researching communication disorders have therefore been criticised by Eastwood (1988) for what is essentially an interactive process between the individual and their environment.

Following a true qualitative design for the children also presented some potential problem. Burns (1981) commented on the poor success of open-ended techniques in children's research because of the levels of introspection demanded by them. Many children are incapable of responding because of their level of maturity, or because they find such techniques uncomfortable. Children in the younger age groups may therefore have difficulty in responding to techniques that are more open-ended. These observations were particularly relevant to the present study where children of varying cognitive and linguistic abilities were involved. It was unclear at the outset what the communication status of the children would be so it was appropriate to choose an approach that was comprehensive but not overly demanding for the group as a whole.

The validity of children's responses in any research has been examined by Begley and Lewis (1998) and Burns (1981). Certain response 'sets' were found to be common to all research participants, such as those of acquiescence and social desirability. These features may be increased in children's research with the added complication of the child being easily distracted or the expressive capabilities of the child somehow preventing them from saying what they really mean. In the present study, attempts to reduce such response sets were made at both the beginning and throughout each encounter with the children. Some time was taken in talking to the child initially, allowing them to overcome any shyness, nervousness or in some cases 'the giggles'. The children could ask any questions they wanted at any time. They were reassured that there were no right or wrong answers, and that it was very important to find out what they themselves thought about things. Where social desirability responses were suspected, the children were asked to say more about the particular item, or it was returned to later in the interview and the second response compared with the first.

Both phases of the study examined the children's views of themselves in terms of their language difficulties and post language unit experience. The older children had to a certain extent adapted to the mainstream school setting, but the younger ones in the 5-7 year age group were still in the process of integration. As the intention of the study was to provide a wider picture of the child than hitherto, a decision was made to assess the children's self-concept. Self-concept has been regarded as an important factor in children's performance at school, and in their feelings of competence (Gurney 1988).

4.3 Issues of self-concept

Self-concept and self-image have been used as interchangeable terms to mean the same thing. Self-concept may be defined as the sum total of an individual's mental and physical characteristics and his/her evaluation of them. The self-concept has three

aspects, cognitive, affective and behavioural (Lawrence 1996).
Self perception, or how we see ourselves, is a complex term that has been interlinked with self-esteem, self image and the ideal self. It denotes one's physical appearance, cognitive competence, athletic competence, name, occupation, and so on. Self-esteem refers to the evaluation of one's self image in some way and subconsciously measuring the self as perceived with the ideal self or what the ideal self should be. When there is low self esteem present, there is usually a mismatch between what is perceived as the self, and what one would ideally like the self to be.

Measuring the self-concept of children can be difficult. Judgements of the young child may not be realistic if there is a desire to be seen as competent at the expense of reality (Harter and Pike 1984). In this regard, attempts at establishing the validity of an instrument may not be successful if the judgements of the children are compared with more objective indices (Harter and Pike 1984).

Harter suggests that self-esteem develops with cognitive development in children below the age of 8. Until then children tend to see themselves as all good or all bad, but not a combination of both. At around 8 years, the child also begins to make comparisons with other children. If a child feels confident at sports or physical activities in general, there is likely to be a high self-concept in these areas. If on the other hand the child feels less confident in academic areas the opposite applies.

Evaluations of perceived competence in some areas may not be reflected in overall estimates of self worth. A measure of global self worth, Harter argues, is difficult to establish before the age of 8, because children do not have the cognitive capacity to combine self-evaluation over different domains. Harter also argues that the relative importance of domains to the individual contributes to feelings of self worth. If a domain is not seen as important, it will not affect global self worth.

4.4 Selection of instruments

Children - Phase 1

The age range of the children varied widely in the first phase of the study, which required a data collection tool capable of covering a range of cognitive abilities. Given the earlier debate on the age at which language development is complete (Lieberman 1984), there was also the possibility that a range of linguistic ability could be encountered. Another issue was the necessity for clear wording and unequivocal meaning, which Gurney (1988) suggests is essential in research tools for children with any degree of SEN. A previously validated questionnaire used by Stone (1991) for ex-language unit children formed the basis of an unstructured interview schedule for the present study. It allowed for the wide age range of participants involved and covered a broad range of topics. It was clear and easily administered and had been used in a similar setting and therefore seemed appropriate in style and content for this particular setting.

Although the ages of the participants in Stone's study ranged from 12 to 21 years, the topic areas covered subsequent school placement, academic attainments, leisure pursuits and social adjustments in mainstream school following integration from a language unit (See Appendix); these were the areas of interest to the present study. Questions regarding employment were omitted because the entire sample was still at school. The final interview schedule used in the present study allowed additional comments made by the children to be included in responses or to elaborate on any answers given.

The method chosen was appropriate for specific groups who possess characteristics relevant to the phenomenon being studied (Mays and Pope 1995). In this study all the participants had expressive SLI and had undergone a process of integration into mainstream school.

Children – Phase 2

There are few measures of the self concept available for children in the 4-7 age range (Byrne 1996). Projective techniques such as drawing and photography have been used to show the unconscious self concept (Begley and Lewis 1998) but such scales can be difficult to score. A standardised rating scale for this age group, The Pictorial Scale of Perceived Competence and Social Acceptance for Young Children (PSPCSA) was developed by Harter and Pike (1984) and examines perceived self competence across four different domains. The pictorial format allows children to respond to factual representations of items contained in each picture, reducing the need for assessing general ability and attaching trait labels which older children use as self descriptors (Harter and Pike 1984). This format is therefore more developmentally appropriate.

The pictorial format extends the validity and reliability of the instrument, which written questionnaires used with this particular age group may not be able to do. Some children can have a limited attention span in responding to written questionnaires. There may also be variation in reading ability, and comprehension of items presented in a questionnaire is not guaranteed (Harter and Pike 1984).

The PSPCSA used in this study is based on a domain-specific approach, with four subscales of Cognitive Competence, Physical Acceptance, Peer Acceptance, and Maternal Acceptance. Each subscale contains six items and the scores are averaged for each subscale. The four subscale means show the results for the child. The scale is counterbalanced in that three of the pictures depict the most competent or accepted on the right and three on the left. Scoring is on a four-point scale, where 4 would indicate most competence or acceptance and 1 the least. Harter and Pike (1984) suggest that by retaining all four subscales, important information is collected on the child's self-perception. These scales were used in preference to others, which generally produce a total score thus reducing the uniqueness of individual item responses. The assumption is that all items need not be of equal value or importance.

Rosenberg's Self-Esteem Scale (Rosenberg 1989) for example, also a questionnaire addresses a unidimensional model of the self concept, concentrating on a global self-esteem or the general regard for the self as a person. It does not measure the underlying factors or domains that may contribute to the general picture.

Harter (1982) notes the contrast between subjective and objective measures of the self. The correlation between perceived scholastic competence and grades, teacher ratings and achievement increases from 8 to 12 years, then destabilises in the period when the child becomes a teenager. The younger age groups, although in earlier stages of cognitive and psychosocial development, possibly experience a similar instability on moving from language unit to mainstream. Harter also reminds us that a child can base their own evaluations on several possible sources including feedback from significant others, peer judgements and social comparisons. However, in the 4-7 age group it is unclear what children use to construct such evaluations if indeed they do at all. Their level of cognitive development is not at the level of sophistication where these judgements are made. They can however make judgements about their peers and see the good and bad traits in them. As cognitive development progresses, children form an awareness of their self-image such as whether they are good or bad at school, and their capability in reading and sports. Peer comparison occurs later in the child's development, coming into its own in adolescence.

Harter and Pike (1984) stress the importance of choosing the instrument to suit the particular purpose of assessing the self-concept. The aim of the second phase of this study was to examine how children felt about themselves in relation to their peers in mainstream school, their friends outside school and their families during a time of educational transition. A multi-dimensional model was needed to encompass cognitive, psychosocial and educational domains. Each item on the Harter scales is designed in a structured response format to reduce social desirability response bias. Despite the limitations of rating scales, it was considered the most appropriate way of trying to measure the children's self concept and provided a standardised measure used on more than one occasion in order to see if integration affected the child's self concept. It was easier to score than unstructured picture drawings and also demanded minimal language input. The PSPCSA had also been used for Learning Disabled (LD) children in the past (Cuskelly and de Jong 1997).

The limits of any standardised measuring instrument are that it may not give a true reflection of how the child feels about him/herself. Reliability of the pre-school version of the PSPCSA was reported by Harter and Pike (1984). By administering the test more than once, correlations between scores would seem to be a good measure of the test's reliability. However, the test retest is not always suitable. People's moods can change from one day to the next, and test takers may learn more between tests. Most psychological tests now have reliability coefficients (that is test retest correlations or correlations between the test halves) on a single occasion.

Subscale reliabilities for the PSPCSA were assessed by employing coefficient α showing subscale mean values ranging from .50 to .85. When subscales are combined according to their designated factors, reliabilities increase to .75 to .89. The reliability of all 24 items is in the mid to high .80s. Byrne (1996), and Begley and Lewis (1998) have also commented on the psychometric properties of the scale. Internal reliability of the scale is considered adequate, although some concerns exist over its construct validity, as there are no good independent measures. Face validity may become problematic and this could arguably be applied to any pictorial scale, in that the scenes depicted become dated and also the samples used to test different types of validity may be small. In addition, there may be other reasons why the child has a low score on some domains, not all of which are attributable to the child e.g. a child may have few friends because of where he/she lives or because classmates are not very friendly towards him/her.

Nonetheless, this is the only reasonably well standardised self concept scale for young children and it was therefore chosen as the measure of self concept in this context.

4.5 Theoretical issues informing methods selected for parents

A search of the literature had yielded a surprising scarcity of material on parental involvement in SLI detection and ongoing intervention. More recently, the value of parental involvement is increasingly seen as something that promotes the amount and continuity of interventions (Donaldson 1995). However, the opinions held by parents as to the effectiveness of those interventions are seldom explored. Most of the available literature on parental involvement was found in reports of parent self help groups which was anecdotal in nature (AFASIC conference proceedings, 1995). Scattered accounts of parents' attempts to secure a diagnosis for their children were also found (Young 1993).

In previous research, parents' views of their children's communication status have been established mainly by means of questionnaire or structured interview format (Botting, Crutchley and Conti-Ramsden 1998; Aram and Nation 1980; King et al 1982; Hall and Tomblin 1978). Parent views have therefore been used to add a qualitative dimension to standardised outcomes of communication testing in the condition of SLI. The range and diversity of parents' views had not been documented in the available literature. The importance of establishing the parents' perspective throughout, which many regard as the focus of qualitative research, had largely been neglected (Boulton and Hammersley 1996). The surprising lack of information in this area led to the choice of a qualitative approach, which would allow an examination of the phenomenon in context (Mays and Pope 1995).

An unstructured but focused exploration of parents' views and experiences was undertaken. Parents had the opportunity to describe in some detail the course of SLI from when the condition was first noticed through the various stages of diagnosis, and treatment up to the child's time in mainstream school. This approach was chosen to illustrate both the course of the condition, the various support systems available to the parents throughout, and their effectiveness from the parents' perspective. The intention was to show what the experience of SLI meant for the parents, they being the group who could provide the most complete picture of events.

4.5.1 Selection of Unstructured Interviews for Parents

The choice of a particular method of data collection for the parent group was influenced by the exploratory nature of the research. Initially it was planned to conduct focus groups with parents; information from which could provide the basis for structured interview schedules. In the event, numbers of participants were unexpectedly low and the decision was taken to conduct unstructured but focused interviews with each parent. There has been criticism of such interviews because of their lack of attention to process and to the possibility that they do not, nor cannot give a true reflection of the daily lives of those under study (Bryman 1988). There is also the criticism that such an interview is an interruption of the natural flow of events, although inviting the interviewee to speak at length is regarded as less obtrusive.

One potential disadvantage of unstructured interviews is that large amounts of data are generated which can be difficult to manage. However, in this case, small numbers of parents participated in the study, making the amount of data analysis required a reasonably manageable task.

The heterogeneity of SLI, already well documented, indicated that each story would be different in some ways. Age of detection for example and age of diagnosis could be different for each child. Presenting symptoms, behaviour problems, parent views of language unit experience and most of all the experience of integration into mainstream school could also differ. However, the broad sequence of events for each child would allow some degree of comparability between responses, which could then be developed in subsequent analysis.

Parents were encouraged to adopt the role of informant in each interview, starting with when the child was born, and following a chronological or life history approach throughout. They were given the freedom to tell their story using their own frames of reference. The use of open probes advocated by May (1993) helped in this process. A short list of common areas of interest was generated, for example when the speech and language problem was first noticed and what views the parents held about language units. These areas were used as open probes and helped to clarify or elaborate points made. The use of probes also maintained the purposive nature of the interview itself. Any difficulty in keeping the direction of the interview was reduced and attention on the topic was refocused when any interruptions occurred.

The length of each interview was determined by the interaction between parent and researcher and it took the form of a guided or purposeful conversation (Burgess 1984; Moser and Kalton 1983). Although it was desirable for the interviewee to feel that they were taking part in a conversation, at the same time the focus of the research was maintained throughout. Consideration was also given to the fact that some respondents could feel uncomfortable with the interviewer until they get used to them, seeing the interview as an assessment of their condition rather than an information gathering exercise (Moser and Kalton 1983). By reinforcing the informant role of the parent, this situation was, hopefully, avoided.

Because parents were asked to recall events of a sensitive nature regarding their child's atypical speech and language development, the potential for a certain amount of emotional stress in the situation could not be ignored. Although parents volunteered for this study, which in itself indicated a willingness to supply information freely, in some situations certain types of information can produce such stress (Moser and Kalton 1983). If this happens, information may not be forthcoming. For this reason, particular attention was given to clearly informing parents of the nature of the research before embarking on the study, and to indicating their freedom to withdraw from the study at any time.

The first phase of the study was retrospective in nature, and as such was prone to the general weaknesses of such data, i.e. change in perception over time, and recency effects of transition from language unit to mainstream school influencing responses. It was nevertheless possible to corroborate parental accounts using LEA documented sources where available. Using objective recordings of formalised statementing procedures and outcomes provided a balance for any parental subjectivity that may have been present.

One earlier study showed that parents tended to rate their children's communication status on what they were capable of doing, rather than taking test outcomes as a yardstick (Cook, Urwin and Kelly 1989). This produced a discrepancy between their own assessment and those of a speech therapist or educational psychologist. In the same study, teachers were also shown to use the same criteria as parents when commenting on a child's progress. The present study allowed further exploration of these contrasting views.

In summary, parents were given the opportunity to describe their experiences of having a child with SLI, using methods that allowed for a range of themes to emerge in keeping with the heterogeneity of the condition itself. The use of unstructured focused interviews, despite their possible limitations, seemed to be the most suitable way of achieving this goal.

4.5.2 Selection of the Teacher Rating Scale

When a child is quiet in class, teachers in a mainstream school setting with a large class may concentrate on more visible signs of progress such as physical and academic ability. There is not always the time to engage in social conversation with the child, and so the teacher may be unaware of all but the most obvious of communication problems. If the child is more vocal, the language may be the only evidence of academic ability the teacher has to go on (Stubbs 1983). If the child's language does not seem appropriate to the classroom, there is a possibility of a negative attitude towards the child by the teacher.

It was necessary to gain as much knowledge as possible from the teachers regarding the children's academic abilities, verbal abilities, and overall progress in the time the current class teacher had known them. As mentioned in the parents' section, teachers in earlier studies appeared to judge communication status on what the children were capable of doing rather than taking test outcomes as a yardstick (Cook, Urwin and Kelly 1989). In Phase 1 of the study, a short questionnaire previously used by Urwin

(1988) was used to produce information on the child's current expressive and receptive language abilities, their motor development and overall learning ability.

In Phase 2, the use of the PSPCSA included a rating scale for teachers to complete, by scoring the cognitive ability, peer acceptance, and social competence of the children. The number of items was less than the children's because teachers were not asked to score the maternal acceptance domain. The scale took 10-15 minutes to complete and avoided placing excessive time constraints on staff.

General comments regarding the child were recorded at the same time. Bishop (1998) has found that teachers and therapists are more willing to use a multiple choice format if they have the opportunity to add comments of their own. Rating scale results could then be compared to parent and child data, to cross collaborate themes and strengthen the results.

4.5.3 Summary of instrument selection.

Methodological considerations were ultimately concerned with providing the best and most appropriate means of accessing the experiences of three very distinct groups, parents, teachers and children themselves. Parents had a major contribution to make. In this study, their opinions were not sought as a confirmation of standardised measures of speech and language ability, but as a background to the whole experience of what it means for a child to have a communication problem. The choice of an unstructured interview format allowed them the freedom to tell their story using their own frames of reference.

A more structured approach was needed for the children which would retain their interest while providing an insight into their experiences. A structured interview schedule covering a wide range of topics and suitable for a range of ages was used for this purpose. For the younger age group, a pictorial scale format with domain specific ratings gave the opportunity to explore issues of self-concept at a time of transition to mainstream school.

In the next section, the means of recruitment are discussed for each LEA in turn, before a description of study participants and procedure followed are presented.

4.6 Recruitment to the study

Ethical approval had been obtained from the University Research Ethics Committee prior to commencement of the study. Ethical considerations were given careful attention. First of all, the subjects were children, and secondly, the topic could be seen as a sensitive area for parents and children alike. It was essential, therefore, that a letter was sent to parents from the LEAs administration to introduce the study, and name those who would be contacting parents, children and teachers. If parents agreed that information about their children be passed to a third party, they were then approached for consent to take part in the study. If they did not want information about their children passed to a third party at that stage, they were given the opportunity to decline. No child was seen until a signed consent form had been received from the parents.

The intention was to focus on the experiences of children with SLI within two Local Education Authorities (LEA). Both LEAs provided funding for the study, and would receive a report of the findings at the conclusion of the study. The study encompassed a two-stage process. The first phase would give a retrospective account of the experiences of children with specific language disorder who had attended a language unit and had subsequently integrated into mainstream schools. The second phase would be a prospective study of children currently undergoing the process of integration. Both phases concentrated on how the children adapted to life after the language unit both socially and academically.

The time frame for follow-up in Phase 2 dictated that children be recruited to the study in the early part of 1996, to allow for completion of the prospective phase. Not all children were integrated at the same time, therefore they were recruited when the decision to integrate had been made under the statementing procedure. The pressure on language unit places was another consideration dictating the return date of the children to mainstream education.

In both LEAs, there was some difficulty in tracing children who had attended language units. Entry to a language unit does not always follow SEN statementing; it can also be as a result of unit assessment or speech therapy recommendation (Botting et al 1998).

4.6.1 Recruitment in LEA (1) Phase 1

In the first LEA (1), records for children with speech and language disorders were held on computer under a general special educational need specification and were not given a separate category, making identification difficult. In the event, the Educational Psychology service produced a list of all children in language units between 1981 and 1994. The list of 140 children allowed a detailed search of archive files within the

Community Education Department. Results of the search showed that 7 children had transferred from the language unit into special education and were therefore excluded. One child had moved out of the area. The remaining 132 potential participants were invited to take part in the study.

From parents' replies, it was established that 30 children were still attending language units and were therefore ineligible for the study. One child was in a reading recovery scheme at another school, one parent did not wish to take part and two parents refused because they didn't want their child included in a research project.

In total, 33 out of the 98 remaining possible participants in LEA (1), agreed to take part. In addition, there were 4 'no access' visits for pre-arranged appointments; in each case a calling card was left giving a contact number, which produced no response. 5 showed initial interest but either did not respond to a second letter or were non-committal when telephone contact was made.

A second mailing of fifty-six letters were sent out to non-responders and 8 replies were received. Three subsequently took part in the study; 2 had moved house, and no forwarding address was available; 2 did not wish to be part of a research study; 1 offered help in the future when family commitments allowed. The final number taking part from LEA (1) in this phase of the study was 33.

4.6.2 Recruitment in LEA (2) Phase 1

Procedures in LEA (2) were slightly different from those in LEA (1). A Parent Partnership Officer (PPO) was in post in LEA (2), and all communication regarding the study was directed through him. This role had evolved following recommendations made by government in the 1993 Education Act Code of Practice. Part of the PPO's responsibility was to provide support for parents of children with special educational need, in addition to fulfilling a general support and liaison role between parents and the LEA.

The whole system of LEA special needs provision in LEA (2) was not as well established as in LEA (1). The PPO had not been in post for very long and there were informal reports from parent interest groups that legal action had been taken by a number of parents, because they felt their children were not being given the special needs support they required. The area of special needs provision seemed to be a sensitive issue for the LEA against a background of political pressures within the system. For reasons of confidentiality therefore, direct access to child records was not made available, which prevented corroboration of parent accounts with these records, something that had been possible in LEA (1).

The PPO collected lists of children attending mainstream schools in the area from headteachers, and from these, children who had attended the two language units in the area were identified. One of the units had relocated from within a special needs school to a mainstream host within the previous 5 to 7 years. The language unit teacher who moved with the unit at the time was under the impression that all records for the children were archived in the LEA system. However, this was not the case and it fell to the teacher to recollect children whom she had taught in the unit while it had been housed within the special needs school. This information was passed to the headmaster and finally on to the PPO. In effect, not all the children who had passed through the unit were identified. This was a major contributing factor to the low numbers recruited in this LEA. The children had been transferred to the units from other locations inside and outside the borough over the previous ten years, which may also have contributed to the difficulties.

The PPO contacted parents by letter, informing them of the study and asked for their participation. The language units in this LEA had been in existence since 1985, approximately 3-4 years later than LEA (1). In LEA (1) a total of 140 children were identified who had attended the three language units in the area over a 14-year period. In this LEA, 40 children were identified who had attended two language units over a 10-year period. Despite the fact that not every language unit had been open for the same length of time, the numbers in this LEA were exceptionally low, given that an average language unit class contains 8 to 10 children at any one time. The reasons for such low numbers are open to speculation, not least in relation to the record keeping within the LEA.

All parents were approached for consent in the same way as before. Eighteen of the 40 parents gave consent for their children to take part. Of these one child had been diagnosed as autistic and was therefore ineligible for inclusion in the study. 7 families were contacted on several occasions by letter and by telephone, but did not respond to either. Thus, ten parent interviews were completed. It was found at interview that 3 of these did not meet study requirements and were excluded. Two children had medical conditions affecting their speech; one child had a hare lip and cleft palate, the other had Bulbar palsy with no muscle control in his mouth. A third child had continuing receptive problems and dyslexia. Subsequently, numbers of participants in this part of the study was extremely low.

There were two language units in LEA (2), one for children with receptive language problems and the second for those with expressive speech and language difficulties. Both were housed in a host mainstream school. Staffing comprised one teacher and a nursery nurse. A speech therapist from the Community (NHS) Trust supported the group for two days a week. Access to the unit required a formal statement of special educational need as in LEA (1). Access to LEA records was not available as it had been in LEA (1) making it difficult later to collect background information on language unit entry dates and standardised test results.

The 7 children from LEA (2) who took part in the study had expressive speech and language impairment and had integrated to mainstream school following a period in a language unit. This meant a combined figure of 40 children from both LEAs took part in Phase 1 of the study.

4.6.3 Recruitment in LEA (1) Phase 2

In Phase 2 of the study, 7 children from the language units in LEA (1) were identified through visits to the language units themselves. These children entered the prospective phase of the study.

4.7 Child Participants

Because of the heterogeneous nature of speech and language impairment, all children varied in terms of language ability. However, all of the children had attended a language unit, had expressive language problems identified on standardised tests prior to entry to the unit and were exposed to similar teaching and therapy.

In LEA (1) children were required to leave language units by the end of the second infant year, that is, by the time they were seven. Local education authority policy provided language unit placement up to infant level only; there was no junior provision in the area. In LEA (2) the system was different and children appeared to enter and leave the language units later.

As part of the statementing procedure, an Educational Psychologist and Speech Therapist assessed all the children. In addition, where the child was already in mainstream school or in nursery at this stage, staff were asked to report on the general, and in particular the communication abilities of the children. Parents were part of the decision making process and had a statutory period of time (normally 28 days) to decide whether or not to proceed with the statement.

Data was available from LEA records on the nature of the children's communication impairments, but not for each child; where data was available, it showed that the SLI was sufficiently severe to warrant admission to a special language unit. Records showed the combined reports from various disciplines. Under the terms of the Education Acts of 1981, 1988 and 1993, all children were provided with a statement of Special Educational Need (SEN) which allowed them entry to a language unit and was subject to periodic review. The statement remained in force until the child's return to mainstream school, and in a small number of cases continued beyond that.

4.7.1 Parent participants

As stated earlier, the intention was to conduct focus groups with parents as a basis for semi-structured interviews. One focus group was held but it was found that those participating were unrepresentative of the parent sample as a whole. The group members were parents of children in special needs education, not in mainstream school and were therefore outside the remit of this present study. In addition, the final sample size was small, allowing more time for individual open interviews with the parents. Parents of both statemented and non-statemented children were approached.

4.7.2 Teacher participants

Teachers from 2 language units in LEA (1) held a dual qualification in teaching and speech therapy but were employed in their teaching capacity only for language units. Speech therapy input in both LEAs was formally arranged with the local District Health Authority (DHA) on a sessional basis for each unit.

Mainstream schoolteachers in both LEAs were approached for the study. In Phase 1, the majority of teachers were not the children's receiving teachers, that is they were not the children's teachers when they moved from the language units to mainstream school. In Phase 2 however, the teachers knew the children throughout the integration period and beyond.

4.8 Procedure

In the home environment, children were asked if they would like to participate in the interview process. If they were happy to do so, they were interviewed either in the presence of their parents, or at least with their parents in the immediate vicinity. Being interviewed in the home meant they were not being 'singled out' in school. Peers of the older children for example may have been unaware of their communication history.

4.8.1 Phase 1 – Parent Interviews

Particular key questions were included covering background to the problem, diagnosis, length of time at LU, integration, social functioning, emotional functioning and progress at school. All were transcribed verbatim. If necessary, parents were given 'prompts' to help jog their memory and allow them to give a fuller description of events.

Parents were given the option of a tape-recorded interview or having notes taken, whichever they felt more comfortable with. It was decided to adopt this strategy to make parents feel as relaxed as possible in the interview situation, thereby gaining more quality and richness in the data. Twenty-four interviews were taped and notes taken in 16. There was a greater amount of data gathered from the taped interviews in contrast to those where field notes were taken, possibly because the breaks in eye contact for note taking interrupted the flow of parents' recollections.

Forty-eight parent interviews were recorded in the home, 40 of which were relevant to this study. The remaining 8 were excluded for the following reasons:

1 child was still attending a language unit.

2 children had primary medical conditions

4 children were in special education.

1 child had receptive problems and dyslexia.

This information had not been available prior to visiting each home, but only became apparent during the course of the interview.

All parents were shown a sample of the teacher questionnaire to be used and consent was obtained from parents for the teacher to be approached.

4.8.2 Phase 1 – Child Structured Interview Schedule.

Wherever possible, children were interviewed on the same day as the parent(s). A return visit was made as necessary if the child was not present. On each home visit, children were interviewed first wherever possible, to capture their interest soon after arriving at the home and also avoid boredom or loss of interest on their part. The structured interview schedule adapted from that of Stone (1991) contained questions relating to educational topics as well as those relating to social integration, both within and outside the school setting. This method was chosen to focus the children's attention on everyday accounts of their experiences since leaving the language unit. It also gave them the opportunity to express their own views freely.

4.8.3 Phase 1 – Teacher Rating Scale

Teachers were asked to complete a standard questionnaire developed by Urwin (1988) designed to produce information on the child's current expressive and receptive language abilities, their motor development and overall learning ability (Teacher Rating Scale). Comments were invited on overall progress in the previous twelve months, as well as any special abilities or disabilities shown by the children.

Forty teacher questionnaires were mailed to the head teacher of each school named by the parent and child as their current attending school. This method allowed ease of access without excessive time constraints on the teacher. The class teacher who knew the child best provided the information.

To summarise, in Phase 1, 40 parent interviews were conducted in the home; 40 child interviews were completed also in the home; and 36 completed teacher questionnaires were returned.

4.8.4 Phase 2 – Parent Interviews

Parent interviews in Phase 2 followed the same format as those in Phase 1 in what Coolican (1990) describes as the 'informal but guided' interview. The intention was to allow the parents to answer without feeling constrained by the researcher. In adopting a life history technique (May 1993) it allowed the interviewees to express how they felt about events, and the meanings which the interviewees attached to those events.

4.8.5 Phase 2 – Child Ratings on the PSPCSA

The Pictorial Scale of Perceived Competence and Social Acceptance (PSPCSA) (Harter and Pike 1984) was used for the younger children who were in the process of integration from language unit to mainstream school. Children were seen before they left the language unit prior to the start of the integration process. They were seen 3-4 months after integration, and at 8-9 months, allowing for family holidays and half term holidays when teachers were available to give contemporaneous accounts of the children's progress.

Where possible, children were encouraged to relate other information such as how they liked school, who they played with, what they did in their spare time and any other items they wanted to talk about. As expected, some children were quite vocal, but others were more shy. In this situation, my previous experience in working as a health visitor proved invaluable. I had been used to dealing with children in both home and clinic settings for some years and felt comfortable working with the children in their own homes. Children in this particular age group engaged quite readily with the pictorial format of the PSPCSA. If younger siblings were present, the children sometimes wanted to 'do' the scale on them, with themselves as interviewer. Overall, the impression was that the children enjoyed the format of the PSPCSA and none were reluctant to complete it.

4.8.6 Phase 2 – Teacher Ratings on the PSPCSA

Teachers were seen in school and asked to complete the appropriate teacher rating scale of the PSPCSA (Harter and Pike 1984) and make any relevant additional comments.

4.9 Analysis

Children

In Phase 1, child structured schedules were analysed using the SPSS statistical package (V6). Descriptive statistics (frequencies, mean, SD) were used to show responses to the questionnaire, and percentages used to give an indication of the occurrence of each item. There is some controversy over the use of numerical reporting in qualitative research (Ritchie and Spencer 1994). It is suggested that what should be reported is the range and diversity of phenomena, rather than the number of times participants gave a particular response. Avoidance of the terms 'some', 'most', 'a few' is advocated, particularly in applied qualitative research. The rationale for the approach seems to rest on the question that if so many people said x, why did the remainder not say x, which leaves an unanswered question or gives an incomplete account of events. In the present study however, the use of

numerical representation was considered necessary to give some indication of how the majority of children fared throughout their language unit and mainstream school experience within the educational system. However, it is important to note that the diversity of experience was taken into consideration and reported for both the minority of children as well as the majority.

An individualised case study for each child or a single-subject research design was used in Phase 2. This approach was advocated by Bochner et al (1980) particularly for use in a naturalistic setting. The advantage of this approach was that it allowed a combination of qualitative and quantitative approaches to be reported, with each acting as a validity check for the other. The diversity of children's characteristics and experiences during integration were captured, together with objective ratings of self-perception over the same time period for the group.

Results from the PSPCSA were analysed again using SPSS (V6). Children's own comments were added to the results of the PSPCSA. This means of presenting results seemed the most appropriate in allowing the experiences of each child to be examined in some depth and individual differences to be explored. Parent and teacher reports together with any available LEA data were added to the child's reports for completeness.

Parents

Miles and Huberman (1994) have highlighted the need for explicit, systematic methods in qualitative research. This is particularly relevant to the area of unstructured interviewing, where a lack of transparency in reporting the procedure of analysis can undermine reliability and validity of the research findings. It was considered essential in the present study to give a detailed account of analysis of parent interviews, in order to document the procedure itself and to allow examination and possibly replication of the procedure in the future.

Initially, the 'Ethnograph' qualitative data analysis package was used in the analysis of parent interviews. The first stage of entering transcriptions into the package was straightforward, as was numbering lines of text and identifying themes in blocks of text. The search and retrieval functions of Ethnograph however, were difficult to operate and a decision was made to resort to manual analysis of the data for two reasons. Firstly, the time needed to learn the intricacies of the software was out of proportion to the time available. Secondly, there was a sense of distance from the data, not found to the same extent in manual analysis.

Parent interviews were transcribed verbatim. When all tapes were transcribed, each transcript was checked for omissions or other inaccuracies while listening to the original tape. This process of listening to the tapes while reading accompanying transcripts was engaged in on at least two occasions for each recorded interview. This process of immersion in the data allowed interrogation of the transcript in a more meaningful way by placing items in context as they had occurred in each interview. It also allowed notes to be made of inflection, laughter, and intonation in the respondents' voice. When all transcripts had been checked for accuracy, subsequent analysis continued using transcripts alone. Interviews that were not tape-recorded were also checked for errors or omissions in the text.

The next stage of analysis consisted of reading and re-reading transcripts. Each transcript was read and themes underlined in the text. Transcripts were annotated with words or phrases to identify themes, using the same words that had been used in the text. This method retained the grounded nature of each interview and reduced the risk of conceptualising too early, or making inaccurate assumptions of what the respondent actually meant. When all transcripts and field notes had been read, a second reading showed any themes or subthemes that had been missed. After a period of approximately 2 weeks, transcripts and field noted were read again, to check that identified themes reflected the respondents' views as closely as possible.

A chart of main themes and subthemes was constructed for each interview, which allowed for detailed checking of each transcript and also comparison of themes to be made across cases. Where several parents reported particular items, it was essential to show that each attached the same meaning to the item, making checks for construct validity an ongoing part of this stage of the process.

Sifting and sorting of subthemes was undertaken at this stage, to ensure their inclusion under appropriate main themes. Throughout the process of analysis, respondents' own words were used to keep themes grounded in the respondents' own frames of reference. Main themes were colour coded and subthemes were given bullet points of the same colour. A note of page numbers for themes was kept for each transcript for ease of retrieval.

The next stage in the process involved summarising and synthesising themes and placing them in categories. A chronological approach had been taken to each interview, and a similar approach was taken in ordering theme categories. The final stage of analysis consisted of interpretation and reporting of the thematic analysis.

An independent researcher assessed a random sample (15%) of interviews, using the same procedure as above. Where there was uncertainty regarding contextual meaning, tape recordings and field notes were listened to again and transcripts re-read, to check that respondent views had been accurately represented. Although a certain amount of interviewer bias may be present in selecting interview themes, this method ensured as far as possible that reliability and validity were preserved.

Teachers

Teacher rating scales were analysed again using SPSS (V6). Teacher open comments were also reported within the text for each child.

In the following chapters, the results from Phase 1 and Phase 2 are presented.

CHAPTER 5

PHASE 1 RESULTS LEA (1) + (2)

5.0 Introduction

This chapter contains the results of parent interviews, teacher rating scales and child interview schedules from the two Local Education Authorities (LEAs). Because of the low numbers in LEA (2), it was decided to combine results for both, while also highlighting similarities and differences between the two.

Firstly, the results of unstructured parent interviews are presented. Each interview lasted between one and two hours. Thematic analysis of the data was carried out following transcription. Where possible, contemporary data from LEA records was examined in relation to parent's retrospective accounts of the child's speech and language problem. This information helped to expand parent reports regarding the nature and treatment of the speech and language difficulty when parents were unable to remember such details.

Secondly, results of teacher rating scales are given and elaborated with open comments from the teachers whenever those were available. Lastly, results of child interview schedules are given before a final discussion combines results of all three sections.

5.1 Characteristics of the children

Forty children, their parents and teachers participated in Phase 1 of the study. All children lived in the same geographical location, were monolingual and 38 out of the 40 came from two parent families. Ages ranged from 6 years 10 months to 16 years 9 months (mean 9.82; SD 2.39). Thirty of the children were male, and 10 female, reflecting the general trend of children with learning disabilities. Four children were in secondary and 36 in primary schools; 30 schools in all were involved, 27 primary and 3 secondary.

In LEA (2) the ages of the children ranged from 7 years 2 months to 10 years 8 months (mean 9.22; SD 1.4). The mean ages in both LEAs were similar, although the range of ages was lower in LEA (2) and did not include secondary school children. There were 6 males and 1 female, reflecting the general trend of higher numbers of male children in the special educational needs category.

Parents provided background information on the children relating to their general development from birth to when the communication problem was first noticed. This included: -

a) birth history including any neonatal complications

b) birth order of the children in the family

c) any medical conditions the child may have had

d) reported behavioural difficulties where they occurred.

This information is presented initially before results of parent interviews are reported

5.1.1 Birth History

In LEA (1), parents reported perinatal complications in 4 cases: in LEA (2) none were reported.

One child was born by emergency full term breech delivery at home, one was born following a prolonged two-day labour, one was four weeks pre-term and cold at birth, and one suffered foetal distress.

The first of these four children, who was born at home, had later problems with 'clicky'[1] hips. By the time she was eight years, she had undergone three hip operations and missed a considerable amount of schooling as a result.

The second child was born after a prolonged labour. He had an unusually large head circumference, which was subsequently found to be a family trait. He also had an enlarged liver and spleen, and received paediatric follow-up until the age of four.

The next child in this group of four was born by rapid normal delivery four weeks preterm but there were no parental reports of any problems in the neonatal period.

The fourth child who suffered foetal distress at birth was later found to have Attention Deficit Disorder[2] (ADD), and is maintained on a statement of special educational needs in mainstream primary school. It was not clear from the parent interview whether his communication problem was in addition to his global

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[1] This condition, detectable in the neonatal period, arises as a result of the poor 'fit' of the hip joint in its socket. A click is felt by the tester on abduction of the hips during routine screening.

attention deficit or part of it.

The remainder of the children were born by either full term normal deliveries or planned Caesarean section. In the parent's view, birth history did not appear to be a factor in the development of SLI, and Local Education Authority (LEA) records made no connection between birth history and later communication difficulties.

5.1.2 Birth order of the child in the family.

In this sample 9 were first born, 18 were last born, and 3 were singleton or 'only' children. The remaining 10 were second or third born in families with both younger and older siblings (Table 1).

Table 1. Birth order of the child.					
	No of children in family				
Position in family	1	2	3	4	5
1ST	3	7*	2	0	0
2ND		13	6	3	0
3RD			4	0	1
4TH				0	0
5TH					1

* One of twins.

The highest numbers were in the 'second of two' category (13).

5.1.3 Medical conditions

Eight children (20%) had medical conditions at some stage in their development. One had meningitis at 14 months and one had whooping cough. Both of these children had begun talking normally, but stopped when they became ill, with no

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[2] a condition characterised by hyperactivity and sleep disturbance.

return to intelligible speech.

Two had 'clicky' hips as babies. Of these, one had several hip operations, missing a considerable amount of time away from school.

One was diagnosed as 'borderline'coeliac[3].

One had a diagnosis of Attention Deficit Disorder in addition to intermittent hearing difficulties and visual problems.

Three had suffered childhood illness such as asthma, chest infections, and chickenpox.

Five had recurrent ear infections, one of whom had a 30% hearing loss in one ear, which gradually improved. Three had grommets inserted for recurring ear infections at ages 3, 5 and 5½. Three had their tonsils removed before the age of 6. One parent felt that her son's ear infections and hearing problems had contributed to his SLI, but none of the other parents linked SLI to these conditions.

One mother described her son as '*a terrible baby who screamed all the time*'.

5.1.4 Other behavioural difficulties

Parents described 14 of the children (35%) as having 'other difficulties' before the diagnosis of speech impairment was made. Of these, some had single difficulties, others displayed more than one.

Eleven children displayed temper tantrums. Two were referred to a child and adolescent psychiatrist because of the tantrums:

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[3] an intestinal malabsorption condition where a special diet is needed.

> *'By the time he was two they were getting worse, 'cos he couldn't say mum, he never spoke at all, and he'd just like walk up to a wall and start banging his head on the wall (or) pavements outside.'*

Changes in behaviour patterns were reported

> *"he was the easiest baby to look after all the way through 'till he got to about eighteen months and he changed totally. He cried constantly, he never slept, he just changed.... he was just so angry all the time, really, really angry."*

Parents linked the temper tantrums with the child's frustration at not being understood when they tried to speak:

> *'he would fling himself on the ground in frustration.....I would say "I know there's something wrong, but I don't know what to do".*

Four of the children with temper tantrums didn't want to or were unable to mix with others in playgroup or nursery. One child cried and hit his classmates in frustration. He became even more upset when the teacher sent him to sit in the corner of the class by himself as a punishment. In the private school he attended at the time, he was made to feel different from the other children and had no friends there. When he transferred to his local school at 5 years, his mother '*warned the teachers*' what to expect.

His experience in the new class was different. The class teacher there made a fuss of him and kept him on her knee during lessons for the first few weeks. In other ways, this child was very bright. He could load computer games by himself at the age of 2 and could also operate the family video recorder. He spent 18 months in mainstream school, by which time the GP had referred him for speech therapy. He was subsequently found to have bilateral hearing loss for which he had grommets inserted when he was 5½. He was then referred to the language unit in LEA (2) where he spent 2 terms. His temper tantrums by this time had subsided.

One mother '*dreaded*' going to the shops or on the bus because of her son's tantrums. Another mother commented

> '*I've not been able to go anywhere with him because he performs so much*'

This child (8:4) was expelled from two nurseries because of his temper tantrums. He still had the occasional tantrum and continued to have speech therapy for his persistent SLI. In spite of this, his mother described him as a loveable child

> '*all the kids in school like him because he is so loveable. The teacher says "he is the only one who hugs me and says I'm lovely".*'

Parents of all 11 children noticed that tantrums disappeared after a short time in the language unit.

Other difficulties were mentioned such as being a poor eater, 'clingy', wanting to be held all the time and not settling after feeds. These were considered by parents to be common traits of babies and toddlers, and in their view were unrelated to subsequent communication difficulties.

In summary, the background information on the children showed them to be little different from a typically developing child. More children were last born in the sample than first or only children and the highest numbers were in the 'second of two' children category.

In 3 cases, parents felt there might have been a link between the SLI and meningitis, whooping cough or recurrent ear infections, although only five of the group had recurring ear infections.

Eleven of the 40 children were reported to have exhibited temper tantrums. Parents associated temper tantrums with the frustration of not being understood when the children tried to speak. This subsided as communication improved.

In the next section, results of parent interviews from both LEAs are given.

5.2 Results of parent interviews

Of the 40 parent interviews carried out in the home, 29 were with the child's mother, 9 with mother and father, 1 with grandmother, and 1 with a father. Interviews were unstructured but certain key areas were commonly explored in all instances (Table 2)

Table 2 Topic guide for parent interviews

Speech problem, age of detection	Mainstream Integration Issues
Diagnosis	Social Integration
Speech Therapy input	Overall Progress.
Language Unit experience.	Current communication ability

Parents were encouraged to give their own account of events before and after language unit intervention. Where they had difficulty in remembering particular items, the above topic guide provided a means of recalling those events. An explanation of each area and what it relates to are given below.

1) *Age of detection.* Parents were asked to recall when the speech and

language problem was first noticed and by whom i.e. parents, extended family or others outside the family, or by professionals (e.g. at developmental screening).

2) *Diagnosis.* For this, parents were asked how old the child was when the diagnosis was made and how it came about. Professional involvement in the process was explored.

3) *Speech therapy.* Information was sought on speech therapy intervention, how old the child was when speech therapy started and roughly how long it lasted. Parents were also asked to recall why the decision was made to change from speech therapy to language unit and who made that decision.

4) *Language Unit experience.* Parents were asked to comment on language unit provision and how the children adapted to that environment. In addition, information on length of stay in the unit was sought.

5) *Mainstream integration issues.* Parents were asked to recall the process of integration into mainstream school and any particular details they remembered from that time. They were also asked to comment on how the child adapted to the larger classroom environment. Parents were asked to recall the support that their child received during and after integration and to give their views on it.

6) *Social integration.* Parents were asked to comment on the psychosocial aspects of integration such as making friends in the new school, or if there were

any problems.

7) *Overall progress.* Information was sought on the general academic and social progress of the child, once they had completed the move to mainstream school and spent some years in the mainstream system.

8) *Current communication status.* This area related to the speech and language of the child at the time of the study. Parents were asked to comment on the child's verbal ability, and on any residual difficulties they considered to be present.

Prompt questions were used when parents had difficulty in remembering details from the early years of the child's development relating to the communication problem. From parental accounts, it appeared that over the 14-year period from 1981 to 1995, the sequence of events that all children followed before admission to the unit was very similar. Usually the parent(s) became aware of the problem and consulted their Health Visitor or GP for help and advice. A period of speech therapy followed, until finally a language unit place was sought. Eight children from LEA (1) were placed in mainstream school for periods varying from six weeks to one year. Parents and LEA records were in agreement that such placements were inappropriate. The children were seen to fail in mainstream school and were eventually admitted to the language units. In LEA (2), language unit places were more difficult to get and children were usually on a waiting list for some time before they started at the units.

The range of ages of the children meant that the length of time in mainstream school varied for each child. Not all parents could remember how long their children had spent in the language units, particularly parents of the older children. The range of years since the children had left the language units was estimated at 1 year to 9 years 9 months. Estimates were also based on LEA records where available. The youngest child in the group was 6 years 10 months on the date of interview and the eldest 16 years 9 months. The youngest child had been in mainstream school for at least a year.

5.3 Age of Detection

Parents of 28 children could remember how old the child was when they first noticed the communication problem. Of these, it was the mother who noticed in 16 (57%) cases, in 1 (4%) the father and in 4 (14%) both parents. In 3 (11%) cases members of the extended family noticed and in 3 (11%) the nursery. In 1 (4%) the health visitor noticed when the child was 2.

In 2 cases mothers noticed their children were making no sound from as early as 8 months. Of these, one mother thought her child was tired from not sleeping and therefore reluctant to speak. Another described how silent her daughter was

> *"If you didn't make any effort to go near her she'd sit there all day not.....nothing, no crying, just nothing. It was amazing"*

Table 3 Age of Detection						
Age in months	6-12	12-18	18-24	24-30	30-36	36-42
Children (n=28)	3	7	7	4	5	2

One mother noticed there was something wrong when her son was 10 months old. His first word sounds were described as '*strange*'.

Two mothers noticed problems at 12 months but couldn't remember exactly what the symptoms were.

One mother said she couldn't understand what her daughter was trying to say at 18 months. She was described as a happy, chatty little girl, even though her speech sounds bore no resemblance to normal speech. Although she was a confident child to begin with, she gradually '*went into herself*' as she got older and people couldn't understand what she said. The teachers in mainstream school also noticed she had a problem and eventually she was placed on the waiting list for the language unit. She started there aged 5½.

One mother noticed something was wrong with her child's speech between eighteen months and two years but couldn't say what.

One child had single words and '*mumbled*' at 2 years.

One mother contacted the Health Visitor for advice when her son was 3, although the family had felt there was a problem for some time before that. Only his brother could understand what he said.

The highest number of detections was reported between 12-24 months. Because of the retrospective nature of these accounts, parents may have underestimated or overestimated the timing of detection. LEA records did not show this type of information for all of the children and it was therefore impossible to corroborate these accounts.

All 28 parents who could remember when the problems were noticed, felt that despite their children's inability to communicate in a normal way, their receptive capabilities were intact. However, LEA records showed one of these children had poor verbal comprehension and poor naming vocabulary skills when assessed for the language unit. On standardised tests his verbal comprehension was in the 2.6 - 2.8 age range at a chronological age of 4.5. He had been attending a psychiatric unit for sleep disturbances and temper tantrums and his communication problem was diagnosed when he was 3½ to 4 years old. His parents reported,however, that they had been aware of it much earlier.

For this child, there was a lack of agreement between parent and LEA estimates. His parents based their judgement on his excellent memory for places, some of which they had visited only once before. Parents felt his only problem prior to the language unit had been his lack of communication, which they saw as the cause of his severe temper tantrums.

One mother reported how her son had tried to get his grandmother to understand what breakfast cereal he wanted by attempting to say 'cock-a-doodle-do' because he knew the Kellogg's emblem on the cornflakes packet.

Five other parents described their children as '*bright*' and '*quick*' in other areas of development. For example:

One child was described as '*an early walker*'; one could climb a frame meant for a four-year-old when he was two; one was completely toilet trained at eighteen months.

One child aged 3½ years had taught his older siblings the basics of how to use a computer.

One aged 4 years could complete sixteen jigsaws appropriate for his age one after the other.

Parents therefore, believed that the SLI was an isolated condition, unrelated to non-verbal ability and conceptual awareness.

In 5 (12%) of the families there were other family members with a history of communication problems, 2 in parents and 3 in siblings. The siblings had also attended language units.

5.3.1 Diagnosis

All parents reported a lengthy process of trying to get professionals to agree that there was something wrong with their children's speech and language development. In 39 out of 40 cases, mothers described how they were made to feel *neurotic*' or '*over-anxious*' when they had approached the doctor, health visitor, or child health clinic for help.

In 10 (25%) cases parents remembered they were advised not to worry because-

a) comparison was being made with an older sibling's speech development, or '*the older child is speaking for him*'(4)

b) that the speech would come on its own (2) and

c) to wait a while longer and see what happened (2).

Similar reports were recorded from parents of the remaining 2 children. One was attending hospital for continuing checks on an enlarged liver and spleen. At each hospital visit from when J was 18 months old, his mother expressed her concern over his lack of speech. She was told that one day he would surprise her with a sudden rush of speech and the problem would disappear. J was the youngest of 5 children and his mother knew instinctively this would not happen. When J was four and due to start school, he attended again for paediatric follow-up. This time his mother insisted that something be done and it was then the paediatrician agreed to *'push some alarm bells'* which resulted in direct admission to the language unit.

The remaining child in this group had been attending a Child and Adolescent Psychiatric Unit for severe temper tantrums and sleep disturbance. He started speech therapy at 3½ years, but it was another year before he was assessed for the language unit.

One mother felt her GP wasn't interested because he said '*the eldest is talking for her*'. When this child was aged 3½, the Health Visitor arranged a hearing test. At the same time, the nursery she attended noticed there was something wrong with her speech. She was referred for speech therapy which started eighteen months later when aged 5 and language unit admission occurred almost a year later. This child lived in the second LEA where admission to language units appeared to be later than in LEA (1).

5.3.2 Speech therapy intervention

Sixteen parents had no recollection when speech therapy started and 2 children had no speech therapy before going to the language unit (Table 4).

Table 4 Speech therapy commenced

Age (years)	2	2½	3	3-3½	3½	3½-4½	4½	5	d/k	none
n= 40	3	2	2	1	11	1	1	1	16	2

From the time of detection by parents to commencement of speech therapy, an average of 2 years had elapsed.

In 38 (95%) cases where speech therapy was provided, parents felt it had limited effect. Conventional speech therapy in a clinic setting, either weekly or in blocks of six to eight weeks, did not improve their children's communication ability. Parents reported that it gave them a vocabulary of two or three words, which was in contrast to the dramatic improvement reported by all parents after the children had spent a short time in the language units.

5.3.3 Mainstream school prior to Language unit

Most children in LEA (1) went directly to the language unit at the age of school entry, in contrast to the findings from LEA (2). Reports from parents there showed the children were usually on the language unit waiting list for at least a year and attended mainstream school in the meantime. All were having speech therapy in school or both home and school during that time.

Eight (20%) children from LEA (1) attended mainstream school before going to language units; the length of time varied from six weeks to one year. Parents of one child commented:

> *'When he was in school it was awful because children......we used to have to bring him home for his dinner, 'cos children used to be like skitting[4] him and asking him to say things and it was like in a circle round him making him talk or asking him to say such a thing'*

Another parent remembered being very upset at the way her little boy was laughed at in school because no one could understand a word he said. His parents requested an assessment with the educational psychologist and a place at the language unit.

Initially one parent refused to consider a language unit placement for her child because of the stigma attached to special needs education. Her daughter subsequently spent a year in mainstream school before eventually going to the language unit. LEA records commented on how she had '*missed out by being in a typical reception class*'. When interviewed for this study, her mother said she regretted making that decision because her daughter still had difficulties with her speech and language and could have benefited from more time in the language unit.

One child (A) had Attention Deficit Disorder, started mainstream, but soon became too much for the teachers to cope with. The deputy head's report described A as...

> *'Happy and very excitable . He rushes about until checked and is very talkative and enthusiastic. A is very popular with the other children and*

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[4] 'skitting' in this context meant the child was being laughed at by the other children.

> *likes to play noisy and active games. Confident with adults and will make conversation with them even if they have difficulty understanding what he says. Very outgoing and loves to be the centre of attention'.*

The deputy head also commented on A's comprehension:

> *Understands spoken language and can respond appropriately. He can listen to and appreciate stories.*

The speech therapist for A recorded .....

> *Severe problems with speech sound development. Omits sounds at the end of words and substitutes and omits sounds at the beginning of words. Needs regular intensive speech therapy.*

One parent asked the speech therapist if her daughter (E) needed a special school as opposed to mainstream because of her speech problem, but was told it wasn't necessary. After a year in mainstream with speech therapy support, there was no improvement in E's speech and language, and a language unit placement was finally arranged. At the time of statementing, Local Education Authority records showed that E (then aged 5) was self conscious about her speech. She knew what she was trying to say but noticed her peers and adults failed to understand her, which frequently made her feel frustrated and annoyed. Her headteacher's comments recorded at the time were as follows:

> *'E's speech impediment is the worst that the staff and I have encountered.'*

E's language unit placement lasted for 2 years. At the pre-integration review, the Educational Psychologist commented particularly on E's excellent progress with literacy during her time in the unit, and on the fact that her standardised test results were above her chronological age.

E's mother had been aware of a speech problem from the time she was 8 months old, and said she became very frustrated at the lack of professional support before language unit placement was arranged. On several occasions she told the GP of her concern and did the same during regular contact with the health visitor. Her mother also knew that E was very bright in other areas, which was subsequently shown in her standardised test results. It would appear that in this case, E's communication difficulties had hindered development of literacy skills in particular, and contributed to E being self conscious about her speech sounds. Her mother felt that, with earlier language unit intervention, these problems could possibly have been avoided and that the availability of language unit placement should continue into junior years.

From parent reports, the remaining children who attended mainstream school before language unit, either didn't cope in mainstream school as in LEA (1) or had to wait until a place in the language unit became available as in LEA (2) despite the severity of their SLI.

The time spent in mainstream school before entry to the unit, even with speech therapy support, was felt by parents from both LEAs to be a waste of time.

5.4 Language unit experience

All parents praised the work of the language unit in terms of providing individual attention for the children, improving the children's speech and language abilities, making them feel 'special' and creating what they described as a family atmosphere in the classroom.

In LEA (1) the length of time spent in the unit ranged from 6 to 24 months (mean 17.25 months, SD=5.58). In LEA (2) the mean length of time spent in the unit was 1 year, which was in contrast to the 18 months in LEA (1). This may be due to the difference in numbers of children between the two samples, but could also be due to the later admission in LEA (2) with subsequently less available time in the unit if all children had to leave the unit by the age of 7.

From the time parents detected the problem to admission to language unit, the average length of time in LEA (1) was 2 years and in LEA (2) 3½ years. One child's parents from LEA (2) were aware of his speech problem at 18 months, but he had to wait until he was 6 before getting a place at the unit.

All parents were of the opinion that the language units provided a major breakthrough in establishing a means of communication for the child or '*the key that opened the door*'. Children with temper tantrums showed a marked improvement in behaviour. Their ability to interact with other children and with adults developed.

> *'He started talking, the temper tantrums stopped and it was as if somebody had took my little boy and given me somebody else's. I just couldn't believe the difference in him.'*

Before the children started at the language unit, all parents were given the opportunity to visit and talk to the teaching and speech therapy staff. Some were unaware of the existence of such units and some felt more comfortable about the idea of their child going to a special unit, once they saw what the unit itself was like.

All mothers reported feeling apprehensive on the first morning that their children were collected from home by the special transport plus escort and taken to the units. For many children, this was the first time they had been away from their mothers or their families for such a length of time, particularly since there was a tendency for mothers to keep the children with them so they could interpreters if necessary. The mothers worried that the escort would not understand what the child was trying to say, and that the child would not manage being away from their mother all day. Despite initial fears however, the children reportedly adapted quite quickly to the routine of being picked up and dropped off by special transport every day. The children reportedly liked the transport so much that some of their siblings wanted to know why they couldn't go to school by transport as well.

The family aspect of the unit was one of the features commented on specifically by 13 of the parents in terms of class size and support for the children. Parents were also encouraged to get involved in the social activities of the unit, or to accompany the children on various day trips. This helped the parents get to know the other children and become familiar with a wider range of speech and language difficulties.

During the time in the language unit, each child had regular reviews of their statement of special need which parents were invited to attend.
Parents of 32 children didn't want them to leave the units. They would have preferred them to continue with what one described as '*better than a private education*'.

One parent wanted her daughter in and out of the unit quickly to minimise the stigma she felt at having a child in special needs education. This mother thought that if her child stayed there for any length of time, she would be as handicapped as a little boy who lived nearby and attended special school.

Six other parents also described how they felt stigmatised initially by having a child in a special unit. However, they reportedly changed their views when they visited the units and saw there was one teacher to 8 or 9 pupils. The amount of progress the children made in the language units in a short time also helped the parents in that respect. One parent described the improvement in speech to be '*so fast it was unbelievable*'.

Three parents in particular commented on the lack of junior language unit provision for children past the age of 7. The rationale behind LEA policy on language unit provision was possibly constrained by financial considerations but from the parent's point of view, there was a need for specialised intervention beyond that age.

5.4.1 Integration issues

Each child in the study had undergone a process of integration into mainstream school. In LEA (1) this usually took place over a three week period and in LEA (2) there appeared to be no set structure to integration.

Twelve of the children (30%) were reported by parents to have had no problems on integration and 6 parents made no comment either way. One in particular (8:4)[5] had no problems and mixed well with the other children from the beginning. His headmistress provided special thick pens for him, which he had used in the language unit for his poor grip. It appeared the follow up in this case was better than in earlier reports.

Twenty-two (55%) of the children were reported to have had problems of one sort or another; they all took some time to settle in.

One child (10:2) was bullied for the first 6 months because the other children couldn't understand what she said, and she is still described as being shy and withdrawn some 3 years later.

One child was bullied for the first three months and used to come home in tears. His mother kept telling him to stand up for himself and in the end he hit the bully back and got into trouble for doing so. When his mother was called to the school, she complained to the head teacher about the lack of support for her son during the integration process, which had resulted in the situation developing initially. She also felt that if her son was prepared to take on the school bully, it showed his

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[5] Unless otherwise stated, ages given refer to age at interview and not age at integration.

confidence was growing, even though he had continuing speech and language problems and was shy because of this. There was a clash of opinions between the mother and headteacher, one of whom saw the child's actions in a positive light and the other who saw a pupil behaving badly. From parent reports, the headteacher in question was unaware of the earlier problems the child had experienced with SLI, even though the situation occurred within the first three months of being in mainstream school.

Six children (15%) were slow to make friends and stood alone in the playground at breaktime.

One little girl in this group of 6 stood in a corner of the playground and was reluctant to join in play with the other children. This situation lasted for almost eighteen months and she is still reluctant to join in after nearly four years in mainstream school.

> '........*not easy....the teachers didn't know how to cope with the problem. She felt she was left out for the first eighteen months......would stand in the playground The other children knew she couldn't speak properly'*.

One (10:8) found he had no one to play with for the first 6 months. After 8 months, he was showing a general decline in school performance and had regressed in reading and writing ability when retested by the educational psychologist.

One parent described her child (8:1) as being '*dropped like a hot potato*' when he went back to mainstream school due to a lack of continuing support. In the parent's view, his reading and writing skills declined over the first year

One parent felt her son (7:2) had slipped back generally since returning to mainstream school. His reading and writing ability had declined although he was reportedly top of his class in maths. At the time of interview, this child had been in mainstream school for 1½ years.

One parent felt her son (10:5) should have remained in special needs education because he needed that support.

Two of the children found the new classroom setting confusing and kept coming out to the teacher for help and advice. This was something they had been used to doing in the language unit. During the initial 3-week integration period, they were allowed to carry on doing this in the language unit but not in mainstream school, which added to the confusion.

One found the process of integration confusing i.e. going to the language unit for so many days and mainstream school for the remainder.

Four children missed the language unit a lot

> *'...she didn't want to go back......cried and cried'*

They missed their friends in the language unit, the transport to and from the unit and the familiarity of the escort and driver on the bus. They also missed the individual attention they received in a small class of eight to ten children, which was the average size of a language unit class.

The remaining children who spent a relatively short time (6 to 9 months) in the language unit were reunited with nursery or pre-school playgroup friends. Parents reported this to be a mixed blessing in some cases because, although the speech or language impairment had lessened considerably, the friends could remember how the child used to sound and tease them for it.

Parents reported that children who had changed schools or who had spent the maximum two years in the language unit were less likely to know or to remember their mainstream peers.

All parents felt the children had been let down since leaving the language units. In LEA (2) the statement of special educational need finished for all children when they left the language unit. When parents asked for continuing help, they were told that the children were statemented for the language unit only and not mainstream school. The statement seemed to them to be connected with the language unit and not the needs of the child. In the parent's view, the children's special educational needs were not addressed.

5.4.2 Continuing support

Twenty-eight children from LEA (1) and 6 from LEA (2) received no further formal help in mainstream school once their statement of special educational need finished. Where help was given, it depended on the resources of the school.

Nursery nurse support continued for 4 (10%) of the children who were still statemented. Of these, one child (8:2) had Attention Deficit Disorder and needed a nursery nurse with him in the classroom at all times .

One child (11:6) had mild receptive problems and anxiety and received 7-10 hours nursery nurse support each week throughout primary school.

One (8:3) had a statement maintained for reading skills. He had small group support of 3-4 hour teacher sessions per week and 10 hours nursery nurse support per week for class language work. This child was one of those with severe temper tantrums before going to the language unit.

One had continuing difficulties described in LEA records thus:

> *Verbal and linguistic difficulties continuing. Difficulty in pronouncing certain words. Obvious language difficulty and this affects his performance across the curriculum. Needs one to one support.*

In addition, one child (9:6) was restatemented for general lack of progress as a result of prolonged periods of hospitalisation. She had help with spelling in a special group.

After integration, 3 children (7:2; 7:11; 10:2) in LEA (2) received additional help with reading on a non-statemented basis. This consisted of them joining a smaller group outside of the main class for an hour or so each week. Three of the 7 parents from this LEA also went into school to help teachers in the classroom because of staff shortages. They listened to the children reading, which meant their reading ability was monitored more regularly than if the teacher alone had been trying to listen to each child in a class of 30-35 children.

Two children (11:1; 11:3) still needed all round help in the parent's view. Both of these were due to change to secondary school in the year of the study, but were not statemented.

The parents of one child wanted him to go to special school because they felt he was not able to keep up in mainstream. This child was also due to start secondary school that year.

In LEA (2) one child (10:5) had extra help with writing, one with reading and writing (10:2).

One had help with writing and spelling (10:8).

One had help with maths (8:4).

One parent in LEA (2) felt that her daughter (age 10:2) had been given no help after the language unit, but had been '*left to get on with it*'.

One child (8:4) was still having weekly speech therapy on a non-statemented basis. This child had been slow to develop reading and writing skills, but was top of his class in maths.

5.5 Current communication status

Twenty-two (55%) parents felt there were no problems with their children's speech at the time of the study.

Eighteen (45%) parents felt there were residual speech problems. Of these, 2 (11%) children had 'slushy' sounds (ages 7:6, 10:0); 1 (5%) confused words (11:6 years); 1 (5%) got stuck on some words (13:0 years); 1(5%) had babyish speech if she spoke too quickly (8:3 years) and 5 (27%) had strange speech sounds (ages 6:10, 10:2, 8:2, 13:2, 8:2). The remainder were non-specific. Four of these children continued to have speech therapy, 3 of whom were statemented.

5.5.1 Reading ability

There were some general comments from 7 parents regarding the decline in their children's reading ability from language unit to mainstream school. Four children (10%) in LEA (1) reportedly had to reread books in mainstream that they had read in the language unit. Parents requested that the children be given more challenging reading material or additional reading in view of their ability, but were told that this was not school policy. All children in the class had to read the same books from the same level. Parents saw that the children lost interest in reading because they were going over the same work again. Eventually, they were reluctant to do any reading outside the normal school homework requirements. Prior to that, parents had described them as avid readers.

Parents of three children (7:2; 7:11; 10:2) in LEA (2) also reported a decline in reading ability from the time the children had left the language unit.

Two children were described as '*still flying through the books*' and two parents felt their children were keeping up with the rest of the class in reading ability.

At interview, one mother felt that the current teacher didn't like her daughter and singled her out by getting her to stand up and read in front of the class, even though her reading levels had declined since attending the language unit. She felt that this was undermining her daughter's confidence and as a result she was becoming more shy and withdrawn.

5.5.2 Social Interaction

Twenty-five (62%) children were described as having lots of friends and being '*sociable*' or '*good mixers*'. Seven parents made no comment as to their children's social abilities.

Three children were subjected to teasing and bullying, 2 because of their speech (7:2; 10:2) and one because of his small stature (10:8).

Some LEA records noted that the presence of a communication disorder affected not only speech and language, but also the development of play and socialisation skills. This was demonstrated by the children's inability to participate in group activities either through shyness, lack of confidence or through frustration at not being understood. For the children with severe temper tantrums this frustration led to a lack of negotiation with other children in group play activities. In LEA reports, 3 children gave up if their first attempt at speech was not understood.

However, in the pre-school years, parents reported that the children managed to play with others using non-verbal means of communication such as grunting or pointing. The majority were able to play with family and other children in nursery or in their own homes. One boy took particular notice of facial expressions on TV as a toddler and even now, he is reported to be very aware of people's expressions. He had used these as a means of communicating. In the parent's view, most children had adapted their means of communication to their abilities.

The contrast in LEA and parent reports may be attributed to the different expectations of professionals and parents and also to the fact that children may feel more confident in their own home surroundings with children and adults they have grown up with. LEA records would only have information on the children from the time of referral, and not necessarily from the early pre-school years.

Five (13%) children were described as loners. Three of these children had attended mainstream school before going to the language unit for periods of 6 weeks, 8 months, and 1 year respectively.
The child who attended mainstream school for 6 weeks reportedly had more friends at that time than he did at the time of the study four years later. His mother admitted to being overprotective with him because he couldn't speak properly. This child liked his own company more so than friends and schoolmates and tended to play alone on his computer. His mother reported no continuing problems with his speech sounds.

Another child was reportedly very shy because of her odd speech sounds and tended to avoid social situations. This child attended mainstream school for 1 year before going to the language unit, and was shown in LEA records at the time to be very self-conscious about her speech, which also affected interaction with adults and peers. At the time of the study, (aged 13:0) there were residual problems with her speech and she was reported to be a quiet child who tended to be on her own a lot.

The child who had attended mainstream school for 8 months had problems in making herself understood throughout the year in reception class before going to the language unit. Four years later (aged 10:2 years) she continued to have difficulty in mixing with other children in the playground at breaktime. However, she enjoyed being part of a local netball team where she felt more confident.

5.6 Summary of parent interviews

Parents gave a comprehensive account of the experience of SLI from detection to diagnosis and intervention. Two thirds felt their children had normal speech and language at the time of the study. The remainder felt that there were continuing difficulties in one form or another. All praised the work of the language unit, seeing them as the only intervention that really worked. The majority had wanted their children to remain in the units because of the quality of education provided and the small class size, but the lack of junior language unit provision in the LEAs meant this was not possible.

Securing a diagnosis of SLI was often a lengthy process and a recurring theme in the interviews. Professional response to parental concerns was often unsatisfactory. Parents found that attending a specialist unit or hospital clinic meant that medical staff there could not see beyond the initial reason for attendance, and did not respond to parent concerns regarding the SLI.

Developmental screening played no part in detection or diagnosis. Speech therapy usually started at least a year after parents had voiced their concerns and in some cases appeared to underestimate quite severe problems. Speech therapy was seen by the parents as ineffectual in tackling the problem but meant that at least the child was 'in the system' and had access to further services such as language unit provision.

Language unit provision only became available from four years onwards. From a developmental point of view, parents regarded the time before language unit as a period where they were waiting for help from professionals to address both their concerns over the child's communication difficulties, and also provide some practical help to overcome them. Speech therapy began to deal with the problem but had limited success.

Fifteen of the children attended mainstream school before they were admitted to the language units. For seven of those, parents said it was not because they were on a waiting list, but because professionals didn't think there was a need for them to attend a unit of this sort. In LEA (2), the long waiting list for a place at the language units influenced the process.

Once the transition to mainstream school was completed, the psychosocial support the children had in the language units was no longer available. The formal review procedures, which included speech therapy and psychological assessments, ended with the statement of special educational need. In the small number of cases where a statement was maintained, the children did receive further help.

Two thirds of children were regarded by parents as socially competent in terms of mixing with other children and adults and having friends to play with. Some made no comment and 5 were described as loners.

In conclusion, all parents reported their children had made overall progress in mainstream school, and most appeared to have overcome the difficulties presented by the move to a bigger class. There were some reservations particularly related to reading ability, and 2 parents said their children needed ongoing support, which was not available, because they were without a statement of special educational need.

In the next section, teacher ratings and open comments will be discussed in relation to parent comments.

5.7 Results of teacher ratings

In this section, the results of teacher ratings from both LEAs are presented. There was a 90% overall response rate for teachers. In LEA (1), 32 out of 33 teachers returned questionnaires giving a 97% response rate. In LEA (2), 4 out of 7 teachers returned questionnaires giving a 57% response rate.

The teachers who participated were the children's class teachers in the year of the study. None of the teachers were 'receiving' teachers from when the child first went to mainstream school, which meant their knowledge of the children was not based on events during the immediate integration and post integration period. Teachers from 30 schools were involved, 27 primary and 3 secondary. Thirty two teachers who responded made open comments in addition to completing the teacher rating scale adapted from the Urwin (1988) scale of teacher ratings discussed in Section 4.5. An average class consisted of from 30 to 35 pupils.

The results are presented in order of the rating scale domains for Expressive Language, Receptive Language, Motor Ability, and Learning Ability. Comparison with parental views of the same children are made throughout.

5.7.1 Expressive Language

In the first domain of Expressive Language, teachers were asked to rate each child on 4 different items, i.e. articulation, vocabulary, sentence construction and expression, using a 5 point Likert scale with values ranging from Very Good (1) to Poor/Some concern (5). The results showed the majority of children in the 'average' range. Where teachers identified 'some concern felt', this occurred in areas of expression and vocabulary more so than sentence construction and articulation.

There were significant positive correlations (Spearman's) between all teacher ratings of expressive language (see Table 5) i.e. all the different measures of expressive language were measuring aspects of the same construct. Expression was most highly correlated with sentence construction, and slightly less with vocabulary and articulation, indicating teachers attached more importance to grammar than vocabulary or speech sounds when rating expression. In other words, they rated what the child expressed higher than the means of expression.

Table 5 Teacher ratings for expressive language

EXPRESS	.632** N (35)* Sig .000		
SENCONS	.573** N (35)* Sig .000	.900** N (35)* Sig .000	
VOCAB	.582** N (36) Sig .000	.743** N (35)* Sig .000	.742** N (35)* Sig .000
	ARTIC	EXPRESS	SENCONS

* Missing values.
** Correlation is significant at the .01 level (2-tailed).

Twelve children (30%) were rated poor/very poor by teachers for articulation (ages 6:10 to 11:7) and 16 (40%) parents felt that their children (ages 6:10 to 13:2) had continuing problems related to speech sounds. Of these parents, 5 had concerns over their children who were older than 10:0 years, 2 of whom were in secondary school. However there was agreement between parents and teachers for only 6 children (ages 7:5; 8:2; 8:4; 10:2; 10:5; 11:3) in the area of expressive language. Parents saw no problems in 6 children identified as poor/very poor by teachers. Conversely, teachers saw no problems in 5 children identified by parents as having articulation difficulties. It may be that teachers are concentrating on the academic aspects of expressive language, whereas parents are more concerned with social aspects and the child's ability to communicate in everyday settings.

5.7.2 Receptive language

The Receptive Language domain covered comprehension of instructions, understanding of words and memory for oral information. Ratings for receptive language tended to be in the average and above average categories, which was in broad agreement with parent views.

Significant positive correlations were again found for all aspects of receptive language, suggesting they were measuring related features of the same ability (Table 6).

Thirty teachers (83%) rated the children as ‘average’ or ‘above average` for all aspects of receptive language. In contrast to the expressive language results, there was good agreement between teachers and parents. Six (17%) children were scored as poor/very poor on comprehension (ages 8:2; 9:6; 10:0; 11:1; 11:6; 16:4) and 5 out of these 6 parents also felt their child had a comprehension problem.

Table 6 Teacher ratings for Receptive Language

MEMORY	.536** N=36 Sig .001	
UNDERSTANDING	.606** N=36 Sig .000	.597** N=36 Sig .000
	COMP	MEMORY

** Correlation is significant at the .01 level (2-tailed).

The only child with a ‘very poor’ score for comprehension was in his final school year (age 16.4) and his parents did not think there was a problem. They felt their son had lost interest in school, was desperate to leave and as a result didn’t pay attention in class. Outside school, this child was the co-ordinator for three youth clubs in the area. He also showed a keen interest in electronics and had spent some work experience time with a firm specialising in electronic engineering.

5.7.3 Motor ability

Teachers were asked to rate the children on fine motor and gross motor ability. Most children were rated average or above average in this group.

Five of the children from LEA (1) had poor co-ordination skills on standardised tests before entry to language units, but there was no evidence of this in teacher ratings. They were no longer rated as poor.

One child from LEA (2) had a 'poor' score for gross motor ability.

There was high positive correlation between gross and fine motor co-ordination at 0.8 (p=.01), suggesting they are highly related abilities (Table 7).

Table 7 Teacher ratings for Motor Ability

GROSS MOTOR	.763** N (36) Sig .000
	FINE CO-ORDINATION

** Correlation is significant at the .01 level (2-tailed).

Four (10%) children (ages 8:0; 8:2; 10:0; 11:1) had a low teacher score for fine co-ordination and 3 out of 4 parents agreed with this rating.

In one case where there was no agreement, parents felt their child was particularly good at drawing and painting.

> *'he loves drawing, is very arty....he loves maths ...he's supposed to be the fastest writer in his class...'*
>
> (age 10:0)

5.7.4 Learning ability

For this domain, teachers were asked to rate academic abilities as well as approach to learning and attention or distractibility.

Scores for reading and writing ability were evenly distributed. There was a high positive correlation between reading and number ability at 0.78, and slightly lower correlations of 0.60 for reading and writing (p=.01), with 0.58, (p=.01) for number and writing (Table 8). Approach to learning was highly correlated with both reading and number ability (0.55, p=.01; 0.58, p=.01). Approach to learning correlated with all except drawing. Attention correlated with reading and approach to learning. Reading, writing and number all intercorrelated as expected. Drawing (a less academic ability) correlated less with others except writing and number.

Table 8 Teacher ratings for Learning Ability

APPROACH	.372* N(36) Sig .026				
ATTENTION	.221 N(36) Sig .195	.583** N(36) Sig .000			
READING	.232 N(36) Sig .173	.553** N(36) Sig .000	.379* N(36) Sig .023		
NUMBER	.294 N(36) Sig .082	.589** N(36) Sig .000	.284 N(36) Sig .094	.785** N(36) Sig .000	
WRITING	.544** N(36) Sig .001	.473** N(36) Sig .004	.257 N(36) Sig .130	.607** N(36) Sig .000	.585** N(36) Sig .000
	DRAWING	APPROACH	ATTENTION	READING	NUMBER

** Correlation is significant at the .01 level (2-tailed).

* Correlation is significant at the .05 level (2-tailed)

Teachers rated ten (25%) children as poor or very poor on reading ability (ages 8:2 to11:3). Of these, there was agreement with parents in 2 cases only (10:5; 11:1). Four (10%) parents said that their children's reading standards had gone down since leaving the language unit (ages 7:6; 7:8; 9:3; 11:1), although teachers rated the same children as average/above average.

One of these parents felt her child was at the bottom of the class in reading ability a year after integration

> *'he is reading the same books now that he read in the language unit'*
> *(age 7:6)*

5.7.5 Intercorrelation between domains

Adding ratings for articulation, sentence construction, vocabulary and expression derived measures for expressive language. A similar process was applied to the receptive language domain. Adding gross motor, fine motor, and drawing derived motor. Adding reading, writing and number ratings derived academic measure. Approach to learning was derived by adding approach and attention. Domains were then correlated using Spearman's correlations (Table 9).

There were high positive correlations between academic and expressive language, indicating that the better a child's spoken language the higher the teacher rated the child on reading, writing and number ability. Expressive and receptive language were significantly correlated at .66 (*p*=*.05)*. Approach to learning was significantly correlated with expressive language (.35, *p*=.01) and academic ability (.48, *p*=.01). Approach to learning was significantly correlated with expressive language (.35, *p*=.01) and academic ability (.48, *p*=.01).

Table 9 Intercorrelations between domains

RECEPTIVE	.664** N(35) Sig .000			
MOTOR	.321 N(35) Sig .060	.337* N(36) Sig .045		
ACADEMIC	.864** N(35) Sig .000	.691** N(36) Sig .000	.464** N(36) Sig .004	
APPROACH	.355* N(35) Sig .036	.303 N(36) Sig .072	.255 N(36) Sig .133	.447** N(36) Sig .006
	EXPRESS	RECEPTIVE	MOTOR	ACADEMIC

** Correlation is significant at the .01 level (2-tailed).

* Correlation is significant at the .05 level (2-tailed)

In terms of correlations, the scales used produced expected results and are therefore likely to be reliable judgements. They also showed the language unit children appeared to have an average spread of ability in their subsequent school performance, i.e. as a group they were not assessed as below average.

5.8 Teachers' open comments

Thirty-two teachers provided comments in addition to scoring the rating scale. Four teachers made no additional comment. The comments fell broadly into academic (creative writing, reading, number) and non-academic (verbal ability, social and behavioural) abilities.

5.8.1 Academic ability

The comments in this category were as follows:

1) *Creative writing.*

Two children (5%) were described as having particularly good creative writing ability although the parents hadn't highlighted this -

> '*...he has written an excellent story showing an understanding of the structure of stories and a good imagination.*' (age 7:5)

> '*... reads with wonderful expression and enjoys books immensely. Creative writing above average.*' (age 6:10)

Teacher comments about one child (10:5) showed he attended a Learning Support Unit for some of the week which parents hadn't mentioned at interview. Other comments made by the teacher were

> *'progress in drawing, beautiful handwriting, gives 100%. Poor literacy skills which hold him back. Has made progress in the last 12 months. Limited vocabulary'.*

One teacher commented on the outgoing personality of a child (10:8) whom parents had described as being on his own for the first 6 months in mainstream. He had general comments of poor literacy which were slowly improving

> *'general literacy slowly catching up. Very likeable pupil but has the potential to be disruptive. Excellent progress'.*

2) *Reading ability.*

Improvement in reading ability was commented on by teachers for 5 of the children (ages 8:0; 8:3; 8:4; 9:3; 11:1) with which 3 parents agreed, one of whom had insisted on extra help with reading for her child.

Two parents thought there had been no improvement for their children (ages 11:1; 9:3).

3) *Number ability*

Teachers commented on the improvement in maths for 4 (10%) children over the previous 12 months (ages 8:0; 9:1; 9:8;10:2). Parents of one of these children (age

9:8) also commented on their good mathematical ability.

5.8.2 Verbal ability/confidence

Eight (22%) of the 36 teachers made specific comments about the children's verbal ability,

3 related to phonological difficulties

> *'I wasn't aware that V had had speech therapy until this letter arrived.'* *(age 11.10)*
>
> *'his speech is quite clear and easily understood, but a slight lisp or irregularity can be detected'.* *(age 7.5)*
>
> *'......he does occasionally pronounce words in an unusual way and spells these words as he says them. However I do not feel that this is cause for concern as he responds well to correction'.* *(age 6.10)*

Interestingly, a special needs teacher (SENCO) made the first comment about a child in her final year at primary school. For whatever reason, information on the child's background had not reached the SENCO. In this case, there were no problems. The child was making excellent progress in school and outside school was writing a book using her home computer.

The remaining two comments showed that residual speech problems persisted after the language unit in both children sufficient for the teacher to make particular comment about them. All three parents were in agreement with the teacher regarding slight irregularities in speech.

Five (14%) comments were related to increased confidence in the children's vocal performance (ages 7:6; 7:8; 10:7; 11:7; 13:2;).

Of these, one parent commented on the fact that her child still made a '*slushy sound*' and was conscious of the sound of some of the things he said (age 7:6). In the teacher's view, this did not appear to be a problem. There was agreement that the child was generally more confident.

One had made particular progress in

> *'participation and solo speaking in assemblies ...... voice projection excellent'.* (age 7:8)

5.8.3 Social ability

Five (14%) teachers made specific comments about the children's social skills e.g.

> *'of a cheerful disposition'* *(age 7:5)*
>
> *'settled back into his old class quite happily and relates well to other children'* *(age 6:10)*
>
> *'more socially integrated'* *(age 10:7)*

All of the above were in agreement with parent views.

5.8.4 Difficult behaviour

Teachers commented on the behaviour of two children (8:3; 11:3).

For one the comment made was that his behaviour had deteriorated over the previous 12 months but no specific detail was given. Parents were in agreement. This particular child had attended a special unit for his severe temper tantrums, which hadn't returned since his time in the language unit. He remained statemented for reading in mainstream school.

The other child appeared to have problems that were more serious. In school he displayed

> *'...very aggressive and disruptive behaviour both verbal and physical. Sexual words and actions used. Has made progress in the last 12 months in writing and numbers. Deterioration in attitude to authority, particularly female staff and helpers. Would probably have benefited from male teacher input instead of all women'.* (age 11:3)

His parents felt the child didn't like his present school and leaving the language unit had been a '*big drop*' for him. He had experienced the break-up of his parent's marriage and had been sexually abused by a neighbour a couple of years previously, all of which they felt had a bearing on his present behaviour, more so than his communication problem. He was due to start secondary school that year. His elder sister was already at the school and his parents knew the headmaster. They had discussed their concerns with him. Informal arrangements were made between parents and headteacher to monitor the situation and if necessary, the headmaster would contact the parents if any further action were needed.

5.8.5 Overall progress

Five (14%) teachers commented on the children's steady overall progress (ages 7:6; 7:8; 7:8; 8:2; 10:7). Three parents agreed with this and 2 disagreed.

5.8.6 Summary of teacher ratings

Teachers viewed this sample as little different from the 'average' child in the class. There was agreement between parents and teachers in five areas relating to receptive language, motor ability, confidence in verbal ability, social ability and difficult behaviour. Only three of the teachers made particular comment on the verbal ability (i.e. phonological difficulties) of the children in addition to rating scale scores, and parents agreed with all three comments. In contrast, a higher number of teachers gave low scores for expressive language and in particular articulation/speech sounds than had made open comments about these abilities. There was some disagreement regarding articulation/speech sounds between teachers and parents.

Twelve teachers gave poor scores for articulation and 16 parents felt their children had continuing difficulties in this area, making a total of 28 children or 70% of the total sample. There was agreement in only 6 cases. Teachers and parents may have been using different criteria in assessing the children. Teachers concentrated more on grammar while parents may have been more concerned with how the child's speech sounded in everyday social situations. However, the numbers for each group showed a significant number of children with reported continuing problems in expressive language.

Teacher comments relating to improvement in reading ability in 5 cases were echoed by 3 out of 5 parents, but none of the teachers made open comments on a deterioration in reading ability, which 4 parents felt had occurred. Teacher's views on the 'average' child related to the children that they taught on a daily basis. Parents on the other hand were making comparisons with the child's reading ability from when they were in the language unit, which they felt was better than in mainstream school. The children identified as poor readers by teachers were generally older than those identified by parents.

Comments relating to social ability were the same from both parents and teachers and where difficult behaviour was reported, parents again were in agreement with teachers.

The overall results showed teacher ratings and parent views were similar and with the exception of expressive language and reading ability.

In the next section, the results of the children's structured interview schedule are presented and compared with both parent and teacher reports as appropriate.

5.9 Results of child interviews

The results of children's interviews fell broadly into three areas: academic topics, social integration in school and involvement in social activities outside school. The children were asked to give their views on any speech and language difficulties they felt they still had, and to say whether or not the condition of SLI had affected their lives in any way. Children were invited to give open comments in addition to completing the interview schedule. It was hoped to gain as much information as possible regarding integration into mainstream school and their experiences since that time in a mainstream school setting. It was also the intention to show how the children functioned in their everyday lives outside school, what interests they had and what friendship networks existed for them. Ultimately, the aim was to establish how the children had fared going from a small language unit to mainstream school. Within the constraints of a retrospective study design, narrative accounts of children themselves would give some indication of what the experience of SLI was like in an academic and social setting.

The wide age range of the children (6:10 to16:9 years) covered several developmental stages, indicating a range of cognitive ability and self awareness. The issue of self concept which changes as the child gets older (see Section 4.3) was something to be considered, although in this section the intention was to concentrate on the descriptive accounts of the children in relation to academic and psychosocial topics. There was also the opportunity to compare the views of the children with those of parents and teachers.

The range of ages provided information on the different areas of interest for the different age groups and gave some indication of the contrast in views between primary and secondary school children.

All of the children had been in mainstream school for a minimum of one year following language unit. Thirty-eight children had remained at the same receiving schools after integration and parents had moved two to other schools. This meant they had gone from the language unit to one mainstream school and shortly after had moved again to another. In one case, it was because the family had moved house and in the second, it was because the teachers in the receiving school had accused the child of cheating in class. The teachers did not believe that the high standard of her work after attending the language unit (parent report) was feasible and felt she was copying from other children which was not the case. Since moving to the new school, she had no problems. This child was the oldest in the sample (age 16:9).

All of the children in LEA (2) had been in mainstream school prior to the language unit. Despite this some experienced difficulties on re-integration, when the level of support they had been used to in the language unit was withdrawn.

The following section records the children's responses to the different parts of the interview schedule used. It covers the change to mainstream school and the different routines the children had to get used to after attending the language unit. It also explores the amount of help they received during integration and beyond and records how many retained a statement of special educational need. The psychosocial aspects of their mainstream school experience are given particular attention in terms of how the children integrated with their peers in mainstream school.

5.9.1 Changing to mainstream school

The primary school children were accompanied to school by parents, friends, or older siblings either in the family car, on public transport or walking. The children going to secondary school went on their own or with friends. This was initially a big change for the children when they first integrated, because they had been used to special transport to and from the language unit. Five children said they remembered how they missed going on the minibus. Two of these were the oldest in the sample (16:9 and 16:4) and their comments were made 9-10 years after they had integrated.

In the new setting, the children had to become part of a much larger class than that of the language unit. Typical language unit classes comprised 8-10 children, while a mainstream class held between 30 and 35. At mealtimes the children had to sit with large groups and in the playground they again had to establish themselves, as any child moving to a new school would. One child (16:4) went home for lunch every day, which his grandmother felt was related to his desire to leave school and spend as little time there as possible. This had intensified following a period of work experience, after which he could not wait to become an electronics engineer.

5.9.2 Subject preference

Children tended to choose less language-orientated subjects in this category (Table 10). Maths and art were the favourites. Thirteen (32%) children mentioned single subjects as their preferred choice, the remainder gave a combination of choices. The most frequently mentioned choice was maths (14), although maths was also the least favourite choice of 7 children. In 4 (10%) cases maths and art were combined as favourites. Art, painting and drawing were chosen by 12 children as their favourites. In 9 (22%) cases, PE was the favourite. Six (15%) children enjoyed history most. 1 child put music as his least favourite subject.

Table 10 Most and least favourite subjects

	Maths	Science	RE	Art	Geog	English	History	PE	Reading	Writing
Most	14	3	0	12	1	5	6	9	1	4
Least	7	8	2	0	3	3	7	3	2	5

Children did not rate reading very highly on their list of favourite school subjects. Other least favoured subjects were science (8) and history (7).

Least favourite subject of all was writing, along with RE and science.

The favourite subjects were less of an academic nature with the exception of maths, and consisted of subjects where little sustained dialogue was required. How this compares to a typical school population is not known.

5.9.3 Extra help with subjects

Fourteen children (35%) were having extra help with reading, 7 (18%) with maths, and 10 (25%) with writing. Three had extra help in all 3 subjects (ages ranged from 8:0 years to 11:6 years), and had statements of special educational need (Table 11). The remaining children appeared to have had no help either on a formal or informal basis.

Table 11 Extra help in school

Reading		Writing		Maths	
ID	Age	ID	Age	ID	Age
1	9:6	1	9:6	16	11 :1
3	7:2	5	8:3	20	8:0
7	8:3	6	11:7	23	8:2
9	7:6	20	8:0	26	10:7
15	9:3	22	10:2	28	16:9
16	11:1	23	8:2	33	11:6
19	11:3	33	11:6	4(2)	8:4
20	8:0	3(2)	10:5		
23	8:2	2(2)	10:8		
29	10:7	5(2)	7:2		
33	11:6				
1(2)	10:2				
2(2)	10:8				
4(2)	8:4				

One child had an attention deficit disorder (age 8:2 years) and the other (age 11:6) a severe expressive and possibly to some degree a receptive disorder, taking account of LEA records. Parents of the third child (8:0) were concerned that his general progress was not as good as it had been in the language unit.

One child receiving help with reading (9:6 years) had been restatemented in the year of this study at her parent's request because of problems with spelling and a general lack of progress through illness. LEA reports showed that school staff had been concerned about the nature of her problems with spelling:

> '*spellings are bizarre and defy the teachers' interpretation*'.

The educational psychologists' report described an auditory loop problem linked to her earlier phonological difficulties, a condition which he described as often found in children with a history of deviant phonology in their early language development. This child received individual help in a quiet environment within the school in the form of a paired/shared reading approach. A personal dictionary was also devised which allowed her to compare her version of a word with the correct version. Before this help became available, the teachers could not work out what she intended to write. An example of her spelling attempts was contained in LEA records thus:

sowtpv = surprise *unwv = other* *werv = very*
futow = find *suwl = should* *insv = is*

(LEA 1993)

In the year of the study, her spelling was improving and her overall progress was continuing despite long absences from school. The problems with spelling were either not obvious or at least not identified when she was destatemented three years before, on integration from the language unit.

In spite of the difficulties, this child described her own school experience in positive terms and she did not consider herself to be any different from her peer group.

Reports of extra help by the other children were slightly vague. Parents could not always say what the help consisted of, but there were reports of the children joining small groups outside the main class for intensive work on given subjects. The amount of help given was unclear.

One child (16:8) in secondary school was receiving extra help with maths in preparation for her GCSEs. The other three children in secondary school received no extra help with any subjects. Of these, one (13:0) had residual speech problems, although she did not think she required any more help with her speech.

Another child (13:2) said he had great difficulty in writing things down quickly from the blackboard. Parents of this child reported that teachers were generally concerned over his abilities and felt '*there was something not quite right*'. The teachers reassured parents that they would keep an eye on him, but other than that, he received no help. The staff were unaware of this child's earlier communication difficulties because his primary school records had been mislaid, something the parents were very upset about.

5.9.4 Socialisation in school

In terms of the children's opinion of their school peers,

30 (75%) regarded their fellow pupils as friendly.

10 (25%) felt that some of their fellow pupils were friendly and some were unfriendly.

Of these, 1 (9:8) felt his fellow pupils shouted at him; 1 (7:6) said they took the ball from him when he caught it; 2 (13:2; 9:3) were hit by the other pupils but they didn't say why; 3 (8:4; 10:7; 11:3) were laughed at by other pupils, 2 because of the fact that they were of mixed race and 1 because of his unusual surname; 3 (10:0; 11:3; 10:2) gave no reason why the other pupils were unfriendly.

When asked who they would choose to help them at school if they had a problem (losing something, general advice), 30 (75%) said they would go to the teacher for help or advice and 5 (12%) said they would ask a friend. Of these, 1 was aged 7:0 and the other 4 were aged 10+. Four (10%) said they would ask both teacher and friend and 1 said they were unsure who to ask.

5.9.5 School teams

Thirty-two (80%) children took part in the full range of school activities and 1 (9:6) was unable to take part in PE and games because of problems with her hips. She had also spent a considerable amount of time in hospital undergoing surgery before and during her school years.

Eight children (20%) were in school teams for football, netball, cricket, rounders, and chess. It was interesting to note that two of those eight were boys who said they had been hit, bullied and teased quite badly in school. One was in the final year of primary school (11:3) and the other (13:2) in year two of secondary school. Both boys were teased about things unrelated to their speech and language. For one it was because of an unusual surname and for the other it was because of his large head and permanently runny eyes. The fact that both boys had been subjected to unpleasant experiences in school did not seem to deter them from becoming team members.

The first boy, who was still in primary school, had problems in other areas mostly related to his bad behaviour. He had been sexually abused by a neighbour and experienced the break-up of his parents' marriage. There were difficulties on integration because he could not adjust to the new environment, and these difficulties continued to the time of the study 4-5 years later. His mother described the move from language unit to mainstream school as a '*big drop*' for him. His teacher commented on his bad behaviour in the school, which contained sexual words and actions and was directed towards teachers and pupils. This headteacher felt that a school with a higher presence of male teachers might have been more suitable.

The child was still having weekly speech therapy and he said he still needed help with his speech. He also had extra help with reading in class.

His parents were concerned that he would not be able to keep up in an ordinary secondary school and had already contacted the secondary school headmaster to inform him of the situation. Because an older sister was already attending the secondary school and the parents liked the headmaster, they felt they could rely on him to informally monitor the child's progress and report any concerns to them. Ideally, his parents would have like him to be restatemented before going to secondary school, which would have guaranteed regular reviews.

Despite all of the above problems, T enjoyed being part of the school cricket team, preferring sports related subjects more so than other academic subjects.

The second boy who had been teased and bullied took great delight in being the school chess champion for two consecutive years. He had also been asked to join the rugby team and was beginning to play regularly with the team.

5.9.6 Future education and employment

Twelve children (30%) hoped to go to university, 4 (10%) to a college of further education and 4 (10%) to sixth form college. Twenty children (50%) didn't know what further or higher education they would like. This question was possibly not fully understood by the younger children in the sample, because they may not have known what going to university or a college of further education meant.

When asked what jobs they would like to have in the future, 35 (87%) already had some idea, with professional footballer being the favourite among males (ages 7:6 to 11:6) (Table 12).

Table 12 Future employment

Footballer	11	Soldier	1
Pilot	2	Fashion designer	1
Author	1	PE teacher	1
Poet	1	Cartoonist	1
Pop star	1	Artist	1
Interior designer	1	Doctor	1
Electronics engineer	1	Rally driver	1
Not sure	4	Motor mechanic	1
Music teacher	1	Teacher	1
Policeman	3	Optometrist	1

The child who wanted to be an author (11:10) had already started to write a book on her home computer. She was described by her parents as a very happy little girl with a large circle of friends. Her speech and language problems had resolved, but at times, if she tried to rush her speech, it became difficult to understand. The SENCO from her school had made the comment in teacher ratings that he was unaware of her earlier speech and language problems and didn't know she had been to a language unit.

Another child who wanted to be a poet (10:7) said she loved to write poems for her friends and family. This child had continuing speech and language problems and was one of the children who experienced teasing on a regular basis, partly because of her speech and partly because of her mixed race. Her teacher also commented on the fact that M was a good sportswoman and a beautiful singer, was well behaved and conscientious.

Two children (5%) had taken part in work experience as part of the school programme. The remaining 38 (95%) were too young to be eligible.

5.9.7 Activities outside school.

The group of children as a whole had a range of leisure interests, mostly sports related such as football, swimming or martial arts. Six of the children belonged to either Scouts/Beavers or Guides and one child (8:3) who had a history of severe temper tantrums as a toddler was waiting to join the Sea Cadets.

One boy (8:0) said his leisure interests were cleaning the house for his mother and baking. He also liked to listen to Vera Lynn records and loved to play with Barbie dolls. His mother had tried to change this behaviour by giving him other toys to play with, but he got so upset she had to revert back to buying Barbie dolls for his birthday and Christmas presents.

The oldest in the group (16:9) had a boyfriend and she liked to go to discos and the cinema with him. The oldest boy in the group (16:4) was involved in running two local youth clubs which he said took up a lot of his time. Neither of these older children felt that their earlier speech and language problems had affected their lives.

Thirty-three (82%) children said they liked to watch TV and all liked to watch videos.

Twenty-one children (52%) belonged to clubs or societies outside of school. Interestingly 2 of these 3 children experienced teasing and bullying in school, but that had not deterred them from joining in out of school activities.

Thirty nine (97%) liked going to other people's houses; 28 (70%) enjoyed taking part in sport and 24 (60%) enjoyed watching sport.

One child liked to do jigsaws, others liked playing on computer (2), minding babies (1), nothing in particular (2).

The question asking whether or not the children went out socially, i.e to the cinema, football, disco etc. was relevant in only 5 (12%) cases. Going to these locations for the older children meant they were able to go alone or with friends. The remaining 35 children who were still in primary school, generally did not go out without parents or other family members.

The children described as 'loners' by their parents tended to be more interested in computer games and spent much more time alone. One girl (10:2) with continuing speech and language problems belonged to a local netball team where she felt more confident than she did in school.

5.9.8 Communication problem

Thirty-six children (90%) felt that their communication difficulty had no effect on them or wasn't a problem for them. This was slightly at odds with the general views of parents.

Four children (10%) considered that their communication difficulty had been the cause of their shyness, the reason for their being teased and the awareness they felt about their speech sounds. Of these, 1 child (8:0) remarked that '*people say I can't talk properly*'. This child said she felt she still needed speech therapy when people said this.

Another (10:7) said '*I could always remember it and other people keep going on about it.*'

One (11:6) said he felt shy because of his speech. Two of the three children were from the same family and parent reports also highlighted the residual speech and language problems and the effect they had on the children. School reports contained comments relating to these difficulties, but neither of the children appeared to be having speech therapy, taking parent, child and teacher information sources into account.

One child commented

> '*it affected my life the way people talked to me*' (8:4)

Two children (13:0; 13:2) in secondary school whose parents had reported residual speech and language problems felt they had no problems and didn't think their earlier difficulties had affected their lives.

Twenty (50%) children found it easiest to talk to their families, 13 (33%) found it easiest to talk to friends, the remaining 7 (17%) found it easiest to talk to classmates, teachers or others outside of school or home. When asked who she liked talking to best, one child (10:7) answered it was mostly her aunt who was dead because she could tell her all her secrets.

Speech therapy was continuing for 7 (17%) of the children (7:11; 8:0; 8:2; 10:0; 10:2; 11:3; 11:6). Thirty-two (80%) children felt they had no further need of help with their speech and 8 (20%) did. They were unsure as to what that help should be.

Twenty-four (60%) remembered the language unit, and this was unrelated to the length of time in mainstream school. Some children who had been in mainstream for one or two years could not remember the unit. Twenty six (65%) thought they could not have had more help at the language unit while 7 (17%) said they would have liked more help with their general work at the unit and not just their speech in particular.

5.9.9 Teasing

Eleven (27%) children said they had been teased at school and 3 (7%) of these were teased both in school and while playing out at home or in other places. In 10

(25%) cases, the teasing was unrelated to the communication disorder but concerned things like unusual surnames, and personal attributes of the child.

One child was teased because he had warts; another because he said '*people call me Elvis'*. This latter child (11:3) also had problems with integration and wasn't happy in mainstream school. He exhibited continuing behaviour problems and his parents felt he needed segregated education in a special school.

One child (8:0) said people called him names because he liked to wear his mother's high heels and put on makeup. He sometimes went to school carrying his mother's handbag, something his teacher had commented on several times.

One child (13:2) had been subjected to physical and verbal attacks, more so in secondary than primary school. Most of these attacks occurred on the school bus and at one point some of the other pupils on the bus went to the headmaster because they were concerned at the level of abuse J was subjected to. This child was teased because of his large head and permanently runny eyes.

One child (7:5) said he was laughed at because '*they said I had glue in my ears'*. One child with Attention Deficit Disorder (ADD) was teased because of his hand tremor and the way he shouted all the time.

Two children were teased because of their olive skin colour (10:7; 8:4) and one of these was also teased about her speech.

One boy said he didn't know why he was teased because he thought he was *'better than them'*.

The remaining 2 children said they were teased but couldn't say why.

Three children from LEA (2) (7:2; 8:1; 10:8) said they were teased at school and 2 of these were also teased outside school. One was teased because of odd speech sounds, one because he was small and one because *'people said I was horrible and nasty'*. Two of the 3 parents agreed with these reports.

5.9.10 Summary of child interviews

Overall, the children making up this sample appeared no different from the 'average' child, which is in agreement with parents and teachers views. The majority had successfully integrated into mainstream school academically and socially and two thirds were in school teams. More than half of the sample were involved in activities outside school on an organised basis and did not appear to have any problems in mixing socially with other children.

The children saw themselves as making good progress, which although in agreement with parent and teacher estimates, was more optimistic than either one of those groups. The children saw themselves in a more positive light than their parents or teachers in terms of general ability and residual speech problems. Academically, their teachers regarded these children as average. In this context it is interesting to note that quite a high percentage (36%) were having extra help with reading compared to other subjects. Almost twice as many children had extra help with reading than with maths and writing. This supported parents' concerns over deterioration in reading ability since leaving the language unit. How this compares with a 'normal' group of children is not known. The extra help was given to both statemented and non-statemented children alike.

Help, where it was given, was mainly confined to primary school children and only one child attending secondary school received help with maths. Two parents whose children were in secondary school felt that their children still needed extra help with reading and one felt extra help was needed with mathematics. However, of those children who were due to go to secondary school in the year following interview, parents of three children had asked for continuing help with reading and mathematics in particular.

Three of the children were aware of their continuing communication problem and regarded this as being the reason for teasing they had experienced, and for feeling shy. Generally, where teasing did occur, it was for things other than speech and language problems. The majority (30 children) felt that their earlier difficulties had no lasting effect on their lives and didn't stop them from joining in both school and out of school activities.

None of the children in the sample returned to special needs education unlike those in other retrospective studies (Stone 1991).

In general, children had successfully completed the transition from language unit to mainstream school. This they achieved without psychosocial support following the move from language units; any help they did receive concerned academic subjects only. Retrospective accounts in this phase of the study produced some positive outcomes in that the children seemed to be making progress throughout school despite some problems with verbal ability and academic subjects. How this compares to prospective accounts will be seen in the next chapter, where results from the second phase of the study are presented.

CHAPTER 6

RESULTS PHASE 2 LEA (1)

6.0 Introduction

This chapter contains results of the prospective second phase of the study, which took place from July 1996 to July 1997. Participants were children attending language units in LEA (1) who had started the integration process into mainstream school. Children from the second LEA were not included, the reason being that the organisational structure of the integration process in the second LEA was not well defined and integration occurred in a less systematic way. This did not allow sufficient time to inform parents of the study before integration began. It was therefore decided to concentrate on the children from LEA (1) where integration was planned and where there was sufficient time to contact parents, obtain consent and see the children in the very early stages of the integration period.

The low numbers in this part of the study reflected integration trends from the language units in the LEAs over any one year. Language unit classes consisted of between 8-10 children, and only one or two children per term integrated into mainstream school. Children from two of the three language units in the LEA were included in the study. The third unit failed to provide information on children due to integrate, despite several visits to the unit by the researcher and two requests by the LEA's director of special needs education for the unit to become involved in the research.

The aim of this phase was to again highlight the difficulties associated with the condition of SLI, and the diversity of experiences for each child, both during and after the integration process. The general development of the children was recorded as in Phase 1, with background information collected from parents at the initial interview. Subsequent integration and progress in mainstream school follows.

The results of both child and teacher ratings are presented for the Pictorial Scale of Perceived Competence and Social Acceptance for Young Children (PSPCSA) (Harter and Pike 1984). The children, at three time points throughout the school year, scored items in each of the four domains contained in the rating scale. Teacher ratings for three of the same domains were scored at the same time points, allowing for comparisons between child and teacher ratings. The PSPCSA does not require teachers to rate the maternal acceptance domain.

All contact with parents and children was made through home visits. Parent interviews and child ratings were conducted on the same visit at three points throughout the school year, representing one contact per school term for each child. Teachers were seen in school at a time suitable for them, usually at the beginning or end of the school day. Teachers were seen if possible on the same day as parents and children, to produce contemporaneous accounts. Where this was not possible, teachers were seen in the same week.

In the first section, the characteristics of the children are presented, with data collected from parent interviews at the initial contact. Interviews followed the same pattern as those in Phase 1, where parents were encouraged to adopt a life history approach to events both before and after attendance at the language unit. The same 'prompt' areas for discussion were used when parents had difficulty in remembering events (see Table 2).

6.1 Characteristics of the children

Seven children participated in this phase of the study, 5 males, and 2 females. Ages ranged from 5:3 to 7:3 years (mean 6:3; SD 0.77) at entry to the study. Two children in the group came from single parent families, one of whom was an only child, the other was the elder of two children.

All children were monolingual and had been diagnosed with expressive language impairment. In all cases, the children had spent a minimum of one year in the language unit. In 6 of the 7 cases, the children were seen before full integration to mainstream was completed. The seventh child was not seen before he left the language unit. His mother, a single parent, had work commitments and was not available to give her consent in time for inclusion in the study.

The children had undergone a three-week period of gradual integration, spending an incremental number of days in mainstream school each week. In the 6 cases where children were seen in the language unit, teacher ratings were scored at T1 by language unit teachers, which allowed for comparison with later ratings by mainstream schoolteachers.

In the next section, the background history of each child is presented.

6.1.1 Birth history

Two children were born by emergency Caesarean section, one was born 8 weeks preterm by normal delivery, and the remaining 4 were born normally at full term. There were no reports of any problems in the neonatal period for any of these children.

6.1.2 Birth order of the child in the family.

Five of the children were second born, one was the elder of two children, and one was an only child.

6.1.3 Medical conditions

Four of the children had recurrent hearing problems. By the time they were 4 years, 2 of these had had grommets[1] surgically inserted into their ears on two separate occasions to relieve pressure on the eardrum. One of these children reportedly made a full recovery with no lasting effects, while the other continued to have significant hearing problems and was listed for further surgery during the course of the study. The same child had other medical problems in that she had only one fully functioning kidney.

One child with less severe hearing problems also had asthma. There were no further medical problems reported for the remaining 3 children.

6.1.4 Other behavioural difficulties

One of the children (2:0) began to exhibit temper tantrums, which resolved as his

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[1] a small drainage tube inserted into the eardrum.

communication improved. His were the only behaviour problems reported for the group. Up to then his mother had been reluctant to take him on the bus or to the shops because of his behaviour. This report corresponds with parent reports from the first phase of the study.

6.2 Results of parent interviews

Parents were interviewed in the home at each time point throughout the year. They provided their own views on the children's academic and social progress over the first year in mainstream school, in addition to the whole integration process. They also provided a description of each child outside school in their home environment and how they related to friends, neighbours and family. Where LEA data was available, it was used to corroborate parent reports and is included in the results of parent interviews.

6.3 Age of detection

One child had little babble as a baby and his mother felt there was already a problem before he reached his first birthday.

One child was 16 months when his parents noticed odd speech sounds. In the remaining 5 cases the problems were noticed between 18 months and 2 years and were described as *'lack of speech'*, *'strange speech sound's*, or *'unintelligible speech'*.

As in Phase 1, parents approached their GP or Health Visitor for help and advice. In 2 of these cases, it was explained to parents that an older sibling was speaking for the child, making it unnecessary for them to speak for themselves. In both cases, referral to speech therapy was delayed by 6 months to a year as a result of professional views.

One mother became aware of her son's speech and language problems when he was 2 years old, contacted her health visitor and was subsequently referred by the health visitor for speech therapy, which started 4-5 months later.

One parent noticed her son's lack of speech before he had reached the age of 2. The health visitor was approached and she in turn referred the child to the Portage team who provide support for children with special needs in their own homes. The Portage worker who visited DC thought he was displaying specific language impairment at the time and continued to visit him at home for six weeks following initial assessment. The sessions consisted of showing him words on cards and relating the words to objects to introduce various speech sounds. At the time, the Portage team suggested DC be admitted to a language unit, but it was another 2 years before admission was arranged because of his age.

6.3.1 Diagnosis

Parents again reported a general lack of interest on the part of health professionals when the parents were concerned about their children's poor verbal abilities. Reports were broadly similar to those of Phase 1, where mothers were made to feel over-anxious if they showed concern regarding their children's language development.

6.3.2 Speech therapy intervention

All children in the sample began speech therapy between 2½ and 3 years of age. They were seen in local child health clinics, where the speech therapist had regular sessions. However, 6 of the 7 parents felt this had no effect on the children's communication problems, which reflected the findings of earlier parent interviews from Phase 1.

Parents of one child (4:6) requested a language unit placement when their son showed a lack of progress with speech therapy. This child had been in mainstream school for 6 months and continued with speech therapy sessions at the local clinic during that time. The speech therapist subsequently referred him for assessment by the educational psychologist, which showed

> *'Speech sound system is very restricted and falls well below that of his peer group. Because of this, his ability to communicate is impeded, leading to frustration and lack of academic development. Emotional and behavioural aspects have not given cause for concern, but M does cover his mouth with his hand so that his inadequate speech is not heard by anyone, thereby causing him to be a non-participant in classroom activities'.*
>
> (LEA report 6.5.94)

One mother could see the problems her son had in nursery because of his lack of intelligible speech, as she was also a helper at the same nursery. In her opinion, speech therapy had been totally ineffective and she eventually asked the speech therapist for referral to the language unit. On assessment by the Educational Psychologist, her son was found to have a severe expressive language disorder at a phonological and grammatical level (LEA records). He had difficulty with pronunciation and his speech was difficult to understand outside a known context. He had been attending speech therapy for approximately six months at this stage.

These 2 cases highlighted the dissatisfaction felt by parents with the outcomes of speech therapy before the language unit, which was similar to parental reports in the first phase of the study. There were no concerns regarding the receptive capabilities of these two children from LEA accounts.

Parents of one child were pleased with the progress their son made during his speech therapy sessions. Referral to speech therapy had happened almost by accident, when he went with his mother and sister to his sister's speech therapy appointment.

6.3.3 Mainstream school prior to Language Unit

One of the children spent 6 months in mainstream school before going to the language unit. The remainder went directly to the unit from nursery or pre-school playgroups.

6.4 Language Unit experiences

The reported length of time spent in the language unit ranged from 1 to 3 years approximately. The mean length of time could not be calculated accurately because not all parents could remember when their child was first admitted to the unit. It was not possible to corroborate parent accounts fully in this respect. For 2 of the children, LEA records were untraceable because the families had moved house during the study year and one child had also changed schools.

In contrast to parent reports from the first phase of the study, some difficulties persisted for the children even after they started at the unit. One child was very upset over going to the unit on the minibus every morning and reportedly didn't speak for the first 5 months of the 2 years he spent there.

Another child, who had initially spent 6 months in mainstream school, was reluctant to speak for the first 18 months in the language unit. From LEA reports, his speech sound system, vocabulary and grammar were delayed and he used little spoken language in the classroom. His family however, had noticed a big improvement in his speech after only a short time in the unit. He '*never shut up talking at home*', and was '*full of himself*'. He was described as a '*great tormentor*' and was confident at home. His parents felt he lacked confidence in school, which was shown in contrasting reports of his behaviour from parents and teacher.

LEA records showed that his parents had visited the language unit for regular discussions with staff and had acted on any advice the teachers gave. One area where M had made progress was in his reading ability, described as '*excellent*' in LEA records.

The remaining 5 children had no problems in the language unit. One made '*remarkable progress*' (LEA report) with speech sounds, having had a significant delay in his speech sound system on admission.

As in the first phase of the study, the language unit experience had been a positive one for the children from parent reports, in that it helped them to communicate adequately with their family and peers. There were 2 children who found the experience traumatic initially and took some time to settle.

6.4.1 Summary of background information from parent interviews

The experiences and views of the parents in this phase of the study were broadly similar to those found in Phase 1. The difficulty in getting professionals to agree that the children had a speech and language problem was a common theme. However, 2 of the children were referred on by the health visitor within a short time of being approached by parents. The majority of parents felt that speech therapy before the language unit was of little value.

There were contrasting reports with Phase 1 for language unit experience, which showed that not all children adapted as easily as those in the first phase. This may be due to individual differences, or may have been forgotten in retrospective accounts.

In the next section, the result of children's and teachers' rating scales will be given and a comparison made between these and parental reports. Children are identified by their first and second initial (DC, DH etc).

6.5 Results of child and teacher ratings on the PSPCSA

The raw scores of children and teachers are presented in separate tables, one for each child, to show the variability in scores at each time point and a comparison of mean subscale scores for each domain. Children were asked to rate their competence over 4 domains; Cognitive Competence (CC); Peer Acceptance (PA); Physical Competence (PC) and Maternal Acceptance (MA). Teachers were asked to score 3 of the same domains. Accompanying each table is a case history of the child's experiences over the year, taken from child comments, parent interviews, teacher open comments and LEA records. In presenting the data thus, it is hoped to bring together the different academic and social elements of the process of integration. The view taken is that no one part of a child's academic or social development can be viewed in isolation from the other. This combination of various elements shows

a) how the children adapted to inclusive mainstream education

b) how each child rated themselves in terms of cognitive competence, peer acceptance and physical competence

c) comparison of child and teacher ratings and parental accounts

d) levels of support available to the children during the time of integration.

To examine changes in scores over time and changes in domain, results of a repeated measures ANOVA are presented at the end of descriptive accounts. It is accepted that with such low numbers in the sample, it was unlikely that statistical significance would be reached, although results of the test would add completeness to the data analysis and be interesting from an educational viewpoint.

6.5.1 Results for child MB (age at integration = 7:0)

This child was described in parent interviews as '*quiet*' and '*a loner*' who would only go to certain people. He liked to play on his own, usually with cars or computer games. His mother commented at the first parent interview that he was bullied for the first three months in mainstream school

> '*Yesterday he was kicked in the stomach and punched in the back*'.

His mother felt this was a common occurrence in the school, something that every new child experienced and was not particularly related to MB himself.

His teacher commented that during his first few weeks in school MB worked quietly and was not really noticeable because he hardly spoke.

Child scores throughout the year were mixed, but were at their highest at the end of the school year for all domains (Table 15).

Table 13 Child and teacher rating (child MB)

		Cognitive Competence		**Peer Acceptance**		**Physical Competence**		**Maternal Acceptance**
		child	teacher	child	teacher	child	teacher	child
T1	**LU**	3.16	3.0	3.33	3.0	3.16	3.16	2.0
T2	**MS**	3.0	2.6	2.83	1.0	3.5	0*	3.0
T3	**MS**	3.5	3.0	3.66	3.0	4.0	3.0	2.33

*Teacher in mainstream school was unaware of PC. She had only been his teacher for 3 weeks.

The difference between language unit (T1) and mainstream teacher ratings (T2) was quite marked. The language unit teacher obviously knew MB better, having been his teacher for a longer period. Her comments at the time showed MB was

'*Sociable in playground and classroom. Good relationships with other* *kids. Reserved with adults'.*

The mainstream schoolteacher at T2 had only known MB for 3 weeks, because of a change of teachers during the integration period. She had difficulty in understanding what he said during the first week and admitted she gave up after several futile attempts. Although the teacher had only known him for this short time, the low rating reflected the isolation MB was experiencing at that time in mainstream, even though his own rating was slightly higher. The teacher described him as not very popular with the other children, not because of his speech but '*just him*'. This was also commented on in LEA reports.

> *'M... has experienced a 'greater degree of difficulty than was envisaged returning to mainstream.' ST thinks his language skills are OK for mainstream. General agreement that he is unwilling to communicate. Strategies to engineer better social integration, help with self esteem and needs help to express himself in small group settings. There is no need to retain statement when the school are not offering anything beyond the normal range of provision'.*
>
> (Letter: Educational Psychologist 8.10.96)

Scores for PC rose throughout the year. Mainstream teacher ratings for this domain initially contained only one valid score because at T2, the first contact in mainstream, the teacher was unaware of MB's physical capabilities, having known him for only 3 weeks.

MB was unhappy for the first 6 months in mainstream school. He said he liked nothing in school, the other children were '*awful*' and he didn't know why, '*they just were*'. He didn't like the class teacher, but did like the class helper because she helped him and he felt '*she was nice*'.

MB stood alone in the playground at breaktime and his elder sister who attended the same school used to make sure he was all right. Because he was quiet in class, his teacher felt he was lost among 30 boisterous children. Both parents and his teacher commented on his reluctance to mix with anybody and his behaviour at home had also deteriorated. He bullied the other children, used bad language, and wouldn't do as he was told.

MB was very much up and down, one day coming home happy, the next coming home in tears. He came home for lunch every day and some days complained of tummyache and was allowed to stay at home for the afternoon.

MB had only read 8 books in the first 3 months in mainstream, whereas he used to read 5 books a week in the language unit. His cousin a year behind in the same school was on a stage or two ahead in reading and MB was upset about that.

At T3, MB had made a friend in school and finally seemed to be settling down. He was joining in more in class and was well behaved. In the playground, he was not as dependent on his sister as he had been. He had been told off for playing in the cloakroom one day and his mother was really pleased because it showed '*he was just like any other normal child*'. Scores on the PSPCSA reflected the general improvement in MB at the time.

MB still went home for lunch every day. Because of this and the fact that he had quite a lot of absences from school for headaches, tummyaches and so on, the teachers felt he was '*playing his mother up*'. His mother on the other hand didn't go out to work and was quite happy for MB to come home for his lunch every day.

Overall, MB's first year in mainstream school was not a happy one. He disliked school, was reluctant to communicate, and had quite a lot of absences throughout the year. His standard of reading had dropped and he no longer enjoyed reading, something that he had always been good at in the language unit.

Socialisation had been difficult and it had taken some time for him to make friends in school. MB had always been a loner, and even before his speech problems were noticed, he had been shy. It was difficult to say whether his problems stemmed from his personality or from his communication difficulties, or if one had a bearing on the other. Either way the problems he did have with speech and language he was conscious of from an early age.

6.5.2 Results for child DH (age at integration = 6:0)

In the first three months in mainstream, DH adjusted well to the new environment of a mainstream class. He had an outgoing personality and found it easy to make friends. His parents and teachers agreed that his personality was a major factor in this.

The first set of child and teacher ratings were obtained when DH had commenced the integration process and still spent part of the week in the language unit (Table 16). All child scores were lowest at T3, and showed a decline in ratings across all domains at the end of the mainstream year.

Table 14 Child and teacher rating DH

		Cognitive Competence		**Peer Acceptance**		**Physical Competence**		**Maternal Acceptance**
		child	teacher	child	teacher	child	teacher	child
T1	**LU**	3.83	4.0	3.66	4.0	3.83	3.83	3.16
T2	**MS**	4.0	4.0	3.33	3.5	4.0	4.0	2.83
T3	**MS**	3.66	3.66	3.33	3.5	3.16	3.0	2.16

Language unit and mainstream school teachers were similar at T1 and T2. There was good agreement between child and teacher for CC and PC, but less so for PA. All teacher scores for PA were higher than child scores, including those for the language unit teacher. Child and teacher ratings for CC were identical at T2 and T3. Child and teacher ratings for PC were identical at T1 and T2 (both language unit and mainstream).

The decline in child and teacher ratings at the end of the year was in contrast to narrative accounts of academic progress and social ability. However, despite the decline, ratings were still in the upper ranges.

Initially in mainstream, his parents were concerned that DH was reading one book per week, as opposed to one book per day in the language unit. The reasons for this were not explained to the parents, who felt that teachers in mainstream school didn't have the time to listen to the children reading and didn't check their reading record. As a result, DH was getting bored and didn't want to read. The overall standard of his reading had dropped in the parent's view.

After 3 months in mainstream, DH was seen by the speech therapist who felt there was no further need of speech therapy. At this time, his statement of special educational need was reviewed and, in the absence of any other medical or educational concerns, the statement was terminated.

DH continued to make good progress. He was described by his teachers as socially competent, he got on well with the other children and was confident in class. He was good at schoolwork, his reading and maths were '*superb*' and there were no concerns about him in any way.

DH commented that

> *'I've got loads of friends, loads of birthdays at school. Six friends have birthdays. I like to play stuck in the mud, tick and house. ...I'm always playing.....I love walking around finding someone to play with........The teacher is nice and kind....she likes instructing us. I like playing out, playing computer games and videos. ....I call for Andrew every day.'*

Both parents and teachers agreed on DH's progress in school and that there were no problems with his learning in the classroom. Interestingly, teacher open comments were related to DH's popularity with his peers, his confident friendly manner and his outgoing personality. In contrast, his parents commented more on his academic ability.

At the end of the first year in mainstream school, DH was still making progress. His reading was described by his teachers as '*excellent*', although his parents still felt it was not as good as it had been in the language unit. There were no problems with spelling or any other subjects. He had a good memory and could work out words he didn't know. He could speed up his work but tended to want everything to be perfect.

6.5.3 Results for child AB (age at integration = 7:0)

This child had the lowest scores in the group for PA and PC, and the lowest scores for CC at T1 and T2 (Table 17). AB was not seen in the language unit because of a delay in obtaining consent for the study. All scores, therefore, are for mainstream only, although the first set of scores was obtained within four weeks of starting in the mainstream school class.

Table 15 Child and teacher rating AB

		Cognitive competence		**Peer acceptance**		**Physical competence**		**Maternal acceptance**
		child	teacher	child	teacher	child	teacher	child
T1	**MS**	2.16	1.0	2.16	1.75	2.16	2.5	2.33
T2	**MS**	2.0	2.0	2.0	2.0	1.5	1.5	2.25
T3	**MS**	3.33	3.0	2.0	1.83	1.66	1.33	2.16

Teacher ratings showed a steady increase in CC over time in contrast to AB's own scores, which decreased at T2 and rose again at the end of the year. The strongest child and teacher agreement occurred at T2, even though scores were low.

PA scores fell at T2 and remained low at T3. Teacher scores for this domain were also low.

AB was the only child of a single mother. The family belonged to a particular religious sect in the area where they lived. AB spent a considerable amount of time with adults outside school hours and during his time in the language unit, comments had been made about his poorly developed social skills in comparison to those of the other children. On two out of three home visits for the present study, he responded in an unusual way when the front doorbell rang. He ran behind an armchair, crouched down, and appeared nervous or frightened. His mother made no comments about this behaviour at the time.

During the first three months in mainstream, his mother commented that AB was kept in after school quite a bit to finish the work he had been unable to get through in class time. Gradually he was kept in less and less, but got lots of homework. His reading and spelling were improving and his mother reported that '*he read everything*'. AB enjoyed playing on his home computer and used the spellchecker facility which was helping to improve his spellings. Maths was also improving, but application took a while.

His mother felt that AB had settled into school well, played with others in the playground, had a few friends and was managing to overcome his shyness.
At T2, his mother felt he was becoming more independent and had begun to go to a friend's house to play. In contrast, teacher comments showed that socially he was on the outside and was immature.

At this stage, the statement of special educational need had not formally finished. Although there was no extra help given to AB with any subjects, there were some concerns about his immaturity and poor gross motor skills.

AB didn't like rugby and never wanted to go to school when he had rugby. His teacher commented at T2 that although AB loved to have a go at PE, he looked uncoordinated. Low scores for physical competence reflected this, showing that AB had a good awareness of his own ability in this domain. It may have been that he knew his limitations, or that he didn't like sport in general.

After nine months, AB was walking to school with the other boys from his locality, one in the year above, and two from the street. He was playing more with the other children in the street. He still didn't like sports and from teacher comments still had poor gross motor skills but '*takes part in all PE with enthusiasm*'.

His mother had no worries about his speech, even though he sometimes said the wrong word in context. She was pleased that AB's reading age was 9, at a chronological age of 7:9 and he still liked reading. His statement of special educational need had finished by that time.

This child was showing poor scores across all domains of the PSPCSA. The teacher expressed concerns about him in open comments accompanying the scale, but he received no academic or psychosocial support.

6.5.4 Results for Child LD (age at integration = 7:0).

When LD started in mainstream school, her teacher commented that she was '*working towards*' level one in her SATS tests particularly related to maths. Three months later she was still having problems with number ability and needed plenty of repetition before she could understand new concepts.

Table 16 Child and teacher rating LD

		Cognitive competence		**Peer acceptance**		**Physical competence**		**Maternal acceptance**
		child	teacher	child	teacher	child	teacher	child
T1	**LU**	3.83	2.0	3.83	1.66	3.66	2.5	3.5
T2	**MS**	3.5	1.33	3.5	3.0	3.0	2.83	2.16
T3	**MS**	3.0	2.0	3.0	2.5	3.50	1.33	2.75

This child's scores were higher in the language unit than in mainstream school across all domains. Child scores for CC and PA were identical at all 3 time points. Although scores were in the upper ranges, all followed a downward trend over the year. Despite this, LD said she liked mainstream school.

Teacher scores were generally lower and showed lack of agreement with child scores. Scores were the same for CC at T1 and T3; that is to say teachers from language unit and mainstream school were giving the same score. Teacher scores for PA were lower at T1 in the language unit than they were in mainstream school, which was in contrast to child scores for the language unit. Interestingly, the highest teacher score across all domains was for PA at T2 in mainstream school.

There was lack of agreement between parents and teacher regarding LD's progress. Her parents felt that her speech had improved since attending the language unit and that she would have no problems coping in a big class after integration. They felt she had passed the reading stage of her older sister, and had progressed onto different books. Her mother commented that LD sometimes had homework, which she herself couldn't do.

Outside school, her parents described LD as very outgoing and bossy when playing with other children in the street. During the first few months in mainstream school, when boys in the school called LD names, she reportedly stood up to them and dealt with it very well.

The positive picture painted by the parents extended to the way LD took part in team games. They described her as a tomboy who loved rugby, netball and snooker. She had apparently beaten a 13-year-old boy at a game of snooker. Her parents also described her as very determined and gave an example of the way LD had rearranged her bedroom to the way she liked it, after it had been decorated and arranged by her parents.

In school however, there were concerns over LD's academic progress. Her teacher commented that her

> *'...language [was] still causing a problem. Reading fine. Number- takes a little time to grasp new concepts. Needs plenty of repetition. Does not always understand instructions. Social - plays with a small group of children. Does not mix with the class as a whole. L tends to rely to a large extent on adults for direction in all areas of the curriculum.'*

From educational psychology reports, LD was having continuing problems with maths and needed small group work over 4 days each week for this subject alone. LD continued to have speech therapy throughout the study year and teacher comments reflected the persistent nature of her SLI. At the end of the first year in mainstream school, her speech was described in speech therapy reports as '*dysfluent*' and the presence of a stammer was also noted. Yet LD was either not aware of her poor speech, or did not feel embarrassed by it. She was the only pupil to stand up and ask a question in school assembly one morning, when a visiting speaker was giving a talk on the environment.

Her parents also felt that after an initial improvement, LD's speech had deteriorated, despite continuing speech therapy. As far as the parents were aware, the frequency of speech therapy input was half to one hour every three months, although there was no indication of the frequency of speech therapy in LEA accounts. In addition, they felt her speech was affected by a continuing hearing loss. Over the year of the study, LD continued to have problems with her hearing and was waiting for her third set of grommets to be fitted. Her parents' concern over LD's hearing was mentioned several times at interview. They reported that the teacher in school was supportive, and brought LD to the front of the class, where it was easier for LD to hear what the teacher was saying.

At the end of the first year in mainstream school, LEA records showed LD's basic number skills to be at the level of 6:02 at a chronological age of 8 years. Her word reading and spelling were also delayed at 7:01 and 6:10 respectively. There was a significant discrepancy between her verbal and non-verbal abilities, with the latter being much stronger. Her parent's however, felt that LD's reading ability was better than her older sister's, due to the fact that she always '*had a book in her hand*'. Her father described her as having a great memory for faces and names, and he was sure she could drive a car even at that age.

After a year in mainstream school, LEA records showed LD continued to rely heavily on adults for direction, and was also having problems in adjusting to the larger class environment. Her short-term auditory sequential memory was poor and she was unable to follow complicated oral instructions. She was described

> '*as a loving and affectionate child who loved to be cuddled and her ability to mix with her peers in school was at an acceptable level*'.
> (LEA report 1997).

She still had phonological immaturities in addition to a significant hearing loss.

Mixed reports of social ability from both home and school, together with concerns over her academic ability and a continuing hearing problem, meant that LD's progress in mainstream school was not as sustained as some of the other children in this group. However, LD saw herself in a positive way across all domains of the PSPCSA, which again highlights the sometimes overly optimistic self-evaluations of children in this age group.

6.5.5 Results for child RS (age at integration = 6:2)

RS began integration into mainstream school, having spent 2 years in the language unit due to a severe expressive language disorder. As a toddler, he had used his own sign language and his mother knew what he meant when he used the signs. Pre school, his speech was difficult to understand outside a known context, although there were no concerns over his receptive capabilities and his IQ was in the average range from LEA reports.

A continuing concern of both speech therapist and teacher during and after the language unit, was RS's poor listening skills and his tendency to '*switch off*'. Classroom activities were explained frequently by the teacher, but he still produced written work which was totally unrelated to the task that had been set. For example, if the teacher asked the class to describe a day out at the zoo, RS would write about something completely different. His teacher described him as being '*on another planet*' and wondered if his problem was related to poor attention, poor concentration, or comprehension problems. These comments were repeated at two points throughout the year by the teacher, but were not reflected in parent interviews.

Child scores for CC and PA rose from T1 to T2 and remained constant at T3. This was in contrast to teacher ratings, which showed a marked decrease in CCover the year. The first score for CC given by the language unit teacher was higher than that given by the mainstream teacher at both T2 and T3. Yet, on Scholastic Achievement Tests (SATS), his mainstream teacher commented that RS managed to achieve reasonably good levels in reading, reading comprehension, writing and spelling. In mathematics, he reached level 1 only.

The teacher described RS's poor listening skills as *'a real cause for concern'* and was aware of these problems from early in the integration process. Comments from the language unit teacher did not convey the same concern. There are several possibilities why this should occur. The language unit class size allows for a more individual approach where there are attention problems, and consequently better outcomes can be achieved in getting children to follow instructions. There is also the possibility that the emphasis on academic subjects is more defined in a mainstream class and children with special educational needs may not be able to keep up. Whatever the reason, the contrast in child and teacher scores at T2 and T3 for CC was quite marked (Table 19).

Table 17		**Child and teacher rating RS**						
		Cognitive competence		**Peer acceptance**		**Physical competence**		**Maternal acceptance**
		child	teacher	child	teacher	child	teacher	child
T1	**LU**	3.66	3.5	3.0	2.66	3.83	2.33	3.5
T2	**MS**	4.0	1.0	4.0	3.0	4.0	3.0	2.83
T3	**MS**	4.0	1.0	4.0	3.5	3.33	3.33	2.66

At T2, RS's own ratings on the PSPCSA had risen in three domains. With the exception of the T3 score for PC (Table 19), all other mainstream school scores were higher than in the language unit.

When RS had been in mainstream school for 5 months, he was seen for the last time by the Speech Therapist, who had no concerns over his speech and language. The speech therapist again referred to his history of poor listening skills, but felt that in this context it was related to his moving from a small class in the language unit to a larger class in mainstream school. However, this situation persisted over throughout the first year in mainstream school with no improvement as RS got used to being in his new environment.

The statement of special educational need was reviewed and terminated shortly after speech therapy assessment. RS was described in LEA records as a

> *'well behaved and co-operative child who was kind to other children. Has excellent relationships with both adults and children'*
> (LEA review Jan 1997)

There were no problems reported by his mother on integration to mainstream school at any of the parent interviews following his move from the language unit.

RS himself was a happy child who liked to have his friends come to his house to play as opposed to him going to theirs. When asked if he was going to have a party for his birthday, he replied he didn't like parties or crowds, and wouldn't be going to McDonalds either.

There was agreement between parents, teacher and RS himself that he was very good at competitive sports, which was reflected in teacher ratings for PC, but not to the same extent in RS's own final score, which was lower than both his previous scores in this domain. However, there was agreement between child and teacher at T3 for this domain. RS enjoyed golf and had his own set of junior golf clubs, which he was very happy to show off. He also played football, rugby, athletics, cricket, and basketball. RS commented that he

> *'liked to run around the track with my grandad'*

The increase in his range of sporting activities was matched by an increase in his circle of friends, which was noted by both parents and RS himself. Teacher ratings also showed an increase in PA over the year of the study.

There was an early reference to a hearing problem by RS's mother at the initial parent interview and a continuing reference to his poor listening and attention skills throughout his schooling. There did not appear to be a link between the two from parent or teacher accounts, or from medical reports in LEA records.
Parent and speech therapist reports showed no concern over RS's speech and language ability since leaving the language unit. His teacher also commented that he was an excellent reader, and made no reference to any speech difficulties.

At the end of the study year, RS's mother was pleased with his progress in school. He seemed to be coping well with schoolwork and was mixing with the other children in school. He also played well with local children, was never teased, but didn't like a lot of fuss or lots of people, noise or parties. His parents had no worries about him, in contrast to his teacher, who was concerned about his academic progress.

RS's poor listening skills, first commented on in the language unit, continued throughout the school year. Teacher scores for PA on the PSPCSA improved over the year, and interestingly were higher than those of the language unit teacher at T1. Child scores for this domain also rose over the year, which appeared to reflect both parent and teacher views.

6.5.6 Results for child DC (age at integration = 5:3)

This child was the youngest in the group of seven children. When DC was first admitted to the language unit, there was no speech therapy input due to staffing difficulties at the time. It was 4 to 5 weeks before speech therapy started, and his parents felt he had regressed in that time. Once speech therapy got under way, he made a lot of progress. Parents reported that DC didn't like the integration days and was in tears at the school sports day. He didn't want to go back to mainstream school. Another child from the language unit went back at the same time and that helped.

His parents had described him as a very sociable child, but while still in the language unit he tended to play more with his older sister in the playground than with other children.

On the PSPCSA, child scores for CC and PC were lower at T2 and T3 than they had been at T1 (language unit scores). Teacher scores in contrast were higher at T2 and T3 for CC than they had been at T1, showing lack of agreement between language unit and mainstream teachers. DC was only 5:3 when he went to mainstream school, and his cognitive ability would be expected to develop over the year, as shown in mainstream schoolteacher scores. Even so, teacher ratings for CC were in the lower range at all three time points, although there was a general upward trend. Comments made by the teacher were not reflected in teacher scores for this domain.

Teacher scores for PA were constant for both language unit and mainstream teachers throughout the year. Child scores for the same domain showed a drop at

T2, which gave some indication of DC's reported initial dislike of mainstream school. There was an increase in child PA scores at T3, although they were lower than those in the language unit, and were lower than teacher ratings for the same period.

Table 18 Child and teacher rating DC

		Cognitive competence		**Peer acceptance**		**Physical competence**		**Maternal acceptance**
		child	teacher	child	teacher	child	teacher	child
T1	**LU**	3.83	1.5	4.0	4.0	4.0	2.83	3.5
T2	**MS**	3.5	2.0	2.5	4.0	3.66	3.0	2.0
T3	**MS**	3.33	2.33	3.0	4.0	3.5	2.5	2.83

After 3 months in mainstream, his teacher commented that DC would

> *'get a lot more work done if he spent less time talking and more time working'.*

After integration, his mother had some concerns regarding DC's reading ability, which, in her opinion, had deteriorated since leaving the language unit. DC no longer liked reading by himself, or with help, and would sometimes say the wrong words when reading. The teacher reassured parents that any reading problems would be associated with DC's speech and language problem, something which his mother didn't agree with. This lack of agreement between parent and teacher was a continuing theme throughout the year.

DC's mother also felt he was not making progress with his language. Much of what he said still sounded babyish, and he no longer had speech therapy following the move from language unit. His mother felt there was a lack of progress with speech. His teacher was always too busy to be seen, which parents found frustrating.

At the end of the year, DC's teacher commented that his reading skills and sight vocabulary were developing. He was also able to attempt simple spellings independently and distinguish sounds in unfamiliar words. He could cope with his maths work, although at times it had to be explained a second time before he could complete it alone. There was a general lack of agreement between teacher and parent views with regard to DC's reading and writing ability, although teacher scores on the PSPCSA indicated there was some cause for concern.

DC's mother had no complaints about his social integration in the school. He had some friends in the playground at break time, and would shout their names and increasingly play with them rather than his sister. Apart from the concerns over his reading ability, DC appeared to be making good progress in mainstream school. He had received no support of any kind over the year and had managed to overcome his initial dislike of the new school, and to make progress in his psychosocial development.

6.5.7 Results for child RD (age at integration = 6:6)

RD was in the language unit for 2½ years and her mother felt it had made a big difference to her speech and language.

All child scores were generally higher in the language unit than mainstream. With the exception of Peer Acceptance teacher score in the language unit, all teacher scores were considerably lower than child scores throughout, with mainstream teacher scores generally lower than those of the language unit teacher. The concern felt over RD's progress in mainstream was shown in teacher comments

> *'R is a low achiever as compared with the other children in the class. Although she has certainly made good progress, academically she is still one of the weakest children in the year group. R is a very friendly girl and mixes well with the others, but she initiates the friendship rather than the other children approaching her to play etc. R's gross motor skills are poor - she has very poor balance and therefore has trouble with physical activities'.*

RD herself was a happy child who appeared unaware of her indistinct speech and her low achiever status. Her own scores for CC were the same at T1 and T3, with a small decline at T2. This did not reflect both language unit and mainstream teacher scores, which were highest in language unit and declined over the year.

Table 19 Child and teacher rating RD

		Cognitive competence		**Peer acceptance**		**Physical competence**		**Maternal acceptance**
		child	teacher	child	teacher	child	teacher	child
T1	**LU**	3.5	1.83	3.5	4.0	3.5	1.66	3.5
T2	**MS**	3.0	1.16	2.83	1.6	2.8	1.33	2.2
T3	**MS**	3.5	1.0	3.0	2.16	3.0	2.0	2.83

Child scores for PA were low at T2 and rose again at T3, which did not correspond with her open comments about making friends in school. Before she went to the language unit, her mother reported she had been reluctant to play with the other children in the street where the family lived. However, since going to the unit, RD did play out more and had made friends with the local children.

RD liked drawing and painting and had no problems holding a pen. Her letters were too big and almost took up the entire page, but her mother felt she was improving in that area. As far as her mother was concerned, there was only one problem with RD, and that was her persistent nocturnal enuresis.

RD's mother was pleased with her progress regarding speech and overall progress in school. She felt RD's reading was particularly improving. Her mother also felt she was good at maths but not very good at reading because the '*sh*' sound was still a problem when she tried to read.

There was lack of agreement between teacher and parent over this child's abilities and academic progress. There was also lack of agreement between child and teacher across all domains of the PSPCSA, but particularly so for cognitive ability. Both teacher and parent agreed on RD's social capabilities. RD also said she was happy to go to school every day. She liked the other children in school and had made friends with two girls in the playground.

6.5.8 Summary of child, parent and teacher views

Narrative accounts of the children themselves showed that with one exception, all were adapting to mainstream education reasonably well. Four had recurrent hearing problems in the pre-school period, one of whom had continuing problems during the study year.

There was lack of agreement between parents and teachers in 5 cases regarding overall progress and reading ability.

One child had problems on integration, which persisted throughout the year. These problems had been in evidence since the pre-school period, when his mother had described him as a 'loner' who would only go to certain people. This continued in the language unit when he showed a reluctance to communicate. Aged 4½, he was conscious of his speech sounds, and would attempt to cover his mouth with his hand so that others could not hear his speech. Later estimates of low self-esteem by the Educational Psychologist were therefore not surprising.

There were differences in reports of how the children presented between home and school. All but one of the children was generally happy in mainstream school. One boy, who was the youngest in the group, after a tearful start, settled in to his new environment quite quickly. Socially, the children reported making friends in school. Even the boy who wasn't happy in school said he had made friends there, despite the fact that he liked nothing about the school, and had a lot of absences from school throughout the year.

One child had low scores across all domains on the PSPCSA, showing his self-perception or how he viewed his own competencies was quite low. He came from a background where his family belonged to a particular religious sect. His social interaction with other children was limited, as parents in his home neighbourhood were reluctant to let their children play with him. His social skills were poorly developed, and he seemed to have an awareness of his own limitations, which was reflected in his low ratings on the PSPCSA.

There was concern over 5 of the 7 children, even though only 2 retained a statement of special educational need. Only one of the children could be said to have made progress over the year, taking teacher ratings and parental views into account. The two with the lowest teacher scores (AB, RD) were described differently by their teachers and parents. One of these children continued to be statemented throughout the year. Both had problems in social integration in school.

One child, his teacher felt was 'on another planet'. This may have been related to a short attention span commented on by the speech therapist in LEA records prior to his leaving the language unit. His own ratings in mainstream school were high for cognitive competence and peer acceptance, higher than his scores for the language unit. He described himself as a good sportsman, and increasingly so over the year. Yet, his objective ratings on the PSPCSA for physical competence were lower than either of the other two domains. They were at their lowest at T3, although when interviewed, he regarded himself as being more adept at sports at that time, and was increasing his range of sporting activity to include golf and other new sports.

The level of hearing loss experienced by one child had been part of the reason her statement of educational need had continued. She had problems in keeping up with the large group setting and her achievement overall was low. However, there was a marked difference in her behaviour at home. She was the leader when playing out, and she was better at rugby and snooker than the boys in the street. Her results on standardised tests were below her chronological age, and she was still receiving speech therapy. She was described as a loving and affectionate child who needed lots of adult reassurance in the school environment. She rated herself highly on cognitive competence at T2 but her scores for peer acceptance had declined over the year. Other children may have been reluctant to initiate contact with her if they felt they were unlikely to get a response, either because of her deafness or if her speech sounds were 'not right'.

Parents also commented in this phase on declining reading standards in 3 out of the seven cases. There were no reports of extra help with reading or other subjects.

6.5.9 Results from the PSPCSA child and teacher ratings.

Data were available for six children at T1 in the language unit. The seventh child had already started in mainstream school before consent was obtained from his mother for him to take part in the study. At subsequent points, data from all seven children were available.

Statistical tests were used to analyse this data over the group, although it is acknowledged that the small numbers of children would be unlikely to produce anything that was statistically significant.

Initially, group means of child scores for each domain are shown in Table 20.

Table 20 Group means - children

Time	CC	PA	PC	MA
T1 (LU) SD	3.6 (.24)	3.6 (.36)	3.7 (.28)	3.2 (.60)
T2* SD	3.3 (.63)	3.0 (.62)	3.3 (.67)	2.5 (.38)
T3** SD	3.5 (.32)	3.1 (.63)	3.2 (.72)	2.5 (.29)

*(3 months in m/s)
**(9 months in m/s)

A 2-way repeated measures ANOVA was performed for the children to discover if their perceptions of competence decreased over time in mainstream school; if they rated themselves lower on some domains than others; if there was an interaction between time and domain, i.e. do some domain scores change over time, while others do not?

No significant differences were found over time $F_{2,10} = 2.4$ (p=0.14). A significant difference was found between domains $F_{3,15} = 29.0$ (p=0.00). Although an intriguing finding, it is unlikely to be a true difference because of the lower ratings on the maternal acceptance than other domains. One explanation could be that the PSPCSA is culturally unsuitable for this group of children, or another may be that they did not fully understand the concepts used in the scale.

Group means for the teachers are presented in Table 21.

Table 21 Group means - teachers

Time	CC	PA	PC
T1 (LU) SD	2.3 (1.2)	3.0 (1.11)	2.6 (.7)
T2* SD	2.0 (1.0)	2.9 (.9)	2.6 (1.02)
T3** SD	2.2 (1.1)	2.9 (.87)	2.2 (.84)

*(3 months in m/s)
**(9 months in m/s)

A 2-way repeated measures ANOVA showed a significant difference over time $F_{2,10} = 4.4$ (p=0.043) in teacher scores. This could be due to the fact that teachers were getting to know the children better and they were rating them lower. There was no significant result for domain $F_{2,10} = 0.8$ (p=0.47) and no significant interaction between time and domain $F_{4,20} = 0.28$ (p=0.09). A small significant result was shown between teacher ratings and child ratings over time.

Overall, no significant differences were shown for time, domain or interaction between time and domain. This was not unexpected in view of the low numbers in this part of the study. A larger sample is needed to reach significance values for each of the areas examined.

This concludes the results for Phase 2 of the study. The findings from both phases will be discussed in the next chapter.

CHAPTER 7

DISCUSSION

7.0 Introduction

This study arose from the concerns expressed by a parent support group for children with SLI. Parents felt that the children were at risk of falling behind in the mainstream educational system, once the LEA terminated their statement of special educational need. In other words, the support they had received in the language units did not continue in mainstream school.

The study set out to explore the experiences of the children who had integrated from a language unit to mainstream education under the terms of the various Education Acts from 1981 to 1993. Different perspectives of the child, parent, and teacher were sought. The retrospective first phase of the study examined the experiences of children who attended language units in two LEAs and their subsequent integration into mainstream school. The prospective second phase explored the process of integration from language unit to mainstream school in more depth, looking at how children fared in a mainstream class over a period of one year.

The children in this study shared the same general characteristics as children with SLI found in other studies, and were predominantly boys. Twelve percent had relatives with other speech or language difficulties, similar to the findings of Ripley

(1986). Recurrent hearing problems were reported in a small number of children, which some authors have found to have a bearing on the development of SLI (Lahey et al 1995). However, only one parent felt that her daughter's hearing problems had contributed to the presence of SLI. In terms of family history of speech or language difficulties and the presence of hearing problems, the children in this study were typical of those in earlier studies.

One of the most interesting findings from the study was the reported difficulty parents had in securing a diagnosis of SLI for the children. Although not the initial focus of the study, this appeared to be a major concern for parents, and contrasted with the views expressed in the SLI literature underlining the importance of early detection and diagnosis.

Another finding, again from parent interviews, showed the low value placed on speech therapy by the parents. They felt the children made little or no progress with speech therapy alone, and it was only when the children reached the language units that things changed.

Parents were unanimous in their praise for the language units. In their view, they were the only intervention that 'worked'. Language units were described by some parents as the key that unlocked the door to their children's communication. When the time came for integration came, parents were concerned at the prospect of the children going from a protected environment to mainstream education. They would have preferred them to stay in the units and continue with what was considered to be better than a private education.

Neither parents nor language unit teachers had the option of keeping children in the units past the age of seven because there were no junior language units in the area. This did not imply however that the children had been 'cured,' or that they no longer needed monitoring of their speech and language ability past that age.

Parents reported that over half the children had difficulties on integration, for which the receiving school gave no help. Parents also reported that no coping strategies had been developed for the children to minimise the effects of leaving a supported language environment, although this has been advocated in earlier work (Urwin 1988). Initially at least, parents felt the children were not as settled in mainstream school as they had been in the language units.

The quality of liaison between language units and mainstream school was poor. Detailed reports on the children prepared by each language unit teacher for mainstream receiving teachers were seldom referred to. Language unit teachers in both phases of the study commented on this point, and on the way valuable information concerning the children was wasted. There were three instances where both headteachers and special educational need co-ordinators were unaware that the children in question had ever been to a language unit. In addition, there was no collaboration between mainstream teachers and speech therapists. It is not known what knowledge mainstream teachers had of SLI.

Results of the first phase of the study showed that two thirds of the children were getting informal (nonstatemented) help with academic subjects some years after leaving the language unit. Paradoxically, teachers rated these children as 'average'. In both phases, children needed more continuing help with reading than with either maths or writing, although agreement between teachers and parents was minimal in assessing reading abilities. However, in combining parent and teacher estimates of reading ability, almost half of the children in Phase 1 were having difficulty, as were four out of the seven children in Phase 2.

There was no monitoring of the children's speech and language once they had been destatemented. This usually happened after three months in mainstream school, and appeared to depend on one visit from the speech therapist. Those who retained a statement of educational need continued to have speech therapy.
Parents felt that one third of the children had continuing speech and language difficulties. Teachers also identified a similar number, but there was minimal agreement between the two groups. In contrast to both parents and teachers, only seven children felt they themselves had continuing problems, lower than either parent or teacher estimates.

The children in Phase 1 regarded themselves as no different from their peers and in Phase 2, the children's self perceptions across all domains of the PSPCSA were positive, despite the presence of SLI. There were few reports of social exclusion or bullying due to SLI. However, five children remained isolated at playtime, which lasted in four cases for the remainder of their primary school years.

In the discussion that follows, limitations of the study are discussed before an evaluation of study methodology. Outcomes of the study are then discussed in relation to previous work; a chronological approach to events is taken in this section of the discussion. Finally, conclusions and recommendations for future research are presented.

7.1 Limitations of the study.

Response rates were low in the first phase of the study (33% in LEA (1) and 17% in LEA (2)), despite sending reminders. The reasons for the low numbers are unclear, and one can only speculate as to why parents and children did not want to take part. It is possible that parents did not want their children to be part of a research project, or that if they were 'cured' in a sense, parents did not want to be reminded of past events. The chaotic system of special needs provision for SLI in LEA (2) may have also influenced parents' non-response.

Numbers in the second phase were also low, but the numbers of children integrating from language units to mainstream education each year in these LEAs were generally low, (between 10-20 children). These figures are in keeping with the low numbers for language unit populations nationally, and were therefore not unexpected. How representative they were in terms of other LEAs and the total language unit population is uncertain. There were problems in terms of statistical analysis because of the low numbers in this phase of the study. A design, which incorporated both qualitative and quantitative methods, was therefore useful in capturing items without relying solely on statistical significance.

The wide age range of the children in the first phase of the study reduced the likelihood of sampling bias, where one age group would be overrepresented. The overall representativeness of the groups had to be considered. Parents and children who took part in the research may not have been typical of the whole SLI population. Miles and Huberman (1994) highlight the pitfalls of generalising inappropriately from specific instances, one of which is the '*overreliance on accessible informants*' (Miles and Huberman (1994, p231). The present study relied on those who were willing to take part in the research, whose perceptions regarding services and integration may not have been typical of the whole group. Recollections may have been influenced by the impact of certain events on parents or children in the study, while others with a lesser impact may have been forgotten. This phenomenon is illustrated by Miles and Huberman (1994) in their comments on overweighting of certain activity types by informants (p232). However, some of the strategies suggested by Miles and Huberman (1994) for enhancing representativeness, were adopted in the present study.

The first was to increase the number of cases, and include two LEAs instead of one. Although the number of respondents from the second LEA was considerably lower than the first, the range and diversity of experiences were broadly similar to those from LEA (1).

The second strategy was to examine each case for contrast with others, which provided an indication of how widespread certain themes were, and where there was disagreement.

A third strategy particularly relevant to this study was to incorporate a wide time span for retrospective accounts, which again highlighted similarities and contrasts between respondents.

The presence of a control group may have enhanced the validity of findings, although this in itself presents problems. Selection of a matched control group for either phase of the study could only occur if there had been other children integrating to mainstream school at the same time as the language unit children. Such a group would not have been easy to find. Typically developing children without a speech and language impairment would have no experience of a language unit, and would not have to 'integrate' in that sense. They would not have experienced a contrast in class numbers as language unit children had. Children going into mainstream school, who had never been to a language unit, would normally attend a pre-school nursery or playgroup. They would probably start school with their peers from play-school, who would more than likely be from the same locality. Any comparison with language unit children would therefore be problematic.

Likewise, a control group of children with speech and language problems attending speech therapy only would begin mainstream school in the normal way, without any experience of special needs education. Selecting controls with special educational needs other than SLI would be problematic, because of the highly specific nature of different conditions. It is possible of course that all special needs children require a similar level of psychosocial support when integrating to mainstream education.

The lack of a control group in Phase 2 was in some way compensated for by the reports of participants in the first phase of the study, making comparison possible between groups. However, using comparison as a validity check should not be viewed as definitive, because of the different data collection methods used for each group, and the broad range of ages in Phase 1.

7.2 Evaluation of methodology used

Changes to the way people think about the combination of qualitative and quantitative methodologies are to be found in various disciplines such as sociology and health promotion (Rogers and Nicolaas 1998). That is not to say that one method is 'better' than another. All that can be said is that one approach produces a different type of knowledge than the other (Milburn et al 1995).

Milburn et al (1995) highlight the fact that combination approaches are often '*pragmatic and unreflective*' (p348), with very often little attention given to the act of combining approaches. Multiple methods may be used at the same time point, or the same methods may be used at different time points. Each has the potential to produce a fragmented picture of reality if combination approaches are not theoretically clarified in advance. The combination of approaches used in the present study was carefully considered for the following reasons. Three different groups were involved in the research. In a review of the SLI literature, parents had been given little opportunity to express their own views regarding their children's condition. This was due to the predominantly quantitative approaches used, whereby parents were asked to respond to questions determined by the researcher. Parent's own views were seldom raised by them or recounted by them in their own way. Quantitative approaches had therefore tended to neglect the process of phenomena, which is considered the central feature of qualitative methodology (Rogers and Nicolaas 1998).

The study was concerned primarily with exploring the process of integration and subsequent experiences of children in a mainstream school, by accessing child, parent, and teacher views. It was acknowledged that different constructions of knowledge could emerge from the different groups, in keeping with qualitative and quantitative research traditions. Parents in this study were in a position whereby they were continually adapting to the needs of their children with SLI, through different stages of the children's development. In a sense, they were an example of what Milburn et al (1995) regard as an interpretivist model, which views the social world, not as a set of facts, but as a continual process of making sense of the world which we as human beings inhabit.

A combination of approaches therefore, would acknowledge the different ways parents and teachers constructed their knowledge of the child. As Milburn et al (1995) maintain, no combination of approaches can be considered without such an acknowledgement. The different ways that knowledge was constructed regarding the children in the study was evident in the different way that parents and teachers gave their views of the same children.

A more quantitative approach was used for the children. It was acknowledged that it is impossible to map all of the processes involved when, to a certain extent, the child is developing and maturing on a daily basis, and in quantitative terms is continuously creating and recreating his/her own reality (Milburn et al 1995). Interviewing the children with SLI in a school setting may have increased their reactivity to the method, possibly seeing the researcher as another teacher who would 'expect' some responses and disapprove of others.

The exploratory nature of the study acknowledged at the outset that generalisability was not the main issue. The focus was to understand the experience of the child with SLI, not just in terms of speech therapy outcomes, but also from a psychosocial viewpoint. An experimental design was thought unsuitable in exploring complex issues. The approach taken in the study allowed a broader picture of the children's experiences to emerge. In previous studies, the use of standardised tests has tended to concentrate on numbers of children rather than on the individual characteristics of the children (Conti-Ramsden 1998). Under the Code of Practice, recorded evidence of the LEAs rests on standardised test results and teacher assessment of a child's classroom work (Code of Practice 1994). For the purposes of the present study, results of children's standardised tests give some indication of the nature of the speech and language problem (Bishop 1998). They refer to one aspect of the child but not the whole child, and can have a narrow focus, which was also the view of Parkes (1990) in earlier work.

The validity of the measures used in the present study was established particularly in relation to construct validity. Similar reports from parents, children and teachers were provided in each phase of the study. Reliability was shown by a consistency of findings in child and parent retrospective accounts over a 14-year period, and again during the prospective phase.

Parent interviews provided richness and depth in the data in both phases of the study. The use of 'prompt' questions was valuable to keep the interview on track. Using a life history approach allowed the parents to tell their story in their own way, and gave parents the time to do this. It produced data over and above requirements and gave some insight into the process of detection and diagnosis, which raised some concerns and is discussed in Section 7.3. Taped interviews provided a valuable source of data, which could subsequently be referred to. They also provided verbatim quotes and allowed the researcher to retain eye contact with the interviewee throughout.

The use of a structured interview schedule for the children in Phase 1 proved to be suitable for that group. The concepts explored in the schedule were developmentally appropriate, and there was the opportunity for the children to add their own comments whenever they wanted.

The availability of standardised data from the PSPCSA (Harter and Pike 1984), although based on typically developing children, gave some indication of the self perception of children moving to a new school. The use of the PSPCSA was developmentally appropriate for the group of children with SLI in Phase 2 of the study. The graphical illustrations used in the scale were easily understood, it held the children's attention and they showed enthusiasm in responding to the scale. Although the scale had been developed with a sample of typically developing children, it also proved to be suitable for this group of children with SLI in the 5-7 year age band. The visual nature of the scale reduced meant that children were able to respond without difficulty to each statement, and the value of the scale for use with children of a younger age was apparent. The construct validity of the scale was appropriate for this group of children, in that all scored within a similar range for each attribute.

In Phase 2, the case study approach was useful in examining the variations between children. By incorporating the objective scores of the PSPCSA (Harter and Pike 1984), with this approach, each child's educational and social experiences were reported, which were not reliant solely on either a standardised report measure or narrative accounts, but on a combination of both. The PSPCSA showed how children perceived their competence and social acceptance in four separate domains. The advantage was that domain-specific information was retained; if a global self-concept measure had been used, much of this information would have been lost.

In Phase 2, data collected from the small sample showed the variation in both social and academic development from one child to another. In terms of statistical analysis, attempts at providing an aggregate result for all seven children in any one area proved impossible, because of the variation in cases. In spite of the above limitations, the study has produced original findings and these will now be discussed.

7.3 Atypical language development: detection and diagnosis

In this study, the earliest reported parental detection of disordered or absent speech sounds occurred when the child was 8 months old. The majority of parents reported problems around the age of 2 years, the age at which speech is held to be reasonably well developed.

Once parents became concerned about their child's speech and language, they sought help and advice from their GP or Health Visitor. The majority often had to approach these professionals with their concerns several times before the child was referred to a speech therapist. Things changed little over a 15 year period in that respect, with parents telling a similar story in both phases of the study. Throughout, parents were reassured by the GP or Health Visitor that '*the older child is speaking for him*' or that '*he will speak when he is ready*'. Children with an absence of babble and speech sounds from as early as 8 months were not monitored.

Blager (1981) comments that speech and language should occur within a certain length of time and should not be regarded as something the child will do when he/she is 'ready'. Blager also makes the point that a mother whose child is not walking but who is old enough to do so, is unlikely to be reassured with '*he will walk when he/she is ready*'. In this study however, that was very often all the reassurance parents received.

This finding supports many other instances in the literature where parents whose children were later found to have severe and persistent language delays were not referred for specialist opinion until months and sometimes years later (Law and Elias 1992; Quinn 1994; Young 1993; Blager 1981). Young (1993), herself a medical doctor, documents her son's experience of remaining undiagnosed and untreated until the age of 6 years when he had a vocabulary of 3 words. He had passed through all the usual developmental checks without referral being made to a speech therapist.

In the present study, primary health care professionals appeared to rely on the probability of spontaneous recovery as the child got older, and when this did not happen, they were more willing to agree a problem existed. Using age as a yardstick for referral or intervention was common, which although useful as a threshold measure, is considered more limited than the mean length of utterance (MLU) in assessing restricted utterance length in language ability (Dale 1976).

Parents were given unsatisfactory explanations for their child's language impairment, even though GPs and Health Visitors would be expected to be familiar with the normal stages of language development.

There was a reluctance to take parent's concerns seriously, especially when they presented in the period between the first and second year. Despite this, parents showed remarkable persistence in securing a diagnosis and treatment for their children. Parents not included in the study may or may not have had similar experiences.

Whitehurst (1994) acknowledges the division in professional opinion on the significance of early developmental language delay. Some regard specific language delay as a condition that is self-correcting, and consequently parents should be reassured that nothing is wrong. Other professionals take the view that specific language delay is symptomatic of other underlying conditions and warrants intervention (Whitehurst 1994). Parents in this study were met with the former explanation, despite an intuitive awareness on their part that something was wrong and despite several visits to the GP or Health Visitor with their concerns. Because this group of professionals was not involved in the study, it is not known what criteria they used in making their judgements. The impression from parents was that decisions were wholly subjective, with no in-depth examination of parental reports.

Children in this study all displayed a failure to produce language at age appropriate levels. Mothers were usually the ones acting as interpreters for the children, but in a minority of cases even they couldn't understand what the child was saying. Parents then relied on siblings to become interpreters. Those outside the family had the greatest difficulties, which in earlier studies has in itself defined severe speech and language handicap (Enderby and Phillips 1986).

Failure to produce age-appropriate language is thought to be the most prevalent form of specific language delay where a child's non-verbal cognitive and physical abilities are developing normally. Whitehurst (1994) considers that the accuracy of prognosis in even the youngest child with a language delay rests on the ability to make fine distinctions between expressive and receptive problems with or without delays in non-verbal ability. Most had difficulties at a phonological level, which Whitehurst (1994) suggests can be detected by anyone who works with children on a regular basis. However, Whitehurst also recommends that the clinician, in deciding who or who not to treat, should not treat exclusive phonological problems. Unless they are interfering substantially with social development, Whitehurst would restrict services to children with secondary delays, such as mental retardation, on the grounds that any child under the age of 5 with SLI will recover with or without treatment. The findings from this study question that assumption because not all children had recovered by that age.

Children in this study were shown to have limitations to their social development. Not only children but also parents were affected. Parents restricted their activities because of the child's SLI. For example, they sometimes would not go on the bus or into social situations where the child's speech would be heard, because of the embarrassment they felt. It could be argued that there is little justification for withholding treatment based on the hope of spontaneous recovery, if the condition is affecting the lives of the child and his/her family to such an extent. Whitehurst appears to base his argument on clinical considerations, without acknowledgement of the broader issues of quality of life for both children and parents. Although it seems a waste of resources to intervene with children who go on to develop normal language, if a mother feels intuitively that something is wrong, those concerns should be addressed. Restricting the range of everyday activities because of the way the child speaks may deprive the child of a full and normal life as they grow up.

7.3.1 Possible reasons for a delay in diagnosis

Findings from the present study showed that referral by primary care professionals to speech therapy services occurred sometimes years after parents had first consulted with the problem. This may have been linked to their role as gatekeepers to other services, but could also be linked to financial implications of SLI for fundholding GPs in more recent years (Law and Pollard 1994).

If health professionals feel that the problem is self-correcting, this may account for their reluctance in requesting speech therapy assessment. The high rates of spontaneous recovery, shown in a marked decrease in the numbers with speech and language problems from pre-school to school age, may inform their judgements (Enderby and Phillip 1986; Bamford and Davis et al 1998; Whitehurst 1994). However, it is not known from results of the present study, what professionals were using as a yardstick for referral to speech therapy services. This is an area where further research is needed.

It is acknowledged that it is not possible to predict at the time of identification which children with expressive speech and language delay are likely to have persistent problems (Law et al 1998). The findings of this study show that where parents were aware of problems in the first year of the child's life, there were continuing problems into teenage years. This is an area where again further research of a prospective nature is indicated.

There are considerable variations between children, and accuracy of prognosis is therefore a problem for clinicians working with very young children (Cook, Urwin and Kelly 1989). The differentiation of persistent problems from transient is one area in the speech and language literature where prediction is difficult. Identification of children with SLI by speech and language professionals usually happens between 2 and 3 years of age (Law and Pollard 1994). However, the means of referral varies, which Law and Pollard (1994) suggest may be related to the gatekeeping role of other professionals such as GPs and Health Visitors.

Health visitor judgements regarding speech and language problems are acknowledged by Pollard (1992) to be based on 'a tiny proportion' of the child development component on the basic health visiting course. Clinical judgements may therefore based on this limited knowledge, combined with the use of standardised screening tests. Experience of children with SLI can take many years to accrue, or may never develop depending on the number of such cases the health visitor encounters.

Some indication of the role of the health visitor in identifying speech and language problems is given by Pollard (1992):

> *'Most parents acknowledge the importance of speech and language if asked and many recognise their children's difficulties when these are drawn to their attention. In some cases this may mean simply encouraging parents to change their behaviour towards the child but in others it may mean a referral on to speech therapy services. It is interesting that parents often accept the need for a referral to speech therapy more readily than they do for other aspects of development.' (p)*

The first assumption is that professionals are the ones to let parents know their child has a problem when in fact it is often the reverse as shown in this and other work (Young 1993).

The second assumption is that by parents changing their behaviour towards the child the problem will disappear. This fails to take account of the fact that a child has an innate desire to communicate to the point where Chomsky (1957) believed that, despite a linguistically deprived environment, the child would still learn a language. The quality of interaction between parent and child may therefore be secondary to the strong urge of the child to communicate (Law 1992).

Pollard (1992) also comments on the poor interactive skills of the language impaired child, assuming the impairment is secondary to these when in fact the child may develop inadequate skills as a result of continuing futile attempts at making themselves understood. The quality of parent-child interaction is subsequently affected leading to what Cunningham et al (1985) describe as an imbalance in initiating conversation in favour of parents.

Children in this study were less likely to come into contact with the Health Visitor when they started mainstream school, even though contact with the family GP was maintained in times of illness. It is possible the health visitors in this study genuinely believed that there was not a problem, or may have felt ill prepared to comment. If contact with the family did not occur on a regular basis, they may have been unaware of the outcomes of any advice given by them to parents, which in this study showed an inadequacy in all cases. Knowledge of long term outcomes of speech language therapy and subsequent progress may also have been limited, which again does little to contribute to the health visitor's knowledge of the outcomes of SLI in respect of recovery or improvement.

7.3.2 The failure of screening for speech and language impairment

In this sample, developmental screening detected a problem with speech and language in only one case. Parents were therefore aware of the condition of expressive SLI sooner than professionals who had screened their children. Encounters with other medical personnel such as those in hospital paediatric clinics or in a child psychology unit also failed to detect the problem. For two children attending such clinics, diagnosis came a lot later than others in the sample. In these cases, professionals tended to focus on the prime reason for attending the clinic, and ignored parental concerns over their children's speech and language. One of these children was attending a hospital outpatient clinic for follow up on an enlarged liver and spleen diagnosed at birth. He also had a large head circumference, which was checked at each visit. The second child was attending a child psychiatry unit for sleep disturbances and temper tantrums from when he was a toddler. Staff in the unit did not address his communication problems, and referral to speech therapy was made at only 3½ years because his parents were concerned.

Other reasons for the failure of screening to identify speech and language problems have been highlighted by Gale (1994), who suggests that prescribed testing using specific equipment can be somewhat unsuitable and inflexible in assessing verbal ability. Gale also indicates that the complexity of the communication process requires a reliable means of assessment, which is not fully addressed by current methods. Children can also feel less than comfortable and less likely to perform well in an artificial testing environment.

Findings from the present study add to the questions surrounding developmental screening for SLI. A report based on systematic reviews of the screening literature carried out by Law, Boyle, Harris, Harkness and Nye (1998) concluded that there is insufficient evidence on which to base the introduction of universal screening for speech and language delay. Authors of the report also recommended that the National Health Service (NHS) should not adopt such screening because of inconclusive findings as to its effectiveness (Law et al 1998). An examination of the performance of screening tests showed few studies comparing two or more tests when applied to one population. Similarly, there were few studies comparing single test measures across different populations. Authors of the report concluded that sensitivity of the procedures used was lower than their specificity, making it easier to determine who was not a case as opposed to who was (Law et al 1998).

7.3.3 Effects of delayed diagnosis

Parents, although lacking specialist knowledge, have an awareness of the impact of SLI and of the difficulties the child is experiencing on a day to day basis. Nevertheless, in the present study, mothers reported they were made to feel over anxious or neurotic when they returned to their GP on several occasions to express their concerns over the child's progress. Parents began to doubt their own judgement and accept that of the professionals, which ultimately delayed intervention. Parents had to rely on their own judgement in order to persist in seeking diagnosis and treatment for their children. It is possible some parents did not persist, and the problems were therefore picked up when the child was in nursery or school.

There are several anecdotal instances of similar situations and some documented evidence indicating that these experiences are part of a widespread response to the problem by health professionals (Law and Elias 1992; Young 1993; Quinn 1994). The result of this can be lowered self esteem in the mother when she is made to feel that her parenting skills are somehow lacking and she is the cause of the child's communication difficulty (Young 1993).

Although there are other factors to consider such as the personality of the child and parent's child rearing experience, it is difficult to see how parents can produce one child without a communication problem and another with, if child rearing skills are thought to be the basis of the problem. Inadequate early learning experiences suggested by Dockrell and McShane (1992) as one of the reasons for language difficulties also fails to answer the question of why other siblings in the family are unaffected, even though they are subjected to similar experiences. Many children are also exposed to other language experiences of nursery, extended family and childminders, which increase their learning experiences in addition to those of the home.

In the present study, as a result of failure to diagnose, the use of verbal language, which Dunbar (1996) considers an essential part of a social support system, was missing for children with SLI in the early years. They had to find other means of communicating, such as grunting, pointing, or facial expressions, and appeared to overcome this obstacle remarkably well by using more inventive means. This ability to make those around them aware of what they wanted indicated that their pragmatic abilities were intact. These were children of normal non-verbal intelligence, which may have influenced their ability to adapt. Those of a lower average intelligence or displaying a more global impairment may not have had this capacity.

7.4 The value of speech therapy pre language unit

In the present study, there was no clear indication in LEA records as to why speech therapists referred children to the language units, rather than continuing with clinic based treatment. Parent reports suggest that parental pressure may have been a factor. Aram and Nation (1980) also found a lack of clarity in their study regarding the duration of pre-school speech therapy. In that study, it was not related to severity of the disorder, or to any measure of subsequent speech, language, or academic abilities. Duration of school therapy was, however, related to the severity of phonological difficulties at diagnosis.

Children who had gone to mainstream school before transfer to the language units were held back by being in the wrong setting for their SLI needs (LEA records). LEA records acknowledged inappropriate placement in mainstream for one child who should have gone directly to a language unit. Her headteacher at the time commented she had the worst speech impediment that he or the staff had encountered. The length of time this child spent in the LU reflected the severity of the problem.

The variability of speech therapy outcomes showed an inconsistency of approach. Some children were thought by the speech therapists to be suitable for mainstream school, but after a time there were eventually admitted to the language unit. As described in LEA reports, these children were found to have severe speech and language problems on admission to the unit, and it is unclear why they did not go directly to the language units. No reasons were given to the parents.

Decisions taken by the speech therapists could have rested on clinical judgements, but could also have resulted from organisational constraints such as the amount of speech therapy services the District Health Authority could provide. Throughout the UK, speech therapy services are under pressure both from health services and education authorities (Law 1994). Speech therapists working in the community have a wide range of language difficulties to treat, from slowly developing children to children that are normal in every other way except for their language. Aram and Nation (1980) showed in their study that pre-school therapy was not based on the severity of the disorder, but on available resources, which may also have been the case in this study.

The majority of parents in the present study regarded speech therapy as ineffective. This applied in both LEAs in both phases of the study and spanned a 15-year period. Parent estimates of progress lay in the amount of words the child could produce and the intelligibility of speech sounds. This finding supports those of Stone (1991) and of Aram and Nation (1980). Both of these authors showed that attendance at a speech and hearing clinic in the pre-school years had limited success in terms of an increase in speech and language ability. One explanation for this could have been the type of intervention used.

The form of speech and language intervention programmes in clinic settings which the children experienced may have had the same limitations as syntax-based programmes which showed a failure of generalisation to the child's spontaneous speech (Bochner, Price, Salamon, Yeend and Orr 1980). Semantic-based programmes may also have been used which focus on the social function of language, believing that as a child increases in conceptual awareness through interaction with his/her environment, there is more reason to acquire language as a means of communication (Bochner et al 1980). This latter approach is easier to carry out in a language unit environment than on a one to one basis (Bochner et al 1980). It is not known which approach was taken for this sample and it is beyond the remit of this study to assess speech therapy interventions *per se*. However there is a need for further research in this area.

Parents in this study who were involved in the speech therapy treatment process enjoyed the experience because they felt they were helping their children in some way. As in the Stone study (1991) however, the effectiveness of this strategy in improving verbal ability was doubtful, because although parents enjoyed the experience, outcomes were unchanged. Parents may be more accommodating to the child's incorrect speech and language in the home than a speech therapist would in a clinic setting.

With the benefit of hindsight, parents in the study were able to compare the progress made after a short time in the language unit with a longer period attending the local clinic for speech therapy, which may have influenced their evaluation of speech therapy intervention. Increasing maturity and willingness to learn may also have contributed to outcomes.

7.5 Language Units

Parent satisfaction with the language units coincides with the value placed on them by other parents and by professionals in the literature that is available (Hutt and Donlan 1987; Conti-Ramsden 1997; Parkes 1990; Urwin 1988; Stone 1991). These were the units similar to those defined as 'small' units by Conti-Ramsden (1993) with an average of 10 children to a class.

It is doubtful whether the children would have made the same amount of progress without going to a language unit, even with the availability of speech therapy beforehand. In the absence of a matched control group of children with SLI not going to a language unit, it is difficult to establish if that was the case. The benefits of attending a language unit were improvements in the children's communication, as well as in their social and behavioural skills. The children subsequently became more involved in their social groups both at home and in the unit, because relatives, friends, and neighbours could understand their speech better.

The language units adopted a child-centred approach, in that there was the opportunity for group or individual sessions, depending on the needs of the child. The children were then in a better position to transfer their skills into everyday situations, which Whitehurst (1994) considers a major advantage of therapeutic school environments that combine milieu therapy with occasional one-to-one speech therapy. The broader remit of the language units allowed for speech and language 'training' to take place within this flexible framework. Webster and McConnell (1990) suggest that language learnt during such training may not be used spontaneously in everyday settings. However, this was not found to be the case for the children in this study. In addition, the children enjoyed the supportive environment that the language unit had to offer.

Parents would have liked the children to stay in the language units because of the small class size, the one to one academic and psychosocial support and continuing speech therapy. These findings are not unique to this study. There have been other instances where parents were happiest when their children stayed in the language units (Conti-Ramsden et al 1997). Similarly, in other studies, teachers have tried to keep children in the units for as long as they could, even when other placements were available, such as mainstream school or special schools (Botting, Crutchley and Conti-Ramsden 1998; Conti-Ramsden et al 1997).

Although parents considered the language units to be the most suitable place for the children in terms of academic, speech therapy, and psychosocial support, there is a danger that, by keeping the children away from an ordinary setting, problems may occur with the development of social skills and independence in approach to learning (Parkes 1990). Staying in a segregated language unit may not have been in the children's best interests. The need for social and linguistic integration with a 'normal' peer group could also outweigh the need for further speech therapy, with some authors taking the view that children learn just as much by talking to each other in play as they do in formal teaching sessions (Ripley 1986). It is understandable that parents should want to keep the children in the language units when they make such progress once there. Ultimately, the balance has to be struck between what the children need in social, developmental, and academic terms. In the case of SLI, the concept of segregated versus inclusive education is one that may require a more flexible approach to reflect the fluidity of need over time, particularly when improvements in the condition are in evidence.

7.6 Overall initial integration

Following integration, 7 children over both phases of the study retained a statement of special educational need and had regular reviews of their overall progress under the Education Act Code of Practice. They also had access to help in the classroom, nursery nurse support and continuing speech therapy where needed. The remaining children were destatemented after three months in mainstream school and had no further formal checks of their speech and language ability or general progress. LEA policy appeared to reflect the views of Whitehurst (1994) who suggests that all children with phonological difficulties will recover by the age of 5-6 and will have minimal risk of future academic problems. However, in the present study, the children in LEA (2), who were admitted to the language unit later than in LEA (1), had not recovered by that age and still required language unit intervention. For both groups there were also continuing academic problems, even though Whitehurst (1994) and Urwin (1988) think that preschool intervention works or 'cures' the children. In reality, however, not all had been 'cured'.

The dictionary definition of integration is '*bringing into equal participation in or membership of a society or an institution or body*' (Pearsall 1999). It implies effort from both parties to achieve that integration, in this case for the child to adapt to mainstream education and for the school to play its part in welcoming the child. However, the inevitability of integration when the child reached 7 prevented integration in the true sense. Children had no choice but to change to mainstream school, and as a result planning and preparation was limited.

The difference in language unit structure compared to a mainstream classroom was very marked for the children in terms of class size and purpose. In addition, the verbal environment of a mainstream classroom was totally different from that of a language unit. There was some evidence that some children found it difficult to make themselves heard or understood as a result, which supports the findings of Ripley (1986).

Some children saw the change as an overwhelming experience. The class size into which they integrated some found confusing and disorienting after they had become used to the small numbers in the language unit. The children had to adjust to the different way of class procedure, how to behave in the class and what was and was not acceptable. These distinctions are subtle and are there even when children move classes to a new teacher in the normal way. For children moving from a language unit the difference is more marked. For instance, the children had been used to going to the language unit teacher whenever they had completed a task and the teacher would give fresh instructions what to do next. In the mainstream class, some continued with this routine, and couldn't understand why they were being told off. In many cases, the children's adaptability was to be commended, because ultimately, it appears that the success of integration lay with the children themselves.

Although changing schools is considered a major life event for most children (Parkes 1990), mainstream schools failed to provide for the psychosocial needs of the children at any stage in the short integration period. The Warnock Report spoke of the need for social as well as academic integration, which in this study appeared to be largely missing (Warnock 1978). This supports the findings of earlier studies, where even the most successful integration, which happened over half a school year, still lacked the element of psychosocial support, which parents felt was equally as important as academic support (Parkes 1990). Children had to 'slot in' to the mainstream system, since no particular effort was made to welcome them. Integration simply meant that the child spent time in the receiving school.

The careful planning for integration advocated by Parkes (1990), involving both the language unit and school, did not happen in either phase of the study. Neither were each child's needs assessed individually and carefully or arrangements fitted to the children, rather the children were 'fitted' to the school. Parkes (1990) also found that integration depended on teacher availability or ease of organisation rather than on the needs of the child.

In every case the children changed to local schools, which did not necessarily have a good track record on integration, as shown in the study by Parkes (1990). Parents were given little choice about where the children went, in contrast to other studies where a choice of school followed recommendations by the educational psychologist (Urwin 1988). In other studies, there had also been opportunities for the children to attend one resourced mainstream school, where additional language therapy or speech therapy was available (Webster and McConnell 1987).

At the time of integration there was no liaison between mainstream school teachers, language unit teachers and speech therapists. The speech therapist was the only one of the statementing team who saw the children after the move to mainstream school. LEA personnel, who said that the educational psychologist did not have the time to see the children after the statementing finished, confirmed this.

The wider issues of inter-agency collaboration were not explored in this study, but it can only be assumed that the pressures under which each discipline functions contributed to the situation. Collaboration is considered necessary in helping both the child and the teacher deal with the wider implications of language impairment such as social exclusion and academic failure (Urwin1988). It also helps each of these disciplines to become familiar with the other's role and expand their knowledge and co-operation, which ultimately benefits the child (Koniditsiotis and

Hunter 1993).

Without a collaborative partnership between speech therapist, educational psychologist and teacher, integrating teachers may have no knowledge of the wider implications of language difficulties, such as behaviour problems, attention and social skills. They are unlikely to change their approach or school attitude as a result of having SLI children in the class, if their knowledge of the condition is limited (Parkes 1990). Receiving teachers in mainstream school are expected, under the terms of the Education Act (Code of Practice 1994), to be informed of the special educational needs of the child, and to be aware of the importance of identifying and providing for those needs. Knowledge of the condition of SLI is necessary for receiving teachers, if they are to fully meet the needs of the child in the classroom. The lack of such knowledge for receiving teachers was evident in this study and has also been documented elsewhere (Greenhalgh and Mason 1994).

There were no reports of continuity or apparent interest from receiving teachers about what had gone before. This reflects the findings of Griffiths (1969) where pupils had gone from a residential school for speech and language disorders into mainstream education, with mainstream school teachers being unaware that the children in question had ever been to a special school. Similar findings were reported by Urwin (1988), when staff were puzzled by the educational psychologist visiting the children in school. Some of the children in the Griffiths (1969) study eventually returned to special education.

In the present study, most teachers had classes of 30-35 children and sometimes had help from a class helper or nursery nurse. In the case of LEA (2), the parents also helped. The advantage of having a class helper, whether nursery nurse (NNEB), teacher assistant or parent is that it gives the teacher more opportunity for conversational interaction with the children, particularly those with a special need (Webster and McConnell 1987). If this support is absent, or if there is more than one child with special needs in a class, difficulties can arise in providing the support and special provision they require.

7.7 Academic Development

The high number of children still needing help in academic subjects supports the findings of Leonard (1998), who estimates that 60% of children continue to have difficulties with speech and language and academic subjects into the later school years. Other studies have also documented help with academic subjects in mainstream school (Parkes 1990; Stone 1991; Botting et al 1998). The findings are also similar to those of Sheridan and Peckham (1975) in the National Child Development Study; they found that a proportion of 16-year-olds still had difficulties in the same areas. From parent reports, no arrangements for extra help had been made beforehand and potential problems had not been anticipated, despite the earlier special needs status.

The percentage of children receiving extra non-statemented help in academic subjects was high (73%). This applied to primary school children, with none of the four children in secondary school receiving help. Stone (1991) also reported a high proportion of children receiving extra help with reading, writing and maths (68%) but this figure included those who had been or were still in special education. Such children would presumably retain a statement of educational need.

Informal support was given when problems with reading, writing, spelling or maths became obvious. One child had to be restatemented in the study year because her spellings were 'bizarre'. However, problems with reading ability were reported more than with other subjects. Parents tended to compare the children's reading in language unit and mainstream school, while teachers were perhaps making comparisons with the 'average' child.

Children had been listened to reading more frequently in the language units, and reading was used as a means of developing speech and language ability, not just as an academic subject in itself. The approach to reading was different in mainstream school. Parents reported that the children had to reread the same books they had read in the language unit. They stopped enjoying their reading and their volume of reading dropped as a result. In reading, as in other subjects, the language unit followed the requirements of the National Curriculum[1]. If the children integrated part way through the school year and had to reread the same books, they appeared to have reached a different point in the reading syllabus in the language unit than their counterparts in mainstream education. This may be related to smaller class size in the language unit.

The National Curriculum allows a set reading time for the children, which can be up to one hour per day. This involves the children being listened to while they read;

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[1] The National Curriculum is a standardised, statutory curriculum laid down by government in England and Wales.

in a small group such as that in the language unit, the children can be listened to more frequently and more books can be completed as a result.

Parents tended to equate good reading ability with volume of reading, placing less emphasis on the quality of reading, but volume of reading alone does not guarantee a reasonable standard of ability.

Previous studies have shown that children with speech and language difficulties and in particular phonological difficulties also have problems with reading (Bishop 1997; Bishop 1995; Ripley 1986). Phonological proficiency at 5½ is considered to be indicative of reading ability in the future, although Bishop and Adams (1990) suggest that syntactic and semantic ability also count as predictors. Bishop (1995) acknowledges that there are considerable variations from child to child. What was interesting in the present study was the speed with which the deterioration took place, suggesting the root of the problem lay not simply in the children's developmental ability, but in the frequent and regular opportunities they had been given to read in the language unit, more so than mainstream school. When the children moved to a bigger class, there was not the same opportunity for the teacher to cover the same numbers of pupils because of the size of the group. Not all children displayed a deterioration in reading, showing agreement with the variation from child to child found by Bishop (1995).

Listening to a child read could be the only opportunity the teacher has to hear the child speak in a mainstream class. The teacher may otherwise go through the whole day not having heard every child speak. In a class of 30 to 35 pupils however, the one hour reading time allocation in the larger group means they get through fewer books and have less opportunity to read than in a small language unit class. Children may as a result lose interest in reading because they cannot practise their reading skills as often as they had been used to doing in the language unit. In addition, the teacher is unaware of reading and verbal ability.

In 5 cases, parents and teachers agreed that there were comprehension problems accompanying the SLI. Interestingly, all parents reported that these children's receptive capabilities had been intact pre-school, suggesting that as the demands of the curriculum increased, the children may have begun to exhibit problems of a more receptive nature, as increasingly complex cognitive input was required. Pre-school children may therefore appear to have normal receptive capabilities in everyday situations, but more subtle defects may be identified on clinical testing. These may become more pronounced as they go through school.

In the first phase of the study, parents reported overall progress for the children, once the initial integration from language unit to mainstream school was completed. However, they also reported the level of progress made by the children in the language units was not sustained in mainstream school. In the second phase, parents were more critical of the lack of support the children received, particularly with reading, although they too felt that overall the children were making progress. However, none of the parents felt the children were as settled as they had been in the language units.

Teacher estimates placed most children in the 'average' category, although they were not asked to specify what they meant by the 'average' child. One could assume that they were referring to the 'average' child with special needs; however, if they were unaware of those needs (which was reported in 3 cases) then that was unlikely. They could of course have meant the 'average' child in the class. If that was the case, it implies that the average child without special needs normally receives extra help with academic subjects, which also seems unlikely. Future studies may help to explain the reasoning behind teacher ratings.

Closer examination of the estimates of progress reported by parents and teachers showed two thirds needed support with academic subjects, in some cases for several years after leaving the language units. Making progress meant that they were not being held back in class, and had not been sent to special schooling. The diagnosis of SLI is made largely by exclusion and the same was found to apply to estimates of progress i.e. if the child was not being kept back or moved to special education then he/she was making progress.

7.8 Language development

The children had all been diagnosed with expressive SLI, defined in this study as a problem in any of the areas of phonology, syntax, semantics, or pragmatics (Conti-Ramsden 1993). The severity of SLI did not necessarily reflect cognitive ability. Scores above chronological age in literacy were sometimes found in standardised tests, even in the presence of severe phonological disorders. Greenhalgh and Mason (1994) suggest that this fact may be ignored by receiving teachers, if they see the child with SLI as globally learning disabled in addition to their communication problem. Bishop (1998), on the other hand, considers all children with expressive SLI will demonstrate some degree of comprehension problems, if tested properly. Parents and teachers felt that almost two thirds of the children had continuing difficulties with some aspect of speech and language. One third of the children had problems in the parent's view, both after integration and up to the time of the study. Teacher estimates paid more attention to expression and vocabulary than to sentence construction and articulation.

In this as in other studies teachers' and parents' views differed on articulation and speech sounds (Stone 1991; Parkes 1990; Urwin 1988). Although each group may have been using different criteria to assess the difficulties, both were picking up irregularities in speech sounds across a range of ages. Teachers may not have heard the children speak as often as parents, and were hearing them speak in a verbal environment normally dominated by the teacher. Urwin (1988) also found that parents reported continuing problems, but that these were not found in teacher ratings.

The children in the present study did not appear to be failing as a result of their SLI, although further research may identify the reasons for so many needing extra academic help. One explanation could be what Ripley (1986) describes as the many children failing in mainstream school because, although their speech is adequate, their significant language delay is holding them back.

Only seven children in Phase 1 felt they themselves had continuing problems, which was slightly fewer than either parent or teacher estimates. In other follow-up studies, parents and children also had differing views on continuing speech problems, with approximately half of the children/young adults in agreement with their parents (King, Jones and Lasky 1982; Hall and Tomblin 1978). Again, different criteria may have been used. The functional value of speech and language may be what is most important to children, if it means they can be understood and not appear too 'different' from their social group. Teachers, and to some extent parents, are concerned with speech and language ability in the context of academic progress, which children may see as less important on a day to day level.

7.9 Social development

In Phase 1 the children reported positive experiences and seemed to be socially well adapted to the mainstream system. Teachers regarded them as ordinary members of the class who were not noticeably different from their peers. Five children had continuing difficulties, such as remaining isolated at playtime; this lasted in four cases for the remainder of their primary school years. These children were described as 'loners' and were generally quieter than others, and may have had these difficulties even in the absence of SLI.

The present study showed that children considered themselves to be no different from their peers in terms of social terms, although Bishop (1995) considers that the social relations of children with communication disorders have been neglected. Her later research (1997) suggests these children are at risk of entering a downward spiral, where the child learns that attempts to interact with others are unrewarding. Bishop also considers that not all children with SLI are the same in terms of conversational skills. Some are reasonably competent while others display poor conversation management, which discourages others from becoming involved in conversation with them.

Children in the present study did not feel they had a reduced number of social contacts because of their SLI, which other studies have shown (Fujiki, Brinton and Todd 1996). However, there was some evidence from teacher reports in Phase 2 of the study that class peers were reluctant to initiate conversation with the children. Whether this was directly related to SLI is not known.

Because of the possible social consequences of impaired speech and language, it is important to address the issue and monitor the children's performance. Many children in this study were described by their parents as having good pragmatic skills, which may have been the reason for their progress. Children who went to special education may possibly have had more difficulties. Further work in this area is needed to explore the issue.

The possibility of bias towards SLI children in this study was not evident from teacher comments. One report of disruptive behaviour in class related to a child who had multiple social problems in addition to his educational difficulties. He had experienced difficulties on integration to mainstream school, which had never resolved. The teacher's comments relating to the child focused on his bad behaviour and its abusive nature. Extensive work by Lawrence (1996) on the self-esteem of pupils in the classroom has shown that such disruptive behaviour can be indicative of deeper problems of low self-esteem. The outcomes of this can be what Adler (1921) described as '*compensation for inferiority*' which motivates behaviour of an aggressive nature. From teacher reports, no exploration of these deeper issues occurred. Teachers concentrated on the outward behaviour, but not what motivated that behaviour. One other child in the study also demonstrated disruptive behaviour in school, although his parents felt he was well behaved at home.

The psychosocial aspects of integration and beyond were explored more fully in the second phase of the study.

7.10 Self concept

There is some evidence from this study that a child with SLI can be aware of their verbal limitations from an early age. One child for example had been covering his mouth with his hand from the age of 4½, and both his parents and professionals agreed he was unwilling to communicate because he was conscious of his speech sounds. He knew his sounds were different to the sounds made by others. Going directly to mainstream school before the language unit made matters worse, because of the gap between his own verbal capabilities and the rest of the mainstream class. If his attempts at speech were not understood after two or three attempts, he would give up. Although of a young age, the child in question was demonstrating what Cooley (1902) termed '*the looking glass theory of self*' where the self-concept is influenced by feedback from others. At the end of the first year in mainstream school (aged 8:0), educational psychology reports recorded low self-esteem as a major problem for this child. This had been apparent from both parent reports and LEA records from the time the child went to the language unit at 5 years old.

Experience of a series of unsuccessful attempts at being understood can lead to lack of reward or recognition and may result in lowered confidence. Theoretical propositions put forward by James (1892) regarding the construction of the self-concept also suggest that if there is a gap between aspirations of success and actual success, with the latter being lower, low self-esteem would result. Conversely. if aspirations of success are equal to or exceeded by actual success, high self esteem will result. Harter (1988) proposes that such a model requires a certain amount of cognitive-evaluative skills. These types of cognitive-analytic skills are unlikely to be found in a child under the age of seven. However, the experiences of success or failure and comments made by adults about the child are particularly powerful if they are in what Gurney (1988) describes as the stage of the exterior self, thought to be present between the ages of 2 and 13.

If a child has expressive SLI, he/she is likely to have odd-sounding speech, immature sentence structure, or speech may be unintelligible (Bishop 1998). The child may be aware of these difficulties, not only because their cognitive ability is at a stage where self awareness is developing, but because they have become accustomed to significant others, peers and outsiders responding in a certain way to their failed attempts at being understood. They may then enter the 'downward spiral' described by Bishop (1995) as their social relationships deteriorate. They are not measuring their own verbal abilities against those of others, but are behaving in a way which experience has shown to be the safest. If they do not speak then they are unlikely to be singled out for attention.

Not all children in the second phase of the study showed the same level of awareness of their continuing speech and language problems. The two female children had global problems and there is some doubt as to whether they should have been in the mainstream system. The two girls were low achievers showing a discrepancy between chronological age and developmental age for both. Their outgoing personalities overcame their difficulties to an extent. The interesting thing about some of the children's scores on the PSPCSA was that where they had described themselves as increasingly competent, for instance in sports, their rating on the PSPCSA was lower and did not correspond with their narrative accounts. This raises the issue of the validity to be attached to different measures.

The high scores of the some of the children on the PSPCSA could be related to a lack of awareness of comparison of self with others at this age, but could also be due to positive feedback the child receives from family and others in spite of their language impairment. Initial high scores may have been due to the support and encouragement they received in a small language unit class. Wright (1990) suggests that the way a child develops self-concept depends in part on the way he/she has been treated by family and significant others. The children with SLI could be influenced by such feedback from the teacher as their cognitive abilities develop.

Although in the upper end of the scale, child scores were generally lower on the PSPCSA at the end of the school year than they had been during the integration process, when part of the week was spent in mainstream school and the rest in the language unit. This was in contrast to the findings from the school population on which the measure was based, where children new to a school reported lower peer acceptance than those who had been at the school for a year or more (Harter 1984). These were not children with special needs as in the present study, and as Wright (1990) reminds us, no clear relationship has been shown between handicap and low morale.

Teacher ratings were generally lower than child ratings, which has been found in previous use of the instrument (Harter 1984). This could be attributed to the more realistic assessments of the children by the teachers.

Capturing the self-perceptions of the children over the first year of integration encompassed the period of upheaval and varying support for the children following the move from the language units. It is therefore not clear whether the children were showing a true deterioration across domains at the end of the year due to increasing awareness of their capabilities. The lack of psychosocial support they received in the mainstream school system could have contributed to their self-perceptions, which as previously stated, can be highly influenced by significant others in the child's life i.e. the teachers. This situation highlighted the outcomes of what Lawrence (1996) describes as the 'back to basics' philosophy of schools, which concentrates more on academic achievement and excludes consideration of affective factors.

7.11 Psychosocial support for children with SLI in mainstream school

Language unit teachers possibly have more opportunity to demonstrate acceptance, genuineness, and empathy in building the child's self-esteem. There may not be the same opportunity for a teacher in mainstream school faced with high class numbers and increased time pressure, to reflect on these aspects of a child's development. Access to the teacher is restricted because of increased numbers and so the process of getting to know one another is constrained by that alone. There is also the question whether or not the class teacher should be the only one to provide psychosocial support for the child with SLI in addition to academic support. The Education Act (1993) Code of Practice expects all who have dealings with the child to provide for their needs, not just the teacher.

The teacher becomes a significant other in the child's life. Lawrence (1996) draws attention to the fact that the self-esteem of the teacher has an enormous bearing on the self-esteem of the child and therefore needs to be considered. Teachers who are under pressure, uncertain of their futures or their role and stressed as a result can develop low self-esteem, which is transmitted to their pupils. Teachers can therefore enhance or reduce the self-esteem of the child, as the teacher-pupil relationship is a powerful one.

In the present study, attention was not paid to the 'whole child' or the 'whole teenager'. Lawrence (1996) maintains there is value in educating for social and emotional development as well as for academic development. This could apply to all children, and not just those with a special educational need.

7.12 Conclusion

Children in the present study had SLI of an expressive nature, with few exhibiting receptive difficulties. All parents in the study were persistent in seeking a diagnosis for their children, despite a lack of interest in parental concerns on the part of health professionals. Speech therapy was considered ineffective for this group of children, who only began to make progress when they reached the language units. There was evidence of a lack of preparation and support for the children integrating from a language unit to mainstream school. A high number received help with academic subjects, although teachers in mainstream schools regarded them as average pupils.

There were continuing problems with speech and language for children in both phases of the study, but only those with a continuing statement of special educational need were likely to have access to speech therapy services. Children with a special educational need such as SLI are particularly at risk in a system where league tables and performance targets are attributed great importance, possibly to the detriment of the social and emotional development of the child. The overall findings were that ongoing support for the children was given very much on an *ad hoc* basis. It was difficult not to think that integration in particular was resource led.

None of the children had returned to special education as a result of their speech and language difficulties. This was not a true reflection of the support they received in the mainstream school system because ultimately, success depended on the resilience of the children. They saw themselves in a positive light, supporting the view that children, even those with a history of special educational need, report fairly positive feelings of competence and peer acceptance

The services the children received could have been improved from initial diagnosis through to mainstream school. The only element of the process which received unqualified praise from the parents was the language unit. However, seen from the child's perspective, services were adequate.

Future research and recommendations

- Urwin (1988) suggests there is a continuing need for clinicians to develop predictive tools to allow '*early and accurate*' identification of SLI. In order to do this it would be useful to carry out a prospective study of children a) identified by parents before the age of 2 and b) identified at 3-4 years by special screening tests which would give some indication of false positives and false negatives. It is possible that a) some children identified by parents do have SLI or b) some children not identified by parents do have SLI or c) some children identified by parents do not have SLI.

- Children should be monitored after leaving the language unit for any continuing difficulties, which might affect their academic and social progress.

- Recent work is beginning to show an awareness of the importance of parental observation in identifying children with speech and language delay, and the need for primary health care workers to be trained in this area. Development of a assessment tool to evaluate parent concerns is needed.

- More attention should be focused on the views of mainstream teachers and how they see their role in terms of children with SLI. It is important to establish what knowledge teachers have of the condition and what, if any, measures they feel they adopt to support the child. It is also important to establish are teachers able to provide psychosocial support in mainstream school and should they be expected to do so?

- In future studies, an extension of data collection methods for children should be adopted to explore more indepth views of the children. Child focus groups may produce a richer source of information.

- Further work should focus on the levels of awareness that children with SLI exhibit in terms of their verbal ability. Evidence from this study showed that some awareness is present earlier than age 7.

- This study found no appreciation by the education system of the 'considerable undertaking' of transition from a small unit to a big class. More support is needed for children during the transition from language unit to mainstream school and for some time afterwards.

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APPENDIX 1

INTRODUCTORY LETTERS TO PARENTS

PARENT CONSENT FORMS

INTRODUCTORY LETTER TO PARENTS PHASE 1 - LEA (1)

Mrs A. Rannard.
Postgraduate Research,
School of Healthcare
Liverpool John Moores University,
79 Tithebarn Street
Liverpool
L2 ER.

DATE

Dear Parent or Guardian of N

I am working on a research project involving children who have attended Language units in the area since 1981. It's aim is to find out how children get on once they leave the language units and go into primary and then secondary schools. I understand that N attended a language unit, hence my reason for writing to you.

This is a joint project between Local Education Authority and Liverpool John Moores University and the information gained from the project will be used to plan future services for the children of . The project will be carried out by means of questionnaires to be filled in by me during a personal visit to each family. The contents will be confidential and no names or individual details will be revealed.

Any help you could give with the project would be greatly appreciated. If you are willing to help, please complete the attached form and return it to me by in the enclosed stamped addressed envelope. If you have any questions or would like more information about the project, you can ring me on 0151-231-4090 and I will be glad to answer your queries.

Sincerely,

Anne Rannard (Mrs)

Research Student.

Attachments: Parental consent form.

INTRODUCTORY LETTER TO PARENTS PHASE 1 - LEA (2)

Mrs A. Rannard
Postgraduate Research
School of Healthcare
Liverpool John Moores University
79 Tithebarn Street
Liverpool
L2 2ER

Tel: 0151-231-4090

Date

Dear Mr and Mrs W

A few weeks ago, Mr P from the Education Department contacted you regarding some work we are doing here at the University. It involves children who attended language units in the past and who went from there into mainstream school. We want to find out how the children are getting on and to do this we hope to interview parents, children, and teachers to get as full a picture as possible.

If you and M would like to take part, I've enclosed a short consent form for you to complete and return to me in the prepaid envelope. If there are any questions you would like to ask, or any other details you want to know, please don't hesitate to ring me on the above number.

Yours sincerely

Anne Rannard
Postgraduate Research

INTRODUCTORY LETTER TO PARENTS PHASE 2 - LEA(1)

Mrs A. Rannard
School of Healthcare
Liverpool John Moores University
79 Tithebarn Street
Liverpool
L2 2ER
Tel: 0151-231-4090

Parent details

Date

Dear Mr and Mrs C

You may already be aware of a speech and language project funded by Local Education Authority and carried out by Liverpool John Moores University. At the moment, I am trying to follow all children leaving language units in and going into school over the next year or so. The idea is to see how children manage when they move from a small class into a big one, how they cope with the change and how they feel generally for the first few months in school. I think this information is very important and is something that needs to be looked at carefully.

As always, everything about the project is totally confidential. There is no pressure on you or S to take part and should you want to leave the project at any time then that's fine. If you would like to be included, I would be more than happy to come and see you at home and explain exactly what is involved. You can also ring me here at the office if you have any questions you would like to ask.

Thank you for your time and I look forward to hearing from you.

Yours sincerely

Anne Rannard.
Postgraduate Research

PARENTAL CONSENT FORM - PHASE 1 AND 2

To: Mrs A. Rannard
Postgraduate Research
School of Healthcare
Liverpool John Moores University
79 Tithebarn Street
Liverpool
L2 2ER

I agree to take part in the project on the understanding that all information will be treated in confidence and I can withdraw from the project at any time.

Parent address:

Tel. No.

Parent signature -------------------------

APPENDIX 2

LETTERS TO HEADTEACHERS

PHASES 1 + 2

HEADTEACHER LETTER - PHASE 1

Date

Dear Mr L

Re:

You may be aware of a project funded by Education Department looking at speech and language impairment in mainstream schools. The project is being undertaken by Liverpool John Moores University and it's aim is to establish how children, who have in the past attended a language unit, get on as they progress through mainstream education. D has in the past attended a language unit, hence my reason for writing to you. Information for the project is being collected from the children themselves, from parents and from teachers. The normal courtesies of confidentiality apply to all information received.

I would be very grateful for your help with the project. If you are willing to help, there is a questionnaire enclosed for the teacher to complete, along with a prepaid return envelope. Parents have been shown a copy of the questionnaire and have agreed to it's completion by the teacher. I would make the point here that parents will not have access to any information contained in the completed questionnaire.

Thank you for agreeing to take part in the project. If you have any queries or would like more information, please do not hesitate to contact me on 0151 - 231 - 4090

Yours sincerely

Anne Rannard
Postgraduate Research

Second letter to Headteachers – Phase 1

Headteacher details

Date

Dear

Re:

Just before the summer break this year, I contacted you regarding a research project on children who have integrated from a language unit into mainstream school, in particular the Teacher Rating Scale element of the study. Possibly because of the timing of the first letter, there are still a small number of replies outstanding. We are hoping for as full a picture as possible on the progress of the children involved in the study and so need as many replies as possible.

I would be very grateful if the enclosed scale could be completed for , hopefully by the teacher who knows or has known him best since integration into mainstream school. The scale has been kept as short as possible because I know how busy people are. I've also enclosed a freepost envelope for your reply.

Thank you for your time.

Yours sincerely

Anne Rannard
Postgraduate Research.

HEADTEACHER LETTER – PHASE 2 – LEA (1)

Mrs A. Rannard
Postgraduate Research
School of Healthcare
Liverpool John Moores University
79 Tithebarn Street
Liverpool
L2 2ER

Tel: 0151-231-4090

Headteacher details

Date

Dear Mrs W

Re: RD

You may be aware of a research project which began in 1994 looking at the transition of children from a language unit into mainstream school. The project is funded by Local Education Authority and carried out by Liverpool John Moores University.

The project is now in it's second phase where contact is being made with teachers, parents and children who have completed the integration process, hence the reason for this letter. RD has recently returned to mainstream school and if possible, I would like to come and see you or the teacher who knows her best to complete the next stage of the study. Consent has been given by the parents for this to happen, but should you want to see the actual consent form I would be happy to bring it along.

If it is convenient, I'll contact you by telephone over the next week or so to make an appointment. If you have any queries or would like some more information, please don't hesitate to ring.

Yours sincerely

Anne Rannard

<u>APPENDIX 3</u>

TEACHER RATING SCALE – PHASE 1

Study ID No --

TEACHER RATING SCALE
Phase 1

You are asked to rate the child on each of the dimensions, by placing a tick according to the following five-point scale:

1= very good 2 = above average 3 = average/satisfactory 4 = poor/some concern felt
5 = very poor/serious concern felt.

Expressive Language a) Articulation b) Vocabulary c) Sentence construction d) Expression	1	2	3	4	5
Receptive Language a) Comprehension of instructions b) Understanding of words c) Memory for oral information					
Motor Ability a) Gross motor - running/climbing etc. b) Fine co - ordination and manipulation.					
Learning ability a) Drawing b) Writing c) Reading d) Number ability e) Approach to learning. f) Attention and distractability					

Do you feel the child has any special abilities/difficulties?
If so, please specify

Has the child made progress in the last 12 months? Yes / No
If so in what direction and to what extent?

If not, are there signs of deterioration?

Questionnaire adapted from Urwin, S. (1988) Pre school language intervention: a follow up study. *Child: care, health and development*. 14, 2, Mar/April 1988. Blackwell.

APPENDIX 4

CHILDREN'S STRUCTURED INTERVIEW SCHEDULE

Education

1. After leaving the language unit, did you stay at the school to which you transferred?
If no, where did you go?
When did you transfer?

	Yes	No
	☐	☐

2. Which subjects do you like best?

3. Which subjects do you like least?

4. Do you have extra help?

	Yes	No
Reading	☐	☐
Writing	☐	☐
Maths	☐	☐

5 Since leaving the unit, have you had any speech therapy?
If yes, how often?

	Yes	No
At least once a week	☐	☐
At least once a month	☐	☐
Less frequently	☐	☐

Where?

6. Do you take part in any of the following:

	Yes	No
Work experience	☐	☐
Swimming	☐	☐
P.E.	☐	☐
Games	☐	☐
Drama	☐	☐
Music	☐	☐
Choir	☐	☐
Art	☐	☐
Craft	☐	☐

Other, please specify:

....

Which of these do you prefer?
Why?

Which do you not like?

		Yes	No
7.	Are you in any school teams?	☐	☐
	If yes, please specify:		

		Yes	No
8.	Are you taking external examinations?	☐	☐
	If yes, specify name:		

		Yes	No
9.	In the future, do you hope to go to		
	Sixth Form College	☐	☐
	College of Higher Education	☐	☐
	University	☐	☐

10. What work do you hope to do?

Social

		Yes	No
1.	Are your fellow pupils at school		
	Friendly	☐	☐
	Not friendly	☐	☐
	Other		

If not friendly, please specify:

If other, please specify:

		Yes	No
2.	At mealtimes, do you:		
	go home	☐	☐
	bring sandwiches	☐	☐
	eat in the canteen	☐	☐
	have school dinners	☐	☐
	other		

If other, please specify:

		Yes	No
3.	Do you sit with:		
	classmates	☐	☐
	on your own	☐	☐

4. Who would you go to for help/advice at school?

	Yes	No
teacher	☐	☐
friend	☐	☐

If other, please specify:

5. Do you travel/walk to school with anyone?

	Yes	No
Do you travel/walk to school with anyone?	☐	☐

If no, probe re companions

6. Do you get teased at:

	Yes	No
school	☐	☐
elsewhere	☐	☐

If elsewhere, please specify:

7. If you are teased, does it happen:

	Yes	No
often	☐	☐
sometimes	☐	☐
never	☐	☐

If often, or sometimes, specify circumstances:

8. What do you do in your spare time?

Do you belong to:

	Yes	No
a) any clubs or societies	☐	☐

If yes, what are they?

How often do you go?

at least once a week	☐	☐
at least once a month	☐	☐
less frequently	☐	☐
never, but used to	☐	☐

If the latter, why did you leave?

	Yes	No
b) uniformed organizations	☐	☐

If yes, what are they

How often do you go?

at least once a week	☐	☐
at least once a month	☐	☐
less frequently	☐	☐
never, but used to	☐	☐

If the latter, why did you leave?

9. Do you go out socially?

	Yes	No
(e.g. football, disco, cinema)	☐	☐

If yes, please specify:

10. Who do you go with?

	Yes	No
friends	☐	☐
family	☐	☐
other	☐	☐

If other, please specify:

11. Which of the following activities interest you?

	Yes	No
taking part in sport	☐	☐
watching sport	☐	☐
going to the cinema	☐	☐
going on holiday	☐	☐
watching TV	☐	☐
watching videos	☐	☐
listening to music	☐	☐
dancing	☐	☐
going to other peoples houses	☐	☐
computer games	☐	☐
cycling	☐	☐
swimming	☐	☐

Please name any other activity/hobby not listed above:

If no to the majority of above, except video or TV ask:
`You do not seem to go out much. Why is this?'

	Yes	No
nowhere to go	☐	☐
no one to go with	☐	☐
other		

If other, please explain

12. Who do you talk to most easily?

	Yes	No
family	☐	☐
friends	☐	☐
class mates	☐	☐
teachers	☐	☐
other		

If other please specify:

13.	Do you remember the language unit? If yes, what do you remember?	Yes	No
14.	Do you think you could have had more help with your speech?	Yes	No
	at the unit	☐	☐
	After leaving the unit	☐	☐
	If yes what sort of help would you have liked?		
15.	Do you still want/need help? If yes, please specify:	Yes	No
16.	Do you think that your earlier speech difficulties have had an effect on your life	Yes	No
	If yes, can you explain?	☐	☐

APPENDIX 5

PICTORIAL SCALE OF PERCEIVED COMPETENCE AND SOCIAL ACCEPTANCE FOR YOUNG CHILDREN

APPENDIX 5

NOT DIGITISED AT THE REQUEST OF THE UNIVERSITY.

APPENDIX 6

RESULTS OF REPEATED MEASURES ANOVA CHILDREN + TEACHERS

Tests of Within-Subjects Effects (Children)
Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
TIME	Sphericity Assumed	1.720	2	.860	2.423	.139
	Greenhouse-Geisser	1.720	1.628	1.057	2.423	.153
	Huynh-Feldt	1.720	2.000	.860	2.423	.139
	Lower-bound	1.720	1.000	1.720	2.423	.180
Error(TIME)	Sphericity Assumed	3.550	10	.355		
	Greenhouse-Geisser	3.550	8.140	.436		
	Huynh-Feldt	3.550	10.000	.355		
	Lower-bound	3.550	5.000	.710		
DOMAIN	Sphericity Assumed	7.164	3	2.388	29.032	.000
	Greenhouse-Geisser	7.164	2.241	3.197	29.032	.000
	Huynh-Feldt	7.164	3.000	2.388	29.032	.000
	Lower-bound	7.164	1.000	7.164	29.032	.003
Error(DOMAIN)	Sphericity Assumed	1.234	15	8.225E-02		
	Greenhouse-Geisser	1.234	11.203	.110		
	Huynh-Feldt	1.234	15.000	8.225E-02		
	Lower-bound	1.234	5.000	.247		
TIME * DOMAIN	Sphericity Assumed	.747	6	.124	1.042	.418
	Greenhouse-Geisser	.747	2.716	.275	1.042	.399
	Huynh-Feldt	.747	6.000	.124	1.042	.418
	Lower-bound	.747	1.000	.747	1.042	.354
Error(TIME* DOMAIN)	Sphericity Assumed	3.583	30	.119		
	Greenhouse-Geisser	3.583	13.579	.264		
	Huynh-Feldt	3.583	30.000	.119		
	Lower-bound	3.583	5.000	.717		

Tests of Within-Subjects Effects (Teachers)
Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
TIME	Sphericity Assumed	5.874	2	2.937	4.391	.043
	Greenhouse-Geisser	5.874	1.236	4.750	4.391	.075
	Huynh-Feldt	5.874	1.440	4.079	4.391	.065
	Lower-bound	5.874	1.000	5.874	4.391	.090
Error(TIME)	Sphericity Assumed	6.689	10	.669		
	Greenhouse-Geisser	6.689	6.182	1.082		
	Huynh-Feldt	6.689	7.199	.929		
	Lower-bound	6.689	5.000	1.338		
DOMAIN	Sphericity Assumed	.469	2	.235	.811	.472
	Greenhouse-Geisser	.469	1.544	.304	.811	.449
	Huynh-Feldt	.469	2.000	.235	.811	.472
	Lower-bound	.469	1.000	.469	.811	.409
Error(DOMAIN)	Sphericity Assumed	2.893	10	.289		
	Greenhouse-Geisser	2.893	7.722	.375		
	Huynh-Feldt	2.893	10.000	.289		
	Lower-bound	2.893	5.000	.579		
TIME * DOMAIN	Sphericity Assumed	.626	4	.157	.277	.889
	Greenhouse-Geisser	.626	1.904	.329	.277	.753
	Huynh-Feldt	.626	3.045	.206	.277	.843
	Lower-bound	.626	1.000	.626	.277	.621
Error(TIME*DOMAIN)	Sphericity Assumed	11.285	20	.564		
	Greenhouse-Geisser	11.285	9.522	1.185		
	Huynh-Feldt	11.285	15.226	.741		
	Lower-bound	11.285	5.000	2.257		