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Social Communication and Interaction amongst Children and Young People with Severe Learning Difficulties

Julia Skinner
M2923275

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Abstract

This study explores the social and communicative interactions among children and young people in special schools who have severe learning difficulties. It considers the concept of phatic communion or 'small talk' and its importance as a social and cultural practice. The study focuses on the actual communication of the children and young people and investigates the functions, patterns and strategies they employ. It considers the development of language and communication from birth onwards, particularly the processes involved in the progress of increasing skills in socially interactive communication. The study reviews literature concerning the development of communication in proto-conversations to the talk of children of typical development and children and adults with learning difficulties. It also investigates the role of non-verbal communication and context and how these can affect and support the social interaction process. The study employed an observational approach to data collection, recording predominantly by field notes, but also utilising some video and audio recording. The data were transcribed and analysed to provide examples of the range and variety of socio-communicative interactions between the children and young people. The findings demonstrate the multiplexity of skill involved in creating and perpetuating the social dynamics of amicable interaction. Finally conclusions are drawn to provide some significance of the impact that this study may offer to professionals working in the special educational sector, particularly with children and young people with severe learning difficulties.

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Chapter 1
Introduction

The Primary Concept

The basis upon which this study is undertaken is firmly established in the work of Bronislaw Malinowski. Malinowski was an ethnographer who, amongst other things, made a study of the language and communication of the Trobriand islanders in the Melanesian archipelago in the early part of the 20th century. It was his ethnographic studies of phatic communion amongst the Trobriand islanders that inspired me to take an interest in this particular form of social communication. This aspect of communication, he suggested, was to establish companionship and unity through the exchange of words. 'Phatic communion' as he termed it, fulfils a purely social function in that the words spoken do not necessarily serve as a means of reflection but as a 'mode of action'. Phatic communion, Malinowski suggested, exists to establish and re-affirm relationships between people, to create a sociable atmosphere and in some instances, to prevent an intimidating silence.

Phatic communion or small talk, to bring the phraseology more up to date, emanates from the innate human desire to enjoy each other's social company. In informal situations where friends, acquaintances, even strangers sometimes find themselves together, a conversation will often ensue. The topics of such conversations are usually of a general nature and do not cross personal boundaries of etiquette. The weather, holidays, local interest, global issues or the context itself, for example, all serve to provide a common ground for participants to comment upon. Although these conversations are entirely voluntary, they are somewhat necessary in terms of establishing and confirming friendships or preventing awkward silences which could potentially lead to embarrassment or fear and apprehension between group members.

As Malinowski's study progressed he began to realise that he could not understand the literal translations of the language of the islanders, nor the implicit meanings carried in their vocabulary, without taking into consideration the context in which the message was spoken. Indeed he states:

> A statement, spoken in real life, is never detached from the situation in which it has been uttered. For each verbal statement by a human being

> has the aim and function of expressing some thought or feeling actual at that moment and in that situation, and necessary for some reason or other to be made known to another person or persons - in order either to serve purposes of common action, or to establish ties of purely social communion, or else to deliver the speaker of violent feelings or passions.
>
> (Malinowski, 1923, p.467)

He goes on to suggest that the context in which people find themselves provides the stimulus for them to communicate Therefore the ".... utterance and the situation are bound up inextricably with each other and the context of situation is indispensable for the understanding of the words" (Malinowski, 1923, p.467).

Although Malinowski based his theories concerning 'phatic communion' on his study of the Trobriand islanders, he did state that they could equally be applied to any society or culture as there existed an innate desire in human nature to enjoy each other's social company and being able to engage in 'phatic communion' enabled man (sic) to accomplish this.

There are a great many aspects of our lives that have their bases in communication of some form or another. A substantial portion of these communicative aspects involve talking and listening to one another in both formal and informal situations. Communicative interaction amongst and between individuals helps us to understand our concepts of self and others, our place in the world and indeed the world around us. Halliday (1978) hypothesised about the pragmatic (doing) and mathetic (learning) functions of language as arising from instrumental, regulatory, interactional, personal, heuristic and imaginative language development. The acquisition of this conceptual knowledge, appears to be superficially casual in some aspects. It would be realistically prudent to assume that the type of socio-communicative interaction that Malinowski proposed as integral to human existence is not something that is taught specifically. Unlike knowledge about learning to read, dressing, or driving a car for example, the knowledge required to engage effectively in social conversation with another person is something that merely appears to be 'picked up along the way'.

The art of conversation is a skill in which we are all expected to participate, yet the mastery of this skill is essentially constructed from personal experience alone. For the majority of people this mode of learning suffices the progressive needs of their social development. However, when children and young people are impaired with severe learning difficulties the consequential learning processes may be subject to developmental delay and cognitive discontinuity. The ad hoc nature of acquiring a constructively effective body of knowledge and experience in social interaction therefore may be flawed.

At the very outset, one has to consider the basic premise of whether children and young people who have severe learning difficulties, actually engage in social communication and interaction not only with their parents, caregivers and teachers, but more importantly, with one another. If these children and young people are driven by human instinct to engage in social interaction, how successful are they and what are the potential barriers to their social, communicative and cognitive understanding of small talk?

Small talk has few contextual limitations in the informal arena and the school environment provides an opportunity to study naturally occurring social conversation between friends and acquaintances during the more relaxed and unconstrained situations during the school day. The school presents an environment where peer groups can re-acquaint their friendships, familiarise themselves with ongoing events, re-capture ideas and beliefs for consideration and introduce new information for perusal. This study adopts Malinowski's concept of 'phatic communion' and seeks to investigate this amongst children and young people with severe learning difficulties within the school environment.

Historical Overview of Education for Children with Severe Learning Difficulties

The education of children with severe learning difficulties has, over the preceding 30 years, changed dramatically. Prior to 1970 these children were considered to be in need of 'special care' and unable to benefit from education (Stephen, 1981). The Health Authorities, who were responsible for children with severe mental handicaps (sic), provided training centres and hospital accommodation where they were cared for and trained in social and life skills. Younghusband, Birchall, Davie & Kellmer Pringle (1970, p.233) noted that "Society's obligation was thought of mainly as providing for the child's physical needs, protecting him

from difficult or dangerous situations, and training him in elementary skills of self help which could be provided outside the educational system".

Although the quality of the training was, in some cases, poor and often adopted a medical perspective of care towards physical needs, gradually more innovative training programmes were being introduced, which emphasised relevant skills training and the development of relationships (Tilstone, 1991). Latterly, the care and training offered by the Health Authorities purported to enable these children to become better equipped in managing as independently as possible in society (Ouvry 1987).

In 1970 with the publication of the Education (Handicapped Children) Act, the children were transferred to the remit of local education authorities and although a more academic approach to their education was undertaken, there still remained a strong emphasis on social and life skills. Beresford, Booth, Croft and Tuckwell (1982) undertook a study of an Educationally Sub Normal (Severe) school that had taken some children from Junior Training Centres. They reported the aims of the school, as perceived by the staff, as "helping the children to come to terms with themselves, to learn social skills, to develop their personality and, as far as possible, to teach them academic skills" (p.232). The Head of the school aimed for each pupil to be able to cope, to the best of their ability, morally, physically and intellectually and to be as full a member of society as was possible. The Deputy Head of another school for severely mentally handicapped children reported that his staff placed the greatest emphasis on communication (Serpell-Morris, 1982). The ability to communicate they felt, was the single most important aspect of the child's needs.

An informal interview with a colleague who was an 'Assistant Supervisor' at a Junior Training Centre remarked that the activities and work that the children were engaged in was very oriented towards personal, social and community skills. Post 1970, the curriculum changed slightly to incorporate the application of mathematical and english skills. However the emphasis remained on the fostering and development of personal and social abilities.

Subsequent Education Reports and Acts (e.g., Warnock Report, 1978; Education Act, 1981; Education Reform Act, 1988) have emphasised the needs and rights of all children to an appropriate education and served to promote an increased awareness of people with learning

difficulties and their place within society and ordinary schools. Whilst in broad terms this is an accepted and realistic approach, some children with special educational needs may require strategies that facilitate an effective education to ensure their integration and inclusion within society in adult life (Hornby, Atkinson & Howard, 1997).

The publication of the National Curriculum (DES, 1989) established a non-discriminatory approach to children and people with learning difficulties in their rights to access a 'mainstream' broad and balanced curriculum. However the adoption of this curriculum gave rise to considerable dissent in special schools and learning support units by staff who questioned whether the children's *real* needs could now actually be met by such an academically based curriculum.

Aird (2001) reported over a third of teachers in schools for pupils with severe learning difficulties disagreed with the National Curriculum. They argued that it was inappropriate to the needs of the children, that its design and content was insufficient to meet those needs and that the solid framework of good practice developed and built from the early 1970s was now being eroded.

Whilst the National Curriculum (DES, 1989) in this country aims to be broad and balanced, the perceived need for it also to be relevant and appropriate has been questioned (Miller, Layton & Martin 2000) particularly by those involved in special educational provision. The reality of delivering the National Curriculum often does not coincide with the needs of the pupils. It is often considered highly restrictive in not allowing adequate provision for the development and practice of social skills - essential elements in the educational development of children with learning difficulties if they are to participate as fully as possible in society. As the new National Curriculum gained ground as a vehicle of entitlement, many staff in special schools for pupils with severe learning difficulties seemed to disregard the irrelevance of the content and sought ways to enable the pupils to become active participants (Aird, 2001). Aird (2001) further argues that the curriculum framework was devised to support the national 'mainstream' model to which children with learning difficulties are seemingly expected to conform. The National Curriculum increasingly gains status as the 'value added' criterion to what Aird describes as the "quasi-commercial world of education" (p.9). In contrast, the positive view of the National Curriculum reveals an ethos of equality

such that the similarities and not differences, between all pupils were recognised (Sebba, Byers & Rose, 1993). However the importance afforded to pupils social and cultural development asserted to in the document perhaps requires more support in terms of developing the vital competence of small talk. The debate between statutory right and individual need continues and the key issue for this study is that the curriculum for children with severe learning difficulties may not provide the best grounding or context for the development of social communication.

Rationale and the Research Questions

The basis upon which this research study is embedded is Malinowski's work on phatic communion. The underpinning rationale describes the fundamental issues from which this study evolves. That is - the claim by Malinowski that all humans have an innate desire to be sociable, to enjoy each others company and to engage in phatic communion.

If Malinowski's claim is valid, then evidence should be obtainable to a greater or lesser degree to support the notion of whether children and young people with severe learning difficulties can and do engage in socio-communicative interaction. This study sets out to provide evidence for critical analysis and discussion based upon the following research questions:-

- **What is the nature of the socio-communicative interaction that takes place between children and young people with severe learning difficulties?**

- **What conversational functions are evident within the exchanges?**

- **What, if any, patterns can be identified between conversational content or context ?**

- **What strategies do the children and young people employ in their socio-communicative interactions ?**

The aim of this study is to provide evidence for the questions identified above and to achieve a better informed understanding of this aspect of communication for this group of learners. Whilst my aim will contribute to the body of knowledge, my objective as a teacher is to address a professional agenda in terms of relating this knowledge to school curricula and how current policy and practices can better support the development of social communication and interaction between pupils with severe learning difficulties.

Part 1 of the Education Reform Act (1988) which describes the importance of pupils spiritual, moral, social and cultural development, takes precedence over part 2 that focusses on the content of the National Curriculum (Brown, 1998). Although the National Curriculum has evolved since its inception and implementation in 1989, its prescriptive and hierarchical nature appears to be outwardly limiting in accounting for the individual and personal needs of the pupil with severe learning difficulties. Since the Dearing Report in 1994, when the curriculum was trimmed to allow an extra 20 per cent of time to be allocated to additional educational areas that the school thought necessary, this allowed schools a degree of flexibility in their delivery of the curriculum. By analysing realistic defintions of curriculum content and distinguishing between experience, exploration and achievement offers pupils their equality of entitlement (Sebba, *et al.* 1993). In interviews with teachers Lewis (1995) identified three most frequently cited benefits for pupils with special educational needs as, provision of the same basic entitlement; a clear curriculum framework; and a structure within which to differentiate access for those pupils. A recent 2003 curriculum policy document from a special school for pupils with severe and profound learning difficulties clearly identifies its responsibility to the Education Reform Act (1998) to provide a broad and balanced curriculum. Although individual learning needs are referred to, the emphasis is placed on 'entitlement' to the curriculum. This is where a balance is required to provide for those needs alongside, as Byers (1999) suggested, skillful planning so that priority areas for individual pupils are addressed in the context of National Curriculum subjects.

To address the challenges of pupils' needs and curriculum entitlement we should perhaps be seeking to discover a balance towards a relevant and meaningful curriculum framework and active participation within it. A report from the School Curriculum and Assessment Authority in 1996 set a challenge to 'educate' both the inner and outer lives of young people in order to better equip them for the world (Brown, 1998). Within the context of this study

based on Malinowski's concept of 'phatic communion' and my beliefs regarding both the personal and social, and the curricula needs of pupils with severe learning difficulties, I have focussed on an extract from a discussion of provision for children with language difficulties. AFASIC and I CAN (1996) proposed that a variety of provision should be available to meet the diverse needs of children who require help to integrate socially into their communities. They further suggested:

> Communication development programmes should become an integral part of the curriculum, and different approaches should be explored. Social interaction will need to be a priority...
>
> (AFASIC & I CAN, 1996, p.9)

It is hoped and anticipated that through the course of this study, the proposals for socio-communicative development will acquire a greater priority within the educational experiences of children and young people with severe learning difficulties. Malinowski discusses the function of speech (for the purposes of this study I would transpose the term 'communication') as "one of the bedrock aspects of man's (sic) nature in society" and we have a "fundamental tendency which makes the mere presence of others a necessity for man (sic)" (1923, p.477). His discussions therefore highlight the importance of the innate socially communicative and interactive needs of all persons.

Chapter 2
Literature Review

Social communication itself encompasses a broad range of literature, but considered from the perspective of children and young people with severe learning difficulties, several additional issues require discussion. It would be inappropriate to review the subject of communication from merely a verbal, age related context. The range of developmental ability encompassed in the term 'severe learning difficulty' represents a span of extensive communicative skills limited only by interpretive negotiation. This review covers past and current literature to determine what is currently known about social communication particularly for this group. The areas under review include the development of communication from birth onwards, verbal communication, non verbal communication, social conversation and context.

Development of (Social) Communication

THE DEVELOPMENT OF COMMUNICATION

This section provides an exploratory review of some of the literature concerned with the development of communication from infancy onwards and will begin to focus on the social and cultural nature of language use in a social context. There are contrasting views concerning development with some theorists suggesting identical and universal stages (Piaget, 1936) that each child progresses through according to age. Conversely, theorists such as Vygotsky (1978) argue that there can be no universal schema due to the constantly changing experiences that humans encounter and the inherent differences of the learning process of each individual person. Therefore to balance these opposing viewpoints, there is a need to consider the broader milestones of communicative development alongside the socio-cultural background of individuals and the cognitive, physical and emotional development of the participants of this study. The review will begin by investigating the earliest social interactions that occur between infant and mother or carer and how these initial exchanges provide the basis upon which the child builds a framework for the ongoing development of communicating with society. The notion of communicative intent is then discussed and how this develops into early pragmatic functions and verbal exchanges. Literature on early communicative development is also seen as relevant because parallels can be drawn with the developmental stages of children and young people with severe learning

difficulties. A chart outlining features and characteristics of the development of vocal/verbal and non-verbal communication can be referred to in Appendix A. Although it outlines the developmental sequences of communication for children of normal development, there may be some correlation of features for children with severe learning difficulties, albeit at possibly delayed and different levels of attainment.

PROTO-CONVERSATIONS

McShane (1980), in his discussion of the origins of conversation, points to the earliest social interactions from birth onwards between the baby and its mother. He reports that conversational type activity can be identified in the 'burst-pause' pattern of feeding, the eye contact between the mother and baby during feeding and the vocalisations often provided by the mother in response to her baby's sucking routine. This burst-pause pattern that occurs during feeding is similar to the turn taking aspect of conversations and together with the eye contact and vocalisation it is further reinforced by the mother. It has been found also that the mother is more likely to vocalise to the baby as eye contact from the infant is gained. These early social connections of eye contact between infant and carer have been found in babies with Down's syndrome but approximately two to three weeks later than suggested for children of normal development (Lewis, 2003). This phenomenon has implications in developing conversational skills as mutual gaze is significant during social interaction.

Garvey & Hogan (1973) argue that children are 'sociocentric' from birth, but lack the necessary skills to interact purposefully. This emphasis on socio-communicative disposition was also highlighted by Vygotsky (1962) who suggested that children were born with certain capabilities that predisposed them to communicate with others and that these social functions of speech become quite apparent during the first year. The movements, vocalisations and laughter are the child's attempts at social contact from the first few months of life. It has been suggested that, from birth, a child develops an ability to discriminate the intentions of others (MacNamara, 1977). This proposal differs from the theory long held that infants are essentially egocentric (Piaget, 1926) and do not consider the interactions between themselves and others as part of a social routine or sequence of events. Indeed McTear (1985) describes these types of interaction between mother and baby as 'proto-conversations' and suggests that babies learn to take turns in response to their mothers' actions and begin to expect predictable responses from them. These joint action routines have been identified by

Richardson & Klecan-Aker (2000) as the earliest social contexts for promoting communication. McTear (1985) suggests that these early phases of proto-conversations occur prior to the development of recognisable language. The term 'recognisable' is used to distinguish these from the babbling sounds made by infants which parents and carers are often keen to identify as meaningful 'words'.

Hayes (1984) also discusses the structure of this 'pre-verbal dialogue' between the mother and infant and suggests that to others it has the appearance of a well rehearsed game. Lewis (2003) reported that the early vocalisations and babbling sounds of infants with Down's syndrome tend to follow the same developmental sequence to those of normal development. These pre-verbal dialogic structures form an important phase in practising turn taking skills essential for future socio-communicative development. These early engagements in mother-infant interaction also provide opportunities for the carers to begin the enculturation process and establish norms and conventions of verbal and non-verbal behaviour particular to the culture to which they belong. These points obviously have great significance when considering children who are developmentally delayed.

COMMUNICATIVE INTENT

Many researchers (Bates, 1976; Bates, Benigni, Bretherton, Camaioni & Volterra, 1977; Scoville, 1984; Harding, 1984) agree that at about 1 year of age a normally developing child begins to be aware that certain types of behaviour, including gestures and vocalisations, can be used to communicate to another person in order to cause them to do something. Prior to this the infant is developing the skills necessary for successful communication, learning how to use different actions and types of behaviour to accomplish their needs. Buckley (2003) describes these actions and behaviours between infant and carer as back and forth games like "vocal tennis" (p.29) which form a joint reference and active participation in a kind of social exchange.

Bates *et al.* (1977) studied the development from gestures to first words in which they proposed that pointing begins first outside of the realm of a communicative interaction. They found that the infant proceeded from a stage of merely pointing or staring at an object, to pointing at the object and then turning their gaze towards the adult and then pointing at the object again, followed by pointing at the object whilst turning their gaze to the adult. These

phases in development from the time when the infant is a more or less passive participant in interaction, to when they are becoming more aware of their own actions and those of others, has been referred to as the development of communicative intent.

A brief informal observation carried out by myself, of toddlers (approximately 15 to 20 months old) at play identified some of these preliminary intentions identified above. The toddlers were essentially unknown to one another, however some were observed to purposely move directly to face another and gain eye contact. These preliminary forms of communicative intent develop in a variety of ways. Scoville (1984), for example, discusses a set of three behavioural indices.

1. The infant directs his/her gaze or gestures alternately from the object of desire to an adult.
2. The infant is able to consistently repeat vocalisations and gestures in recurring interactions within similar contexts.
3. The infant begins to modify vocalisations and gestures in response to the other person's behaviour.

In the work of Harding & Golinkoff (1979) their proposals identify four components to communicative intention, namely:

1. Eye contact with the adult.
2. Gesturing or gazing towards the desired object.
3. Persistence.
4. Termination of the behaviour once the desired goal is accomplished.

This, like much literature, focusses on communicative need rather than communication for social connection. However the foundations of communication lie on the same pathway. Further work from Harding (1984) discusses the concept of communicative intention as the transmission of audible, visual or tactile signals which are both meaningful and significant enough to be interpreted by the other person as an intention to communicate. Halliday (1978) likewise proposes that before infants have accomplished any kind of recognisable form of their mother-tongue, they realise that they can express some meanings by the consistent use of certain vocalisations. These "proto-words", described by Buckley (2003, p.44), are considered to be functional such that the communicative sound patterns are consistent, intentional, sociable and have some goal. Harding (1984) suggests that this notion of communicative intention develops in a sequence of three stages:

1st stage - the infant is aware of a desired goal,

2nd stage - the infant is able to develop a plan for achieving the goal,

3rd stage - the infant is able to develop a co-ordinated plan involving alternatives and staged goals.

During these three stages the notion of persistence continues throughout, thereby confirming the desire to communicate intention of a desired goal. Harding proposes therefore that the development of the intention to communicate via these audible, visual and tactile signals provides the basis upon which 'language' can be used as a conventional means of communication. The ability to communicate in a social interaction depends upon the level of cognition within the stages of development. This is significant to the context of this study. Children who have severe learning difficulties obviously function at a lower developmental level and often will place more emphasis on these type of signals to elicit meaning from the interaction. A further discussion of the significance of these type of signals follows in the section on non-verbal communication.

In consideration of Harding's thoughts and with reference to Scoville's second point, early language learning is thought to be highly context specific and infants recognise an utterance via its pragmatic function rather that its semantic one. Ninio & Wheeler (1984) propose that an infant's first verbal utterances will be copied from those that are spoken by influential adults, i.e. parents and carers. Lewis (2003) found however, that few young children with autism engage in these person to person communicative experiences. Shared social experiences allow infants to identify the function of phrases such as " Thank you" and "Bye bye" and the infant will begin to copy the adult model of behaviour in similar contexts. Bates *et al.* (1977) also make similar proposals and refer to Halliday and Bruner's work on interaction stressing the social basis of language rather than the cognitive. Bates *et al.* (1977) propose that the social interaction that occurs in ritual exchanges form the structure to which the infant derives recognition of the pragmatic function of communication.

Verbal Communication

In broad terms verbal communication can be expressed as either formal or informal. Although this study focusses on an aspect of informal communication, there are some

fundamental similarities between both types including types of speech act, aspects of style, register, and repertoire. Literature on verbal exchanges together with the general principles and rules of communication are discussed here.

VERBAL EXCHANGES

In interpersonal communications there exists a function for each communication. Somewhere embodied in the act of speaking there will be an intention (Bruner, 1986). Functions may range from making a statement, asking questions, giving instructions or information and so forth (Fairclough, 1989). In the context of this study communication, although of an informal nature, still carries some function between participants. It has already been noted that Malinowski (1923) proposed that the bases of these functional aspects was to sustain social relationships between people.

The style and sound of verbal communication rarely involves a monotone dialogue but includes a range of styles and sounds, or prosodic features integral to the socio-interactive sequence (Graddol, Cheshire & Swann, 1994). Rhythm, stress and intonation are the stylistic aspects of communication that not only provide verbal exchanges with structure and expression but also can make the words, and the whole dialogue more interesting to the speaker and hearer (Crystal, 1995). These features serve several functions and assist the participants in the understanding and continuity of the interaction.

In studies of children with learning difficulties (Lewis, 2003) it was reported that the speech of children with Down's syndrome was higher in pitch but does reduce with age. However those children with autism, although able to speak with a range of styles and sounds, were reported as using speech that was stilted, pedantic and with abnormal prosodic qualities. Their failure to adjust their language appropriately was explained by their difficulties with the theory of mind, but for this study the reason is of less interest than the possible consequence for developing successful small talk.

Register, according to Holmes (1992), Atkinson, Kilby & Roca (1985), Trudgill (1983), Halliday (1978) and for example, is characterised by role and situation. Register applies to the language variety and lexico-grammatical structure utilised by a person and is dependant upon the ongoing activity and social hierarchical processes. The notion of register is more

often associated with occupational varieties of language, but can also be identified with specific language situations of use, such as motherese (Atkinson *et al.* 1985). The significance of register to this study was anticipated to unfold in the socio-communicative encounters between children of different developmental abilities.

In the myriad of daily activities, the communicative partnerships we encounter undoubtedly vary according to the context, such that the diversity of socio-interactive encounters necessitates a wide verbal repertoire available to each individual. An appropriate topic of conversation with a close friend may not be suitable when in the company of a work colleague or someone of higher social standing or different gender. As children grow older they increasingly gain an awareness of their own gender. As gender roles becomes more apparent, the implications for mixed gender relationships acquires greater significance. Thurlow (2001) and Weppelman, Bostow, Schiffer, Elbert-Perez & Newman (2003) found in their studies that girls and boys were different types of communicators. Girls had tendencies towards gossip and collaborative talk whereas boys identified strongly with cultural expectations of autonomy and differentiation. This was in favour of establishing a sense of connectedness between friends or developing intimate relationships, which was favoured by the girls. Boys' preferences for communication were generally task focussed and directed towards form and content. In contrast girls were found to be more socially and interactively aware. Davies (2003) differentiated her findings of girls and boys single gender discussions between "being friends" (p.118) to "proving machismo" (p.124) respectively.

Children and young people continually make, and sometimes break relationships particularly during the turbulent teenage years. Relationships vary and change over time thereby generating opportunities for creating and terminating socio-interactive partnerships. Thus experience of differing contexts and communicative partners enables children and young people to develop a verbal repertoire from which to select an appropriate form.

Social communication has, as it has been suggested above, its basis in the mother or carer - infant relationship begun at birth. It has been demonstrated in other studies that the vocalisations produced by the infant are significantly increased when they are reinforced by the parent or carer and, when they continually extend their vocal demands on the infant

(McShane, 1980). The question and 'answer' exchanges between the two, not only accomplish this act of reinforcement, but also enculturate the infant into the conventions of conversational exchange. It has been noted that children as young as 2 years of age understand that turns alternate and that only one person speaks at a time (Buckley, 2003). In conversation, generally one utterance follows another and it is assumed by conversational partners that if one partner makes an utterance then that partner expects the other to respond in some way. As McTear (1985) suggests, conversation is a joint production that is created on a turn by turn basis. He proposes that there are two types of structural unit that can occur - an adjacency pair and an exchange. An example of an adjacency pair is found in greetings, compliments, question and answer. An exchange can consist of an initiation and response (IR) and can also be extended to an initiation-response-feedback (IRF) exchange in certain contexts. Both IR and IRF exchanges are prospective in that the initiation makes the response predictable. However, the major difference between social conversation and other types of verbal exchange is that conversation does not necessarily have to fit into an exchange structure as participants have no obligation to comply. Verbal exchanges tend to apply to the more formal aspects of linguistic interaction, such as classroom talk (Edwards & Mercer, 1987) and business meetings for example.

PRINCIPLES & RULES

Grice (1975) set out four principles to which participants should apply their conversational contributions. He implied that each contribution should be accountable for quantity, quality, relevance and manner. In considering social conversation then, participants would be allowed a turn of one unit (e.g. word, phrase, sentence), the contribution would need to be informative and applicable to the ongoing exchange and be meaningful to the participants involved. However, McTear (1985) argues that social interaction involves more than the mere exchange of information and in some cases is not considered desirable from a socio-cultural point of view. Duncan (1968) explored this notion in his discussion of the 'art of conversation'. He argued that although the content of social conversation must be interesting, entertaining and light, it cannot become mere nonsense and it must suit the social demands of the occasion. However, whilst the participants aim to achieve harmony and a common consciousness in conversation, its content cannot be allowed to become too intimate or individualised as personal remarks are unable to be shared by everyone in the conversational group.

In recognition of this non-personal approach, McTear (1985) cites the work of Lakoff in 1973 who proposed that in addition to Grice's four principles, three rules of politeness should be included, that is, don't impose, give options, and make the other person feel good. His first rule is similar to Knapp's (1984) discussion of small talk in which he described it as 'breadth not depth'. He suggested that conversational topics may include demographic or biographical information, the surroundings, the weather and would all contribute towards finding a common ground on which to base a conversational relationship. Lakoff's second and third rules of politeness are akin to ways of phrasing ones comments within a conversation, for example using "Would you like to sit down Michael?" as opposed to "Sit down Mr McTear". In other words using polite and more personal forms instead of authoritative and demanding versions. However these rules of politeness conflict somewhat with McTear's earlier comments concerning types of exchange and that, within social conversation, there is no obligation for participants to comply with the rules. I would surmise therefore, that in general, participants do follow the 'rules' of social interaction. It is perhaps only in cases of misunderstanding or misinterpretation that the rules may be broken inadvertently. Edelsky (1977) stated that people do not just 'talk' they also interpret the socio-linguistic situation, including unexpected silences, in light of their own experience and expectations. Additionally one also has to consider immaturity and the lack of knowledge, particularly in children whose conversational skills are still developing and who merely have insufficient experience and are perhaps not fully aware of conversational norms of behaviour.

Kernan & Sabsay (1989) remarked upon the inappropriate communicative behaviours of people who were mentally handicapped (sic). The examples included making comments that are irrelevant, talking more loudly than is appropriate, sharing intimate details, and poor use of tense and grammar. Although these factors may be applicable to these people, they may also manifest themselves in the immature conversations of children of normal development. Detheridge (1997) makes a poignant note when she described the ability to communicate as being crucial to an individual's opportunities to demonstrate his/her capability in social interaction. Often when mistakes or inappropriate behaviour occur, control over personal and autonomous participation is reduced and either adults or more able peers begin to assume responsibility for that person's contribution to a conversation. Thereby the participant is allowed to become increasingly more passive and unable to gain from personal experience.

In a discussion of appropriacy of comment, McTear and Conti-Ramsden (1992) refer to Grice's principles as the expected form of conversation. Although they agreed that participants should make contributions that follow the purpose and direction of the interaction, they do not necessarily have to comply or agree with the contributions of others, as long as their own are consistent with the four principles of informative, true, relevant and clear.

Following this discussion several authors highlight the notion of rules in communication. Beveridge & Conti-Ramsden (1987) suggest that different types of communication have their own rules which children must learn and that they must also become aware of differing types of speech act. These can range from requests, persuasion, prediction and many other forms in both a formal and informal context. Thus a framework for this study develops from the literature to which can be included: the principles of conversation, types of conversational acts, and types of exchanges

In consideration of the social communication of children with learning disabilities, some authors have acknowledged that these children, more or less, follow the same pattern of development as children of normal ability. Findings in Lackner's (1976) research suggest that the language behaviours of normal and retarded (sic) children follow similar developmental paths. However he did find that the development of the more severely retarded children became more delayed presumably as they advanced chronologically but not cognitively and therefore remained at the lower levels of language acquisition. Lewis (2003) reported no differences in the communicative ability and daily living skills of children under seven years of age with Down's syndrome and children with autism. She did, however note that the children with Down's syndrome had more advanced socialisation skills, with both groups functioning at levels similar to younger children of normal development. Other studies (Bray & Woolnough, 1988) have pointed to the specific differences that, for example, children with Down's Syndrome exhibit in grammatical skills. Their lexical and pragmatic skills generally remain in line with their mental age, whilst their comprehension of language is much better than their expressive (Lewis, 2003). But, as noted above, Wise (1965) argued that conversation is the free-est form of speech, so perhaps the concept of grammatical correctness, in the context of social interaction, is not as important as the continuity of conversation.

Although children whose learning is severely delayed often experience difficulties in recognising and satisfying normal social conventions of conversation, they are able to make attempts at participation, although they may not necessarily interpret correctly the full intention of the message given by another participant (Beveridge & Conti-Ramsden, 1987). For example, a comment such as "It's cold in here" may not just be reflecting the ambient temperature, but may be an indirect request to close the door. The authors propose that this misinterpretation is due to the children's absence or lack of knowledge and understanding of differing conversational acts. However, it is suggested that part of this knowledge and understanding may come with the variety of experiences that the children will encounter during their day to day life, contrary to Piaget's (1926) stance that experience plays no part in a child's learning patterns. Beveridge and Conti-Ramsden (1987) have also suggested that children who are language disabled in terms of cognitive delay, may find some difficulties in requesting information or clarification from other participants in conversations. They also found that these children have poor strategies for repair work, such as redefining their meanings and expectations of their conversational partners.

During the course of normal development, experience allows children to build on the knowledge and understanding of ways in which they can express meaning by taking account of the context in which they find themselves and the conversational demands of the situation. Beveridge (1989), in another paper, suggested that even when children are aware of the rules for communicating, this knowledge does not necessarily mean that a conversational interaction will be successful. He acknowledges that conversational initiations from children with learning difficulties increase with age and that their peer relationships may affect social interaction. However his proposals could apply equally to a child of any ability and not just to those with severe learning difficulties.

In the discussions of the development of communication above, the focus has largely concentrated on the verbal aspect but, as it is apparent, whether consciously or subconsciously, face to face communication involves much more than the verbal properties of speech and it is the aspect of non-verbal communication that is considered in the following sections.

Non-Verbal Communication

In a study that involves children and young people with severe learning difficulties, it is relevant to include a review of non-verbal communication. Some of the participants involved in this study were at a level where their developmental delay or physical difficulty prevented or precluded them from utilising more recognisable verbal forms of communication. These individuals therefore had a tendency to rely on non-verbal strategies to convey their thoughts and needs.

Non-verbal communication manifests itself in many forms, the most common of which, gaze and eye contact, has already been briefly discussed above as they begin at birth within the proto conversations between infant and carer. This section of the review will also consider the communicative and interpretive functions and meanings of other forms of non-verbal communication including expression, gesture, proxemics and haptics, posture and orientation.

NON-VERBAL COMMUNICATION

The general view of language development often considers the process as a gradual decline in utilising non-verbal forms of communication, particularly gesture, to one of mainly verbal output (Guidetti, 2002). As with verbal communication, so too, non-verbal communication develops from simple eye contact to the more refined features of different types of behaviour. In any type of interaction non-verbal behaviour supports, enhances, clarifies and in some instances acts as the primary communication source between participants. Its importance in these and other functions is discussed below within the different types of non-verbal behaviour and how effectively they work in conjunction with one another and with verbal forms of communication.

When considering the concept of conversation we generally think of it as 'talking' and McShane (1980) indeed suggests that it is primarily a vocal activity. However he also remarks that both speakers and listeners do not remain motionless during an interaction. Indeed all participants in a social interaction will display forms of non-verbal behaviours; some are not as overtly noticeable as others, but nevertheless they are an integral part of the interaction. In a similar notion to Grice's principles of talk, Wood (1976), in her discussion

of verbal and non-verbal language development, has suggested that all behaviour is rule-governed. The culture to which one belongs determines the appropriateness of behaviours by establishing norms and rules to which individuals are expected to adhere. Graddol *et al.* (1994) suggest that non-verbal communication can include all manner of communication between people other than words and it is inseparably bound up with face-to-face interaction. They propose that non-verbal communication serves three functions within a face-to-face interaction: firstly it can convey specific meaning, secondly it can give indications of how a person feels emotionally, and thirdly it can play a supportive role for speech. Although Graddol *et al.* (1994) suggest that non-verbal communication can include any behaviour other than speech, it is generally categorised as gaze, gesture, expression, proxemics, posture and orientation, and haptics. Some authors (Wise, 1965; McShane, 1980) who have studied language development in children of normal ability and some (MacNamara, 1977; Carvajal & Iglesias, 2000) who have studied children with learning difficulties have highlighted the importance of non-verbal behaviour and how it plays an integral role in conversation. They have suggested that speakers pay more attention to non-verbal behaviour, as an indicator of assurance on both topic and conversational strategy, and in circumstances of an apparent misunderstanding of spoken language then participants will rely on, or use non-verbal signals to elicit clarification of the message either to or from their conversational partner. Eskritt & Lee (2003) describe this principle based on the "commonsense assumption that 'actions speak louder than words'" (p. 26). However, they do also note that inconsistencies between the two modes of communication can also serve several interpersonal functions such as amusement and deception.

Gaze & Expression

Referring back to the discussion of the early development of communication and communicative intention among babies and infants, it can clearly be seen that gaze and eye contact are among the first communicative behaviours that an infant displays. It has been stated by Buckley (2003) that infants are predisposed from birth to be interested in people and particularly the two features central to the communicative process, the face and voice. She suggests that the development of the social smile occurring at about 4 - 6 weeks of age is the cornerstone of social interaction. McShane (1980) points to the fact that the initial communicative phases of eye contact between mother and infant are carried forward in the ongoing development of the child and play an important role in the social interaction of adult

conversation. Strong correlations have been found between eye contact or gazing and vocalisation within adult conversation. Although vocalisation was not the most important of the two behaviours between mother and infant at this early stage, this certainly substantiates the origins of 'conversation' within the realm of mother-infant patterns of gaze.

Gaze plays an important role in social interaction as information can be transmitted to conversational partners via facial expression. One only has to consider the difference between speaking to a friend face-to-face and via the telephone to understand the amount of additional cues and information one is devoid of receiving when facial contact is not available. Argyle (1987), in his discussion of non-verbal communication, suggested that the face combined with the voice are the two most important channels for signalling one's emotions and attitudes to others. In the context of social interaction it is important to send conversational partners positive non-verbal signals if one is to develop and maintain friendly relations. He further commented, that in his study of young people and adults with social difficulties, they used non-verbal behaviours such as gaze, expression and gestures less often. These findings are concurrent with those of Lewis (2003) who noted that children with autism show little expression on their faces and use gaze directive behaviours less often. Arthur (2003) also found evidence to suggest that people with learning disabilities have difficulties in recognising emotion from facial expression.

These problems in the perception of others could probably also apply to children with learning difficulties whose social skills are not following the normal pattern of development. However, in contrast, Carvajal & Iglesias (2000) in their study of looking behaviour in Down's syndrome infants, found the relationship between emotional expression combined with direction of gaze had a certain amount of control over the stimulation that the infant gave or perceived. They found that infants with Down's Syndrome smiled more when they were looking at people even though they would look at an object for a longer period in comparison. When Carvajal & Iglesias compared the results of the infants with Down's Syndrome to infants of typical development, they did find that the former tended to look at their mother's faces more than the latter, although when looking at objects, the differences in 'looking' time were found to be negligible between the two groups. From this study Carvajal and Iglesias concluded that there was little difference between the two groups in terms of preference in directing their gaze towards the social object - that is a human face - rather than

an inanimate object. What they did suggest though was that it would probably be after the first year of life when significant differences in the use of gaze as a communicative behaviour would begin to become more apparent between the two groups of infants. Although Lewis (2003) acknowledged similar findings in the relationship between infants with Down's syndrome giving more eye contact with their mothers, these perhaps need to be placed in the context of her conclusions concerning language development. She suggested that in children of normal development their acquisition of language appeared to be related to the extent to which they associate objects and people. However, findings suggested that for children with Down's syndrome, their language development was related more to objects.

There have been reports cited by Bates (1976) of infants, who at the age of ten months have some control over their non-verbal signals. She mentions the work of Bruner who found that from the age of 3 months an infant will follow its mother's gaze resulting in the shared attention to an object, thus suggesting that joint attention is the beginning of a shared point of reference - this being a pre-requisite for later social communication.

GESTURE

MacNamara (1977) proposed that a set of natural non-linguistic signs including gestures and eye movement provide the infant with a strategy to determine intention from a speaker. These non-verbal signs present the infant with a key to future language learning as MacNamara claimed. They are able to understand these non-verbal signs long before they recognise the meaning of verbal ones and are used as a reference for learning verbal communication. Conversely, in a study reported by Lewis (2003) young children with Down's syndrome vocalised much less, relying more on the use of gestures to communicate. MacNamara (1977) hypothesised that non-verbal signs are more powerful and in his study of using manual gestures and eye to eye contact with children he confirmed this to be true. When there was a conflict between speaking and gesture, or when the infant understood little or nothing of the spoken communication, they would focus more on gestures to elicit understanding as these were determined to be more reliable. Further to this he also found that even when a child understood fully the content of a verbal message and was capable of acting upon it, they could be misled by any adverse gestures or eye movement made at the same time. This led MacNamara to conclude that non-verbal signals could be perceived as a

'universal means of communication across all ages' because verbal communication depended on non-verbal signals for interpretation and understanding.

Similarly Guidetti (2002) was drawn to the conclusion that some gestures remain in our communicative repertoire throughout life. These 'conventional gestures' such as pointing, nodding, waving and shaking the head all tend to have fairly specific meanings and can be used either simultaneously with speech or independent of any verbal form.

PROXEMICS & HAPTICS

Referring back to the focus of this study - communication and social interaction, Malinowski (1923) in his discussion of phatic communion, described it as moments of pure sociability when men (sic) enjoyed the company of others and listened to idle chatter and gossip for its own sake. A group of people gathered together engaging in small talk would present a disparate scene to the same group engaged in a business meeting for example. The informal atmosphere of the first scenario would be in stark contrast to the formal proceedings required of the second. Small talk is a more intimate activity whereas more formal exchanges require distance and relatively superficial relationships between participants. Thus the proximity of conversational participants in small talk will be fairly close. Proxemics relates to the distance required between people in certain types of exchange. It communicates, for example, the amount of trust, formality, or distress between the participants and the type of interaction in which they are prepared to engage. Hall (1969), a major theorist in the study of proxemics, argued that humans are territorial and described four zones of territory that are observed in interactions. The four zones: - intimate, personal, social and public - each have near and far phases within them and serve particular functions regulated by socio-cultural rules. Hall stressed, however, that the zones cannot be generalised to all sections of society as cultural, age and socio-economic differences will influence interpersonal communication. Wood (1976) notes that Middle Eastern cultures interact at a much closer proximity than many Western cultures would feel comfortable with, thereby creating a dilemma in inter-cultural encounters.

In terms of age and gender, de Haan & Singer (2001) found that even young children had preferences with whom they developed friendships. Children as young as 4 years of age tended to prefer friendships of the same gender and age. Difficulties and problems can

potentially occur in mixed age encounters, as Hall (1969) proposed. Although children acquire a sense of personal territory from an early age, their development through the zones, parallels their social and cognitive development from birth to 7 years and older. These observations have some bearing on the communicative interactions of children and young people with severe learning difficulties. Often their developmental delay and lack of socio-cognitive reasoning creates an imbalance between the social expectations of their fellow interlocutors and their own understanding of norms of socio-cultural behaviour.

Proximity in different types of exchange can range from intimate to casual, to consultative, to public (Graddol *et al.* 1994). It has been suggested by Wise (1965) that the proximity of conversationalists needs to be close, approximately half a metre. Proxemics is also closely linked to haptics, which essentially refers to body contact. Body contact can occur either intentionally, such as shaking hands, or accidentally when brushing past someone in a queue. Touching another person can be the equivalent of calling their name to attract their attention. Freedle & Lewis (1977) note that certain non-verbal behaviours such as touching and holding are more effective than others at making the verbal function of the interaction more effective, for example, cuddling a child when they feel upset or placing a hand on a person's shoulder whilst expressing sympathy. It is apparent, though, that the non-verbal behaviours have different interactive potentials depending on the accompanying verbal messages.

Posture & orientation

Posture and orientation have close associations with proxemics and haptics. The way one positions oneself in an interaction gives indications to the other participants as to the level of receptiveness and the perceptions of the relationship between the participants. Turning one's body away from a listener or speaker can communicate a multiplicity of messages from disinterest to dominance and of course the opposite applies when postural orientation is directed towards participants - this displays the more positive messages of the interactive relationship. Graddol *et al.* (1994) reported on a study of postural congruence and noted that it was found to be a very common occurrence particularly in the more natural contexts of social interaction. In a study of interpersonal space, Hall (1969) found marked differences between males and females in their orientation during communication. He found that males were less direct in their orientation towards their communicative partner, whereas females faced one another more. These gender differences were also noted by Thurlow (2001) who

described relationships between girls as more close and interpersonal whereas boys favoured impersonal contexts. As with proxemic non-verbal behaviour, the strategic use of body orientation in communicative interaction would also be acquired with age and through experience.

Social Conversation

The preceding sections have given a more general overview of the components of communicative interactions, namely the verbal and non-verbal aspects that may or may not be part of the general communicative process. This section will focus on a particular form of communicative interaction - small talk, gossip, chat, however it may be termed, but that which constitutes social conversation.

SOCIAL CONVERSATION

Conversations do not need, or have to conform to rigid structures. Wise (1965) proposed that conversation is the free-est communicative situation and does not exert any pressure on the participants to comply with certain standards of speech. Conversation does not necessarily have to be correct syntactically or grammatically as its creation is developmental. Although we talk for many reasons, the act of talking socially becomes its own purpose (Duncan, 1968). He goes on to state that conversation is the most characteristic moment of sociability. Coupland (2003) describes small talk as a representation of social cohesiveness that structures a social interaction between participants. The structure of a conversation is generated as it proceeds and when one topic is successfully accomplished, or not and there is a breakdown, then another can be initiated. This serves two purposes: first, in that the participants either become, or are aware of their partner's needs; and secondly, to prevent an awkward silence and reduce any inherent threat values (Coupland, 2003). She draws parallels between the human and the machine and suggests that to indicate that there is not a breakdown "the machine must be humming" (p.2). Silence can create an atmosphere of embarrassment and discomfort and, as Malinowski (1923) proposed, it is the breaking of silence that is the first step towards establishing friendship and this can be achieved through 'small talk' (Knapp 1984).

Research has shown that children are able to adjust their style of speech to suit the age level of the listener and they seem to be aware that the mode they choose to speak to a baby is different from that they would use to their peers or their parents (Sachs & Devin 1976; Weppelman *et al.* 2003). This apparent conscious adjustment in language corresponds to the notion of altering one's speech according to the register required of the discernible characteristics of that context.

Similarly Wood (1976) indicated that children perceive others according to that persons role in their lives. Consequently they may communicate and interact differently with their teacher than with their brother or sister. Collins (2000) reported the notion of differing cultural habits required in the contrasting settings of home and school. Furthermore, children's own self image and how they believe others perceive them, also affects the communicative strategies they employ. Interacting within different kinds of relationships is how children learn to perceive themselves. However, Clarke & Kirton (2003) found that children with special needs often experience negative social relationships expressed through isolated social status and rejection by their peers. Carson & Docherty (2002) also suggested that people with learning difficulties have little opportunity to participate in social networks and therefore have few close friends.

Buckley (2003) suggests that the ability to represent their own and perceive the state of mind of others, is fundamental in being able to relate to people in the process of communication especially in social situations. She found that this ability was apparent in children of normal development of approximately 4 years old and also children with Down's syndrome of a similar mental ability. She did, however, comment that the triad of impairments associated with autism (difficulties in interaction, communication and imagination) was probably related to an inability to "mind read" (p.186) thus creating difficulties for the child with autism to engage in meaningful interaction. To a child with autism there needs to something of personal or emotional value in order for them to make any meaning from the interaction (Sherratt & Donald, 2004). Lewis (2003) reported similar findings from studies of children with autistic tendencies. She suggested that their understanding was limited to the concrete and interpretation was usually literal, with no relative contextual cues being taken into account. The children may possibly produce some echolalic utterances, such as providing

information, to maintain the flow of conversation, but these may not be connected to the social situation.

Bates (1976) found that 4-year-olds used simpler, shorter phrases with exaggerated intonation when they were speaking to 2-year-olds. Weppelman *et al.* (2003) described similar findings including greater use of endearment and fewer questions. Therefore the 'conversational' development occurring through the child's participation in socio-cultural events provides opportunities for them to develop and learn how to manage their conversational roles and those of their partners (Vernon-Feagans, 1996). Vernon-Feagans (1996) also goes on to suggest that although the mother-infant relationship is influential in laying down the bases of social interaction, children's experience in peer and community relationships gain more importance as the child develops. Vygotsky (1978) proposed that a feature of learning presents itself via the collaboration with more capable peers. He formulated the term the 'zone of proximal development' to describe the interaction and co-operation a child may receive with more able people in the environment, thus supporting his/her developmental processes until independence in that skill is achieved. Similarly in her study of children's talk Vernon-Feagans (1996) discusses the notion of 'guided participation' which stresses the mutual support that child participants in conversation give one another. This is somewhat different to the support that adults offer. The conversational worlds of children and adults are often so divergent that their combined interactions are likely to cause an underestimation of cognitive reasoning from the adults perspective and misinterpretation by the children (Donahue & Lopez-Reyna, 1998).

However, conversations between similarly matched people are more likely to succeed relative to their knowledge and experience. McTear (1985) stresses the reciprocal process involved amongst participants as they make ongoing assessments about the current state of the social interaction and redesign their socio-linguistic actions accordingly. In this supportive, developmental process children are learning the principles involved in conversation and the implicit rules for social interaction.

The sections above have provided a review of a wide variety of aspects involved in social interaction, in terms of the development of verbal and non-verbal communication and the strategies and meanings surrounding their use and interpretation. However, one final aspect

must be considered. All face-to-face communication, in whatever form, takes place somewhere and it is the context in which communication occurs that must finally be discussed to complete this exploratory review of social communication and interaction.

Context

The final section reviews the literature concerned with the notion of context. The notion of context has been tentatively referred to briefly above with the intimation that it has some effect on the processes of communicative interaction.

It was Malinowski (1923) who originally suggested that utterances can only be fully understood within the context of the situation in which it is spoken, implying that we do not experience language in isolation, but in relation to the environment, the people, the actions and events upon which the meaning of the words spoken can be derived (Halliday, 1978).

> In each case, therefore, utterance and situation are bound up inextricably with each other and the context of situation is indispensable for the understanding of the words. Exactly as in the reality of spoken or written languages, a word without *linguistic context* is a mere fragment and stands for nothing by itself, so in the reality of a spoken living tongue, the utterance has no meaning except in the *context of situation.*
>
> (Malinowski, 1923, p.467)

Analysis of spoken language therefore, needs to be placed where it occurs. As Halliday (1978) argued, language has to be put into a living environment to interpret its meaning. McTear and Conti-Ramsden (1992) suggest that in terms of context we could include features such as the role and status of the participants, the time, the place and the topic. However, Halliday (1978) went on to suggest that all features of the environmental situation do not necessarily affect the communicative encounter, therefore only the parts that are relevant need to be considered. As each communicative context is unique, the participants must act on the relative relevance of its features and accommodate the meanings emerging from them. Only some features bear a "direct pragmatic relation" (p. 29) to the situation, particularly when children are involved.

Bates (1976), in her study of pragmatics and sociolinguistics, refers to the "rich" meanings young children construct from the context in which they are used. She suggests that children construct their meanings on two levels - the expressive and the implicit. On the first level they select an aspect of the context and express it as a one word utterance and on the second level they construct the rest of the meaning from parts of the context to which the utterance is related. In young children the expressive and implicit meaning are connected often through non-verbal behaviours such as pointing, eye contact and postural orientation.

As it has been demonstrated in the discussions above, the concept of non-verbal behaviour is also a method of sending and receiving messages, therefore it could perhaps also be argued that any communication, be it verbal or non-verbal, should be understood within the context in which it occurs. Beveridge (1989) comments on a study of three mentally handicapped (sic) children and the descriptive accounts of their actions within a task. They concluded that although the three children showed similar levels of communicative performance their spontaneous verbalisations were subject to individual differences and this could be due to an influence of contextual features.

This raises an issue surrounding the degree to which the context where children with severe learning difficulties learn and practise their social skills, school for example, should be adapted and made suitable for their cognitive requirements. Whitaker, Barratt, Joy, Potter & Thomas (1998) in a study of autistic children and peer group support, argued that it was "essential for the environment to be adapted" (p.61) to accommodate the children's difficulties. Lewis (2003) noted that when children with autism shared their leisure time with children of normal development, their levels of social engagement increased. However, those children with motor disabilities were often excluded from peer interaction.

In contrast, Leudar (1989) was emphatic in his arguments that the environments of mentally retarded (sic) people are "systematically distorted" (p. 276) and are not all like those of average individuals. He further suggests that these non-standard contexts merely provide a structure whereby communicative skills are practised but would essentially prove to be inadequate for any other context. Indeed Greenberg (1984) discusses the notion that all instances of a certain behaviour do not convey a similar meaning. He suggests an example of a smile which can represent attachment or sociability and a frown can represent confusion or

displeasure. Each depends on the environmental and behavioural context in which it is displayed. Hayes (1984) suggested that language does not need speech and that non-verbal behaviours which convey messages of intention and meaning can perform the function of language without the use of speech. He therefore concludes that non-verbal behaviour is integrally linked to language and there is no boundary between the two.

In consideration of the above discussions the framework for this study can now be expanded to include the principles of conversation, types of conversational acts, and types of exchanges, verbal and non-verbal strategies and context.

This review, although not exhaustive, has investigated the literature available concerning the social communication and interaction of children, the various aspects of communicative encounters and how they develop in the child. The review has set out to investigate literature both current and that which dates back some time, the relevance of which is determined by the criteria defined in the research issues and questions. The defining criteria has sometimes led to the need to clarify decisions concerning the inclusion and exclusion of certain literature and directions of enquiry (Badger, Nursten, Williams & Woodward, 2000). The focus of this study was to investigate the social communication and interaction amongst children and young people with severe learning difficulties, and whilst there have been some references to this topic area, literature searching revealed a lack of available research concerned with this distinct focus. There appears to be a scarcity of knowledge describing the rich picture of social communication amongst children and young people with severe learning difficulties. The questions guiding this study could not be answered through interrogating existing sources. Thus, this empirical study is presented as contributing to a gap in current knowledge.

Chapter 3
Methodology

Qualitative Research Traditions

Within the domain of qualitative research there are many different methodologies from which to approach a study. However the nature of the study itself and the ideological perspective of the researcher often provide indications as to the most appropriate approach to adopt. To re-iterate from the introduction, this study seeks to investigate the quality, depth, characteristics and nature of social communication and interaction amongst children and young people with severe learning difficulties. A methodology is needed that can generate detailed descriptions of these social interactions and analyse them in terms of function, content, context and strategy, thus answering the research questions:

- What is the nature of the socio-communicative interaction that takes place between children and young people with severe learning difficulties?

- What conversational functions are evident within the exchanges?

- What, if any, patterns can be identified between conversational content or context ?

- What strategies do the children and young people employ in their socio-communicative interactions ?

From these terms of reference the methodological standpoint from which to base this study is firmly embedded in the ethnographic tradition. Bronislaw Malinowski has been described as the person who established ethnography as a research tradition by adopting a style of narrative realism in his writing grounded upon a theory of structural functionalism (Gitlin, Siegel & Boru 1993). The development of the ethnographic tradition led to a form of interpretive ethnography where researchers considered the cultural meanings of the participants involved in the study.

The research questions that this study addresses focus on the children and young people's naturally occurring socially communicative behaviour in an ordinary everyday setting. Their meanings, understandings and perspectives however, are subject to ethnographic interpretation by the researcher.

This methodological strategy stands in contrast to the more positivist traditions of experiments and surveys which profit from statistical analysis to generate results. Whilst such results are undeniably accurate from the remit of the research agenda, they are unable to take account of issues surrounding the day to day realities of the classroom (Vulliamy & Webb, 1992). The idiosyncratic perceptions that individuals bring to any context, requires a research design that can lend itself to the exploratory and practical demands of naturalistic inquiry where an interpretive perspective is reported and discussed as a social construction.

Interpretive Research in the Ethnographic Tradition

Interpretive research has increasingly become more acceptable over the past 30 years or so in studying issues in our educational establishments and communities. It is better able to adapt to the variable conditions and contexts in which research is being undertaken and it is more accessible in its presentation of results as a tool for reflection and enhancement. This type of research has a more exploratory perspective in its approach to naturalistic research problems. The emphasis is upon description rather than explanation, the richer and 'thicker' the better, as it seems to represent reality through the eyes of the participants, and recognises the importance of viewing behaviour in context. The social realities of school life are infinitely variable and complex. The emotional, cultural and personal experiences and demands of individuals that permeate through the ongoing daily activities necessitate recognition and description in interpretation.

Qualitative methods of research generally provide more detail than quantitative methods about the uniqueness of the focus. They have provided insights into cultural values, institutional practices and interpersonal interactions that are influential in special education. The research may emphasise individualised outcomes, provide in depth information about the people and the topic being studied, and may focus on the diversity and idiosyncratic nature and singular qualities of the individuals (Mertens & McLaughlin, 1995).

Relationships between the participants of the study, the school staff and the researcher need to be considered and addressed. A stranger entering a classroom could potentially create an atmosphere of apprehension or curiosity amongst the pupils and to some extent, possibly the staff. Potential problems could occur when the researcher, as an outsider, has to gain the trust of both staff and pupils. The researcher has a dual role to fulfil. On the one hand s/he has to be accepted by the pupils such that their behaviour is generally considered 'usual and normal' and on the other, by the staff who need to be willing to allow access into the classroom. Rose & Grosvenor (2001) noted that since OFSTED have been regularly carrying out school inspections, teachers have had to accept 'strangers' making observations in their classrooms. However, it was also highlighted that the nature of these visits and observations, particularly from OFSTED, created increased anxiety amongst teaching staff. One could argue that a researcher approaches classroom observations from a diametrically opposed standpoint from that of an OFSTED inspector. The mere presence of an observing 'stranger' however, may likely cause undue tension amongst the classroom inhabitants thus creating behaviours that do not represent a true reflection of the norm.

Difficulties were reported by Reynolds (1991) when pupils from a working class community considered the researchers as 'outsiders' due to their accent, demeanour and lifestyle. Throughout the course of the study, the researchers attempted to gain the trust of the pupils by adopting a more casual style both visually and psychologically. This increased their acceptance by the pupils but alienated the researchers from the staff who considered they were not adhering to a suitable dress code or upholding the staff-pupil relationship code of respect.

Teachers undertaking research within their own classrooms or institutions are at less of a disadvantage as they are already in the position of being known and accepted. However, strangers are able to remain detached and adopt a fresh perspective. Teachers may have a tendency to impose their own perceptions on situations due to their familiarity with the participants and a tendency to generalise behaviours, actions or opinions. They may make assumptions concerning school policy and practice, therefore acknowledgment of these as part of the research process expedites ethical practice (Grosvenor & Rose, 2001).

The teacher as researcher is in somewhat of a unique position as one who already possesses knowledge of, and is familiar with, the situation, contrary to large scale research projects which may fail to fully relate to the realities of the classroom (Grosvenor & Rose, 2001). However the teacher-researcher is also at a disadvantage in not being able to distance themselves from that situation, unlike a visiting researcher who makes interpretations with some degree of impartiality.

Vulliamy & Webb (1992) suggest that teacher research has the potential to make important contributions in three areas; firstly for their own personal and professional development, secondly to elicit changes in classroom practice and lastly as a means of influencing school policy. Hammersley (1993) discusses the role of the teacher as researcher and comments upon its appropriateness, suggesting that the teacher already has an in-depth knowledge of the context and has a working relationship with the children. He sees this as distinctly advantageous to the pursuit and validity of the data being gathered. It could be argued though, that the teacher-researcher is in danger of interpreting a situation, behaviour, or speech in a way that would normally be expected of that child, instead of a critical observation made with no 'insider' knowledge available.

Grove, Bunning, Porter and Morgan (2000) discussed the potential difficulties in interpreting the communication of people with severe learning disabilities as they may, in some circumstances, be highly dependant on others for support. Therefore they proposed a set of guiding principles to adopt when interpreting the meaning of communication from people with severe learning disabilities. Using the benefits of 'insider' knowledge in a careful and structured way would prove useful with children who have poor articulation, for example. It is the professionals and carers who work closely with these children who will have a degree of understanding, based on previous experience, in the messages they are attempting to convey. It is this tension of being a passive/moderate participant observer combined with the interpretive/ethnographic model of qualitative research that this study attempts to encompass.

Ethnographic research, the style adopted by Malinowski, implies an intensive, continuous involvement with the individuals who are the focus of the study. An ethnographic approach attempts to describe and analyse practices and beliefs of cultures and communities and involves an intensive, detailed study of an individual or group within that culture or

community (Mertens & McLaughlin, 1995). The role of participant observer calls for the researcher to enter into the day to day life of the individual or group as naturally as possible in order to observe their actions and participate in their activities when appropriate (Kernan & Sabsay, 1989). This role of the researcher allows the ongoing creation of a type of working relationship between the researcher and the individuals of the study. However once the research is completed the researcher ceases the contact between themselves and the individuals, thus causing potential confusion particularly with children and even more so, those with special educational needs (Gray & Denicolo, 1998). In the case of the teacher being the researcher, this circumstance would not occur. Although it could be argued that both teachers and children do move on to different classes within their educational careers, thereby creating a change in circumstances in the daily routines of the children.

The dichotomy presented between the outsider-researcher and the teacher-researcher is, however not as simplistic as it may appear. Each person, whether an outsider-researcher or practising teacher-researcher, is influenced by their own life experiences. Researchers, whether they be from outside or within the institution, often like to consider themselves as neutral. However this perceived 'neutrality' is merely a hope and belief of their own perspective and is in itself a value laden stance (Gray & Denicolo, 1998). As with the participants mentioned above, the researcher's emotional, cultural and personal experiences have an effect upon the research process. All individuals are subject to the vagaries of social and emotional well-being. Whilst the outside-researcher may have the limitations of time constraints concerning access for example, the teacher-researcher is pressured by the obligations of the school curriculum. Both situations present further profound influences upon the progress of the study. To counteract these, the goal of a balanced view can be aspired to and tendered in order to address and incorporate the differing perspectives and values of both researcher and participants alike.

Validation

The value of a research study is paramount to its acceptance as a true and accurate record, sufficiently convincing and well grounded in fact, in terms of the issues it seeks to address. Bird, Hammersley, Gomm & Woods (1996) propose two main criteria crucial to the assessment of any piece of research - validity and relevance. To assess the first of these

criteria - validity - the researcher is required to provide the necessary reasoning to judge whether the study has a substantive level of plausibility and credibility, if there is sufficient evidence in support of the findings and results, and whether the study achieved its aims and objectives. According to Bird *et al.* (1996) plausibility and credibility have been found to be a somewhat weak basis for assessing validity. A similar discussion is taken up by Winter (2002) who suggests that the validity of a research report rests in its 'authenticity'. He proposes that an 'authentic' research report which "gives direct expression to the 'genuine voice', which really belongs to those whose life-worlds are being described" (p.146) should be credited with an "epistemological validity and cultural authority"(p.146).

Secondly, in assessing the relevance of a study, the researcher should provide evidence of its interest, value and worth to the professional community it is intended to serve. What is also equally influential in its acceptance, is the relevance of the research to the existing body of knowledge and literature. Providing evidence in the form of examples of actual interaction combined with an analysis based upon existing literature, will afford a degree of relevance to this study.

This study sets out to investigate the social communication and interaction amongst children with severe learning difficulties and to date there has been little research in this area. The study will therefore provide a contribution to the foundation of this area of knowledge and present one perspective to an audience interested in the education and care of children and young people with severe learning difficulties.

The value of studies such as this lies at the heart of the data. These are the 'voices' that Winter (2002) refers to. In the past, children and people with severe learning difficulties were thought to have no desire to communicate (Barnett, 1987), but this was perhaps a serious oversight on the part of their educators and care-givers who only considered communication from a conventional perspective. The 'communicative voices' that are richly described in the data have the potential for most educational professionals and care-givers to track back (Mertens & McLaughlin, 1995) to their own sources of experience of working with this group to find similarities in communicative function and strategy. The meanings and understandings conveyed in the data present us with some suggestions to how and why the children and young people engage in socially communicative activity. Their interactive

collaboration and breakdowns give some indication of the extent of their strengths and weaknesses. Finally the cumulative interpretation of their social communication and interaction works towards seeking an authentic validity in context.

Data Collection

In qualitative research the aim is to produce an illuminating and coherent description and perspective of a situation based on detailed study (Schofield 1993). It is not intended that the study should be replicated in order to produce identical results to satisfy the concept of reliability, but for any similar studies to advance comparable conclusions. Henwood and Pidgeon (1993) suggest that the process of doing this type of interpretive research is to produce an ongoing analysis of findings which will subsequently generate working hypotheses rather than immutable facts. Findings from this study will be grounded in the data collected and supported by the literature, which will consist of the naturalistic social conversations and associated interaction of the children. From studying the data gathered, concepts should emerge rather than imposing data within a pre-determined theory to substantiate it. The danger of using pre-determined theories in a study such as this, is that one would have to fix meanings to certain behaviours for instance, when they may in fact be variable and negotiable according to the context of use.

Often the nature of the issues and questions to be addressed in a research study will serve to clarify the means of data collection. This research project seeks to study the concept of 'small talk' amongst children and young people with severe learning difficulties and its importance as a social and cultural practice. The analysis of this concept through the literature describes not only the verbal aspect of small talk but also the nuances of non-verbal communication integral to any social interaction. Gathering evidence of small talk, is by its very nature, not something that can be meticulously planned, unlike, for example, the timed interview or completing observation schedules of teacher-pupil interaction during lessons where negotiated, planned and organised data collection is managed and controlled by the researcher. Small talk is generally spontaneous and naturally occurring and grabbing paper and pencil and making furious notes has often been the scenario of my data collection technique ! However there are periods during the day when small talk is more likely to occur and the process of data collection can be anticipated to some extent.

In a school environment the more informal periods generally centre around arrival and departure and break and lunch times. It is pertinent to note that within special schools for children with severe learning difficulties there is always an adult present in a supervisory capacity even during these periods of informality. However intervention into the childrens' activities is only considered in instances of health and safety issues. Otherwise the children are free to interact as they wish.

A salient point to note regarding the data collection process, concerns the professional duties of being first and foremost a teacher. The responsibility to the health and welfare of the children is always of primary concern and in this study this has sometimes been to the necessary, but unfortunate abandonment of collecting rich, authentic and intrinsically valid data.

DATA COLLECTION INSTRUMENTS

Studies which involve the observation of participant behaviour naturally involve some method of recording that behaviour. Methods for gathering the data vary according to the situation and priorities. The three main instruments of data collection in qualitative studies utilise taking field notes, tape recording and video recording. Unlike a more structured approach within studies which may involve data collection via observation schedules, interviews and surveys for example, this study, by its very nature is extremely unstructured. It is therefore prudent to assume that the methods for collecting data need to be freely accessible. At the outset of this study it was assumed that data would be collected using a variety of instruments dependant upon such distinctions as the time of day, the ongoing activity, the context and the participants themselves.

VIDEO RECORDING

Initially I had expected that a considerable amount of data for this study would be collected using a video camera. It was anticipated that video recordings would provide more or less, a complete account of a socio-communicative interaction. Collecting data by video recording has had both advantages and disadvantages. On the one hand it has captured the verbal, non-verbal and contextual nuances of an interaction, but conversely has had limitations in camera angle, depth of view, microphone quality and the level of reactivity it creates.

Preliminary video recordings of social interaction were disappointing in clarity. Although close up shots enabled the camera to capture detailed non-verbal behaviour, particularly facial expression, they have precluded any contextual features which may have been integral to the interaction. Conversely long distance shots have included potentially all participants and their significant inclusion or indifference to the interaction, but were not able to capture any softly spoken verbalisations or subtle non-verbal behaviour. Of course an extremely poignant note reflecting the spontaneous nature of the topic under study, was that the camera was rarely there at the right time !

McLarty & Gibson (2000) discuss their experience of using video technology in their research with young people with learning difficulties. They highlight the benefit of capturing the subtleties of behaviour so often missed or overlooked in real time observation. They did observe though, a distinct qualitative difference between experiencing events in real time as opposed to the two dimensional replication on video footage. However in contrast to this study, their recordings were distinctly more formal and regular and not seeking specific instances of a particular type of interaction. They also report on the use of hand-written notes to support video footage and to highlight details not included in the recordings.

FIELD NOTES

In this study, the majority of data has been collected using field notes. The selection of this data collection instrument as the one most often used, was more or less a forced decision. The majority of social communication and interaction was so spontaneous that any pre-planned observational recording by video camera, for example, was either void of significant and appropriate data or subject to considerable elements of reactivity. Social communication is a naturally occurring phenomenon and any attempts to pre-plan the 'activity' would render it to a structured exercise.

As with all researchers I have had to carefully assess the reactivity of the data collection techniques. Nias (1991) reported difficulties when collecting data for her study of primary teachers. Her concerns related to the uncertainties of the effect that tape recording may have on the interviewees and their possible unwillingness to be as forthcoming in verbalising their thoughts. Having resorted to writing notes by hand during her interviews, Nias was also aware of the potentially inhibiting unsocial behaviour of writing notes and not giving her

interviewees the attendant non-verbal signals of someone who was interested in the often emotional reflections to her line of enquiry. However, writing field notes during observations for this study did not have the same apparent effects upon my participants. My input to occurrences of social interaction was deliberately inactive unless I was directly addressed, in which case socially appropriate attention was offered and writing ceased. As the interaction concluded or I was no longer deemed to be a participant, discussion and collaboration between myself and my teacher's aide outlined and confirmed the missing field notes.

TAPE RECORDING

There have been a few occasions when I have attempted to use a tape recorder for the purposes of data collection but this has not proved successful. A dictaphone type machine was placed in a pocket, in order to reduce the reactivity element of a visually recognisable recording tool. The quality of the recording was found to be poor and one still had to take field notes to link observable behaviour to recorded speech.

An alternative would be to use a radio microphone attached to an individual pupil. However I would argue that the focus would be on that individual pupil interacting with others instead of the potential of interaction between any members of the class. It could be suggested that each participant wear a radio microphone, but the cost of equipment would preclude this option. In the context of this study I would further argue that wearing a radio microphone is not natural and could potentially limit occurrences of small talk. Maybin (1993, Children's Voices, lecture notes) described her experiences of data collection during her study in a primary school. She attached a radio microphone to one girl and monitored her conversations during lessons. A conscious reactivity to wearing the radio microphone occurred at first, when the child moved around the room to each of her classmates deliberately speaking to them and showing them that she was special because she had been chosen to wear the microphone. Her reactivity to wearing the radio microphone did decrease over time.

THE RESEARCHER AS AN INSTRUMENT

In a study such as this, the researcher herself has to be aware of her own presence as a kind of data collection instrument. Although in the overall context of this study, my primary role to the participants was that of a teacher, my dual responsibility also required me to fulfil the role of researcher and thus adopt another perspective.

The researcher is able to adopt many different roles, from a passive observer to complete participation, dependant upon the type and style of research being undertaken. The researcher may also be in any position along the continuum from being unknown, to the class teacher. In this study the latter position is adopted and is described as non-reactive, as the researcher has a recognised role within the context of the participants. The disadvantages and dilemmas of being in a recognised role include the possibility of being included in the observed behaviour and drawn into occurrences of small talk. However, even adopting a detached role does not preclude one from the effect of one's presence upon the context.

REACTIVITY

In the context of this study, similar issues of reactivity have been considered. Although I do not necessarily have the same concerns about writing field notes, as those of Wright (1993), the children being naturally inquisitive, have questioned my activity. Appropriately worded responses concerning my interest in their 'talking' have satisfied their curiosity and my ethical role of probity and candour.

Where I did encounter a level of reactivity was in the use of a video camera. Although the majority of the children are used to being photographed (for the purposes of evidence in curriculum subject areas), their reaction is one where they may have previously been encouraged to 'look at the camera'. Therefore this natural reaction is their typical response when any type of camera is brought into view.

It is noted that in the work of McLarty & Gibson (2000) they do not discuss the notion of reactivity to the use of a video camera during their research. Although the participants of the study were described as multi-sensory impaired, their experience of any degree of reactivity was not discussed, even though they comment upon other studies which led to children behaving in an atypical and awkward manner.

Much of the data, consequently, has been gathered by field notes, either written at the time of the interaction or immediately afterwards. The disadvantage of this method is that handwritten notes can never capture all of the action. The subtleties and nuances of the interaction, particularly some or the more subtle non-verbal behaviours and prosodic features of speech will pass unnoticed.

There have been 30 sequences of data collected in term time during the period of this study. Raw data has been recorded primarily using field notes but has also included the use of video recordings and some tape recordings. Contexts have varied from community visits, travelling on a bus to the majority of sequences taken from classroom situations.

In conclusion, there was no ideal method of data collection. I surmised, over the course of this study, that one needs to have available, a range of recording tools and to be flexible enough to make the best of the opportunities that arise at any moment in time.

Participants

Whilst there is an increasing challenge to promote research in education to establish teachers as evidence-based professionals (Grosvenor & Rose, 2001) the clarity in defining the special education population is complex (Mertens & McLaughlin, 1995). Research conducted within the field of the special education population is small compared to the large arena of mainstream education. This creates difficulties, particularly when the research is based in individual schools, in generalising findings to the wider population. The subsequent results of the research could be potentially ambiguous and subject to alternative interpretation within different institutions (Mertens & McLaughlin, 1995). The researcher therefore should be as clear as possible as to the defining characteristics of the participants. Mertens & McLaughlin (1995) argue that whilst labels to identify disabilties can be controversial, misleading and encourage stereotypical images they can facilitate communication. They propose broad categories which identify the range and complexity of the characteristics and abilties of the participants such that cross-context application is possible.

Wilson (2002) calls for more research that can present evidence about particular learning difficulties or special needs. He suggests that from the findings practitioners, researchers, policy makers and other similar professional agencies will be able to review their own prevailing perceptions to shed light and further debate on current understanding and practice. This study has invited participation from children and young people with severe learning difficulties, who are being educated in special schools. Consequently this distinctive, though not homogenous, group of participants, provides a narrow focus for this research, but produces a specialised report for the reader.

Initially, during the preliminary stages of this study, I felt it was important to keep the participant sample size small to allow for more detailed observation to be carried out. As I was teaching in a special school for children with severe and profound learning difficulties, I had considered that the study would focus on three children from my class - a speaker with severe learning difficulties, a speaker and/or sign language user with severe learning difficulties and a non-speaker/sign/symbol language user with profound and multiple learning difficulties. During the preliminary stages of the study it became apparent that one of the identified children would be unable to participate due to extremely poor health and subsequently receiving home tuition. Although he attended school for some special occasions, his visits to join his peer group were infrequent and his contribution to the research would have been extremely limited. I was therefore obliged to alter the focus of the sample and decided, during the initial stages of the study, to include the class as a whole as it existed in school. This decision enabled me to observe the class as a naturalistic and cohesive unit. The ongoing inter-relationships between the children and how each one responded to one another within the context of the study I hoped would provide some interesting data.

The class consisted of five pupils - three girls and two boys. Four of the children could speak to varying degrees of fluency and one signed but was beginning to make tangible and recognisable vocalisations generally in imitation. Although the initial study involved the whole class, I could foresee that there was a strong possibility that the class group would change in the new academic year as it consisted of Key Stage 2 pupils in years 4, 5, and 6, thus aged between 8 and 10 years. The pupil in year 6 would almost certainly move up to the Key Stage 3 class, thus creating an opportunity for another pupil or pupils to join the existing class. At that stage however, I did not feel the changes in class composition would adversely affect the study. I anticipated that it would enhance it with the existing class members forging fresh relationships with new pupils and new challenges for small talk.

Changes in professional circumstances then provided me with opportunities to observe a wider group of pupils both in terms of age and ability. As a supply teacher I was able to make additional observations of several groups of teenagers in a mainstream secondary school, groups of older teenagers/young adults in a special school for pupils with severe learning difficulties and one observation of an infant. Some of the observations made in this special

school were of particular interest, as I had taught there previously over 5 years ago. Some of the students, as they were now referred to, were pupils in my class and had participated in a pilot study I had carried out of peer group social conversation.

The observations of those children and pupils of normal development provided some measure of comparability with the developmental origins of social communication. Their levels of communicative skill suggested a range of verbal and non-verbal strategies that could potentially be expected to emerge from the majority of the participants in this study. This however, was not a comparative study of the social communication between children of normal development and those who have learning difficulties. The opportunity merely presented itself for me, as a researcher, to place some of these communicative skills into the context of a developmental scale.

During this period, I was also able to make weekly visits to the previous school where observations continued. Unfortunately a serious decline in the number, length and quality of examples of social interaction was noted. Of the original class of 5 pupils, one had left, one had moved up to the next key stage, leaving the remaining 3 now included with their parallel class of cognitively higher achieving peers. It was reported that one of the pupils, previously a prominent participant in the initial observations, had become subdued and now, rarely interacted socially with her peers.

Further changes to my circumstances during the latter stages of the study, provided opportunities to observe another group of 8, year 4/5 pupils aged between 8 and 9 years old. This class group included 6 girls and 2 boys; 6 of the children were able to speak with varying levels of fluency and articulation and 2 were non-speakers, one of whom was able to use a few basic Makaton signs.

To summarise, the participants of this study have, in terms of age, ranged from 4 months to 19 years and in terms of developmental ability extended from those with severe learning difficulties to those of normal development and functioning. The participation that all of these children and young people have provided has, I believe, enhanced and broadened the data base to provide a range and diversity of examples of socio-communicative interactions particularly amongst children and young people with severe learning difficulties.

Profiles of the children and young people participating in the sequences of social interaction are given in Appendix B. They have contributed to 30 sequences (Appendix C) of social communication and interaction which have all taken place within an educational context, with the exception of sequence 12 where, it would be prudent to assume that the child was not aware of the type of context in which he was participating.

Ethical Considerations

In qualitative research, where the emphasis is on detailed description rather than empirical testing and experimentation in the quantitative tradition, the sample size of participants may be small and, although anonymous within the research report, may be identifiable within a school from the descriptive nature of the participants' actions or opinions. The researcher undertaking any study therefore is required to balance ethical considerations against investigative reporting. Chappell (2000) noted a shift in the methodological goals of interpretive research with participants with learning difficulties, such that it seeks to "empathise with them and articulate their experience of the world" (p. 40).

Any research that is undertaken should give due consideration to the rights, privacy and protection of the individual participants. Some individuals and groups are well able to protect themselves, but as Finch (1993) discusses the more powerless social groups are often ill-equipped or unable to defend their position. One such group are those who have severe learning difficulties who are generally highly dependant on other adults as their advocates. Stalker (1998) suggests that research with people with learning difficulties should involve an equitable working relationship, there should be consultation between the researcher and participants, and the participants should be involved in the research process. In her discussion of involvement, Stalker (1998) does acknowledge that very little is known about the potential implications for people with learning difficulties participating in the research process. However, Richardson (2002) remarked on reports demonstrating that people with learning difficulties have been able to express personal views and these were sometimes found to be discordant to those of their carers.

In this study I was aware that personal conversations were being recorded for subsequent analysis. Overhearing private and personal conversations can happen frequently in public

places. The essence of small talk is that it is purely by chance that it is overheard due to its apparent spontaneity. When people of normal development wish to engage in a very private conversation, they generally take an appropriate action such as whispering or moving to a more discrete location. Children and young people with severe learning difficulties may not have the developmental knowledge or physical ability to accomplish this. However, small talk is usually of a generalised nature with uncontentious topics and content. In this study no data have been gathered or used that is considered to be confidential. Pupils, in ways appropriate to their understanding, colleagues, support staff and parents were made aware of the reasons why data was collected and its subsequent anonymity. All names of pupils and staff in the study, apart from my own, were changed to pseudonyms to effect a degree of privacy and protection. I chose these pseudonyms when the final transcription of data took place so that during prior discussions concerning the sequences, no participant could identify to another person their individual pseudonym.

Some arguments have been raised, however, concerning the ethics of qualitative research. Gitlin, Siegel & Boru (1993) suggest there is a conflict of power relationships between the researcher and the participants, particularly in conventional ethnographic studies. They argue that this method of research serves to promote political goals and has little impact upon the participants emancipatory needs. Conversely, it has been proposed (Faulkner, Swann, Baker, Bird & Carty, 1991) that observation of pupils for the purposes of benefiting and improving educational practice is considered acceptable and legitimate. This study has only progressed as a consequence of the openness revealed throughout its duration in the knowledge that the outcomes from it are effectively for the children and young people themselves.

Within the field of social research, the roles of researcher and participant have often been distinguished by those who have control over the specialist knowledge and those who are considered the subject of study (Chappell, 2000). This approach embodies the view of research in the learning disability arena. However current ethical considerations are challenging this view by arguing that 'disability' is merely a social construct and attempts to reduce this perceived oppression by adopting alternative and collaborative methodological approaches to research are being sought. Richardson (2002) has qualified this notion in his suggestion that researchers should adopt methodologies that are "respectful towards participants and account for socially constructed barriers" (p.48).

There is presently an emergence of methodological enquiry that attempts to address the empowerment of people involved in learning disability research. Chappell (2000) discusses the objectivity of emancipatory research which attempts primarily to utilise research as a tool for improving the lives of people with disabilities and should be accountable to them.

Perhaps in the process of carrying out research *with* people with learning difficulties, adopting a quasi-advocacy role their voices can be heard in terms of reporting their successes. McLarty & Gibson (2000) proposed the use of a video camera to record and validate the subtle behaviours recognised as the communicative 'voices' of young adults with multi-sensory impairments. Thus attempting to credit a degree of empowerment to their 'participants'. However, both McLarty & Gibson (2000) and Kellett & Nind (2001) acknowledge the problematic nature of involving people with severe and profound learning difficulties whose perception and understanding of a research agenda is limited. Whilst this study did not adopt the emancipatory approaches described above, the form of ethical consideration hopefully embraced the spirit of this style of research and methodological enquiry.

Empowering children and young people, who experience severe learning difficulties, in the research process involves some measure of ingenuity and adaptability if they are to express their opinions regarding participation. As a precursor to the issue of participating consent, agreement for consultation was given by the institutions, parents and/or carers, support staff and other professionals working with the participants. Finding ways and means to facilitate a dialogue with the pupils about what is essentially an abstract phenomenon proved difficult. As Stalker (1998) and Kellett & Nind (2001) discovered, I could find no established precedents for gaining the consent of children and young people with severe learning difficulties to participate in this research study.

The strategies I employed to negotiate consent with the children and young people with learning difficulties were somewhat simplistic and naive in nature and I would hesitate to allude to acquiring conclusive consent as a matter of respect for their relative lack of understanding of research, per se and its practices and procedures. Negotiations with the participants centred on showing pictures of children and young people talking together and subsequent discussions concerning their social conversations and recording the outcomes.

Participants who were unable to express their feelings verbally were offered symbolic representations of happy and sad faces. Their understanding of these symbols was checked prior to discussion using known likes and dislikes. Richardson (2002) used a similar technique of providing drawings of emotions to clarify and check analytic details with participants with learning difficulties. Only two participants in my study were unable to offer expressions of feeling - the infant, whose mother was present at the time, and a child with severe learning difficulties whose parents conferred informed consent, insisting that their child "had a lot to offer". The child was subsequently able to contribute to sequences of social interaction, in contrast to the findings of McLarty & Gibson (2000) who reported that some people whose impairments were so severe, were unable to take an active role in any research project. Difficulties in obtaining conclusive consent from the participants in this study, therefore need to be acknowledged. However, the study sought to benefit the participants with learning difficulties by raising their profile and *our* awareness of their socio-communicative abilities and needs. The pupils in the mainstream secondary school were consulted regarding their views concerning participation. Discussions with their parents and carers also took place as I felt this was important, not only to maintain a level of non-discriminatory practice, but also because the majority of participants were under the age of lawful consent.

Following the recording of data, discussions concerning the content of the socio-communicative interaction took place at an appropriate time. Although the majority of children and young people were able to express an opinion regarding my use of their conversations, I was concerned whether their expressions of agreement were subject to indications of acquiescence. This may be one of the more negative aspects of being a teacher researcher, particularly one who is undertaking a study in her own classroom. The working relationships that are built between a teacher and her pupils, inevitably involve certain levels of trust forming between them and the unavoidably influential role of a teacher may overshadow their opportunities to exercise free choice. In summary, this study is therefore undertaken on the understanding that the participants have been empowered to offer a form of implied consent rather than expressed consent.

Interpretation & Analysis

Methods of analysing data vary according to the style and purposes of a study. Prior to analysing the data, the researcher once again needs to consider the issues being addressed in the study. In qualitative studies of the ethnographic tradition, analysis is recursive as findings are generated and hypotheses are systematically constructed as data are collected throughout the course of the study (Mertens & McLaughlin,1995).

Mertens & McLaughlin (1995) identify nine principles concerning the analysis of qualitative data. They are as follows:

1. The researcher should adopt a reflexive approach during the data collection process, searching for categories, relationships, patterns, themes, differences, weaknesses and gaps.
2. The analysis should be systematic, but not rigid and the cessation of data collection should be considered once no new data begins to emerge.
3. The analysis should include the perspectives of others not immediately involved in the primary analytic procedures.
4. The data should be considered both as a whole and broken down to smaller units.
5. The analytic process should be inductive with new themes being allowed to emerge.
6. The analytic process should be comparative, searching for conceptual similarities, negative evidence and discovering categories and patterns.
7. The categories should be flexible and subject to modification.
8. The quality of the data analysis should be subject to validation procedures.
9. The results of the analysis should form a descriptive picture.

This study seeks to address these analytic principles.

The initial part of this study provided a useful piloting context to test the various methodological instruments. Several sequences of social communication and interaction were filmed or noted down through field observation and a subsequent analysis was performed. Within the context of this initial piloting, reviews were carried out of the analytic procedures and appropriate amendments were made.

Conversation analysis was the method adopted for interpreting the data. This methodology was originally devised in the 1960s by Sacks and Schegloff to analyse audio recordings

(Pomerantz & Fehr, 1997). However it has since been developed further to encompass more detail concerning the ways in which conversationalists use techniques to interpret and act within a social world. Therefore conversational analysis studies episodes of naturally occurring interaction. In this study as a conversational exchange was collected, the raw notes, video footage or tape recording were reviewed as soon as possible after the event to check for clarity and overlooked details such as contextual features. Discussions with the children and young people and appropriate support staff and colleagues also took place to clarify details as was felt necessary. One of the benefits of working in a special school is that there are, in general, support staff available in each classroom to enable the pupils to access the curriculum more actively and to provide care for their personal needs. In terms of this research study, the presence of support staff has provided an additional benefit such that they have been of assistance in the interpretive analysis of the sequences of social interaction. An illustration of this assistance provided corroboration of intention of meaning, for example in sequence 8 at lines 8 and 10 and in sequence 10 at line 16. Discussions with support staff, concerning interpretation of verbal and non-verbal communication, provided other examples of similar behaviours on different occasions.

McTear and Conti-Ramsden (1992) emphasise that conversations are a collaborative activity and therefore the utterances and actions cannot be analysed in isolation of one another, but as part of a sequentially occurring process. The interconnections between utterances and actions that have already occurred and those that follow have some sequential significance upon each other and to those participants who generate those utterances.

In conjunction with Sacks and Schegloff's work, Gail Jefferson developed a set of transcription conventions, which are more or less still in use today, with minor variations according to the needs of the analyst (ten Have, 1999). The transcription conventions are mainly used for the verbal part of the interaction with any non-verbal communication details being added according to the focus of the study (ten Have, 1999). The most appropriate of Jefferson's transcription conventions have been adopted for the purposes of analysis in this study. The glossary of transcription conventions are given in Appendix D.

The importance of non-verbal communication in a socio-interactive sequence has been stressed, therefore a significant part of the transcription process was to highlight the

categories of non-verbal communication. Initially I considered developing coding criteria for behaviours within non-verbal categories but subsequently felt that they would be so varied and diverse that codings would merely add confusion. I therefore have coded the broad categories and included further description as required, for example gaze or eye contact is coded as GZ with a supporting description alongside, thus ((eye contact with Jon)). In addition to the non-verbal communicative behaviours described previously there was also a need to include a category for sign language, as formalised or symbolic gestures.

As discussed in the literature review the use of gesture when communicating in a social interaction is significant. However when considering the communicative skills of children with severe learning difficulties, it needs to be taken into account that they have probably been taught to use a Makaton type sign language to enable them to communicate in their early years and to supplement and support their developing speech as they grow older. The signs that the children use are a 'language' in their own right and therefore need to be accepted as such. Consequently it would not be appropriate to include signs as a form of gesture in the context of this study, so an additional non-verbal communication category was added to accommodate them. A glossary of non-verbal communication categories is given in Appendix E.

The coding criterion was drawn up and subsequently revised as transcription and analysis continued. Reviewing and revising within the context of a study is an integral part of carrying out a research project, particularly in the domain of naturalistic inquiry. This differs from the systematic classroom observation described by Scarth & Hammersley (1993) in the ORACLE project. Observations were recorded according to specific categories and coding rules using observation schedules. This style of observation allows little scope for interpretation, in terms of participant interaction, non-verbal behaviour and contextual features. This type of analysis could also potentially involve some system of quantitative statistical measures.

Characteristics of a more naturalistic analysis to qualitative methodology can be found in Wright's (1993) account of her study of multiracial primary schools. Amongst other methods she too utilised note-taking, verbatim descriptions of events and recording via a tape recorder. Cuckle & Wilson (2002) used interview schedules in their study of the social relationships of young people with Down's syndrome. Although the interviews were brief,

care was taken to allow the young people time to express their own opinions and make further comment should they wish. The children involved in Davis & Watson's (2001) study of social and cultural exclusion also had their verbatim comments noted by the researchers. These three studies contain identifiable characteristics similar to those used in this study of social communication. The data that have been collected require a level of interpretation and analysis relative to the issues being addressed in the study.

Following gathering data of a conversational exchange, at a more convenient opportunity these were then transcribed fully to incorporate transcription notes and non-verbal codings and were set out in a more comprehensible style (see Appendix C). The transcriptions were then offered to support staff colleagues and parents/carers for scrutiny. Their assistance in corroborating or refuting my interpretation and analysis was supportive to the whole process. Explanations were sought from parents concerning my relative lack of knowledge of the topic 'Barbie cars' (see sequence 30) and the concept of 'babies' (see sequence 23). The information they were able to provide about these toys thus enabled me to put the topic into context. Any alterations or amendments provided by support staff and parents were incorporated into the transcribed sequences and subsequently re-affirmed.

The generation of hypotheses develops through a comparative analysis of the data, the range of contexts, the participants involved and to an extent the method of data collection. Mertens & McLaughlin (1995) describe the process of analysis as recursive. The researcher continually analyses, hypothesises and re-analyses as further data are gathered. Indeed, throughout the process of data gathering itself, one is constantly reflecting upon whether the data will or will not fit into the analytic procedures.

The researcher who engages in studies of naturalistic inquiry such as this, has to address the dilemma of the interpretive nature of analysis. The dilemma in the analytic procedure evolves from the data itself. The researcher is in a position where although she has objectively based data upon which to work, the verbatim transcripts of speech for example, she ultimately has to ascribe an interpretive description to them. Qualitative research has been described as a high risk - low yield enterprise capable of succumbing to subjective analysis, impressionistic in its perceptions and images, and lacking precision in terms of definitive results (Hammersly, Gomm & Woods, 1994).

To counter this critique, the researcher has several options. The views of the participants could be sought concerning the interpretation of the data similar to the process undertaken by Cuckle & Wilson (2002) and Davis & Watson (2001). However, in consideration of the concept of 'small talk' I doubted the actual benefit of following this line of enquiry. Malinowski's view of social communication was as "a mode of action and not an instrument of reflection" (p.474). Thus the concept of small talk is one of social activity rather than ascribing definitive meaning to dialogue. Coupland (2003) suggests that the interpersonal significance of a comment has a greater focus than expressions of content or experience in occurrences of small talk. There were one or two occasions when an attempt was made to effect a reasoning behind a communicative remark or action, but replies were often met with simply repetitions of the same or similar phrase or no response at all (see Appendix F, informal discussions 1a & 1b). Small talk, due to its very nature of being inherently spontaneous, is likely to be inclined towards impulsive behaviour and undefinable or throwaway remarks.

An alternative approach is to strive for an ontological objectivity in the research process (Eisner 1993) based upon the nature of the human mind and its relations to the external world. However as Eisner argues, the quest for certainty is unrealistic and instead the researcher's aim should be for a recognition of the transactive state and an acceptance of interpretive consensus. It has been suggested previously that each of us possesses differing perceptions of events and actions because we have all experienced different life histories, therefore definitive interpretation is not achievable in its absolute sense. What Eisner suggests is that we should share our interpretations to reach an agreement. However we should also accept that these interpretive agreements may be subject to ongoing change and are therefore not conclusive.

Consensus of interpretation is a means of recognising and validating the communicative intentions of participants. Some level of agreement can be achieved through involving a network of people involved in the life of the participant (Kellett & Nind, 2001). Collaboration between the researcher, support staff, other professionals - speech and language therapists for example, parents, carers and the participants themselves will serve to confirm inferences of meaning (Porter, Ouvry, Morgan & Downs, 2001).

As data were collected, ongoing information exchange with the children and young people often resulted in their curiosity and comment regarding my activities. Some of them have continued a dialogue querying my perceptions of their 'talking' and whether it was "good" and if I "liked" it. There was one child, in particular, who was able to give some feedback on communicating socially albeit, in general terms. I cannot refer to this question and answer scenario as an interview as such, as our discussion was more of a 'chat'. This style of questioning was far more conducive for eliciting responses and for the child herself. Our 'chat' took place during a very informal period of preparing for hometime and her responses were found to be concurrent with the findings in the data (see Appendix F, informal discussion 2).

A more profitable and constructive approach was to seek the assistance of colleagues, particularly if present at the time of the interaction. Colleagues were able to either corroborate or refute the findings of the researcher. Porter, Ouvry, Morgan & Downs (2001) in their discussion of interpreting the communication of people with learning difficulties, suggest that sharing information between people who are in contact with the participants is an essential element in the validation of interpretation and their communications. They also highlight the importance of accounting for individual perspectives with regard to the participant. A word, phrase, sign or gesture may carry different meanings according to the people present and the context in which it is communicated. Thus, seeking the perceptions and understanding of teachers' aides, parents, and professional colleagues has assisted in the interpretation of meaning. In the context of this study this method of validation has been implemented in several samples of data transcription and analysis, and has proved to be invaluable in terms of omission of detail and interpretation of non-verbal behaviour.

The field notes, video and tape recordings were destroyed at a point in the study when all the raw data had been transcribed, analysed and checked for interpretation. This element of privacy I felt was important to preserve the anonymity of the participants as the raw data inevitably included real names, initials and reference points identifiable to individual participants. This measure of privacy was explained to all those who participated and was requested by one.

The processes and procedures of data collection within the ethnographic tradition attempt to capture the multiplexity of facets within each sequence of social communication against a background of ever-changing contexts. Context and social communication, in the words of Malinowski (1923, p.467) are " ...bound up inextricably with each other..". He argues that within man's (sic) innate desire to engage in phatic communion with his fellow companions, there lies an additional stimulus of context in which the social communication occurs that serves to increase the bonds of fellowship between the participants.

Experience from the schools I have been familiar with has led me to surmise that for many pupils with severe learning difficulties, the school environment is often one of the few situations where they can socially interact with their peers. Ferguson & Lawson (2003) and McIntosh & Whittaker (2000) have identified communication difficulties, early developmental levels, physical need and challenging behaviour as barriers to social inclusion both in pupils' communities and in school. Cuckle & Wilson (2002) also highlighted the nature of the friendship groups of young people with Down's syndrome compared to that of their mainstream peers. They report on the difficulties in extending friendships beyond school due to the limitations of geographical location, practical and safety issues and sometimes cultural reasons. Apart from siblings and neighbours, very few children have any other social contact with their peer group other than at school. There are a few who attend out of school groups, such as Cubs, or have integration links with their local primary school, but these children are very much in the minority.

It has been noted previously that Leudar (1989) argued that mentally retarded (sic) people were generally found in communicative environments which were 'systematically distorted' because of their particular needs. Taking this argument a stage further, he suggested that the communicative content of the experiences of mentally retarded (sic) people were therefore supported and sustained in their atypical environment. Ferguson (1994) justifies this when she cites that in the field of special education, the focus over the previous 20 years has been for children with severe disabilities to 'acquire' language. Speech acquisition, she observed, ranged from imitation training, to naming and, spending "considerable amounts of time asking students redundant and meaningless questions just to get them to answer" (p. 9). Clarke & Kirton (2003) also noted the goals of adult-child communications were often directed towards specific communicative content and rarely involved humour or anecdote.

On the one hand, it could be argued that these findings are justifiable in the respect that special schools for pupils with severe and profound learning difficulties are in the business of providing an environment that is developmentally facilitative. Conversely however, this notion could be applied generally to any school.

Although this study focusses on the social communication of pupils with severe learning difficulties, there have been opportunities to collect data from typically developing pupils in mainstream secondary schools. This has provided an interesting agent of comparison to reflect upon the social communication of young people in general. The justification of Leudar's argument, I believe, does still remain, however if one considers 'schools' as a holistic concept. There is perhaps a further debate to consider emanating from this concept concerning communication within institutions, per se. Holmes (1992) discusses the notion of linguistic repertoire in terms of the participants, the context, the topic and the function or purpose of the interaction. Edwards & Mercer (1987), similarly, discuss the notion of the special properties of talk, and although there are some common, identifiable properties of all conversations, talk that belongs to particular institutions each has its own characteristics. Edwards & Mercer (1987), in their study of the development of understanding in the classroom, identify this notion as 'educational discourse'. Within the context of this study, perhaps modern parlance would phrase the notion thus - 'school speak'. However Thornborrow's (2003) study further classified children's school talk and refers to two different types as institutional and relational depending upon the activity in which the children are engaged.

In terms of the data gathering exercise it would appear that, although data have been gathered from different types of school, the contexts are of a similar nature. Both sets of pupils experience lessons where skills and knowledge are shared by teachers and aides or support assistants; there are often opportunities within lessons for the pupils to work within discussion groups with their peers; they all participate in periods of free time at morning and lunchtime; and there are always members of staff present throughout the school day (there is a difference in staff:pupil ratio however).

Interpretive research, upon which this study bases its methodological enquiry, attempts to embody the nuances of individual characteristics and behaviour of the participants within the

context of the school environment. Holmes (1992) discusses the concept of social networks in terms of speech patterns and linguistic features. The social networks that each person belongs to will differ in terms of their pattern of relationships. The networks apparent in the socio-communicative environments of this study are constant and consistent with one another, in that they occur within an educational environment therefore a comparative discussion can be explored.

Chapter 4
Findings

The results of the interpretation and analysis are presented below. Although a considerable amount of communication occurs amongst the children and young people during the day to day activities of school life, instances of social communication and interaction between them, in terms of Malinowski's (1923) concept of fulfilling a purely social function, are relatively few. This study has set out to address this under-researched area with the expectation of developing a better understanding of the socio-communicative and interactive functions and strategies of children and young people with severe learning difficulties. In this respect the small number of sequences (30) is both significant as a new understanding in itself, and adequate for drawing new knowledge.

During the data collection process, reflexive reviews of what was emerging from the data began to highlight some categories of communicative function. Interpersonal communications always carry the intention of accomplishing some action. A broad overview of the sequences of social communication generated a range of functional categories of communicative interaction upon which to base the findings. To re-iterate Malinowski's theoretical premise:

> .... the situation in all such cases is created by the exchange of words, by the specific feelings which form convivial gregariousness, by the give and take of utterances which make up ordinary gossip. The whole situation consists in what happens linguistically. Each utterance is an act serving the direct aim of binding hearer to speaker by a tie of some social sentiment or other. Once more language appears to us in this function not as an instrument of reflection but as a mode of action.
>
> (Malinowski, 1923, p.479)

Rich description

During the initial stages of the study analyses of the communicative interaction within the sequences identified the range of functional categories as: conversational initiation;

adjacency pairs; applications of conversational repair; instructions; offering information; and topic change. As more detailed analysis proceeded, a further, somewhat unexpected, function became apparent, that of relationship reinforcement. These categories evolved from an overview of all the sequences analysing the broad function that each portion of a communicative sequence was intended to perform. ten Have (1999) discusses classifying conversational phenomena as an aid to organising similarly constructed sequential portions. He suggests the process can enable the isolation of interesting phenomena; the consolidation of intuition; presentation of statistical data; and provide evidential information to support any subsequent claims. Initiation and adjacency pairs are well documented in the literature (Graddol *et al*, 1994; McTear, 1985; Knapp, 1984) and likewise repair work (McTear, 1985; ten Have, 1999). The functional categories of 'instruction' and 'offering information' evolved from the imperative and declarative speech acts (Graddol, *et al* 1994). In his discussion of discourse analysis Coulthard (1985) considers the conversational function of topic, including topic change and conflict and how their relationship and relevance impact upon the flow of conversational interaction. I was aware of and used the literature as I engaged in the task of categorising that data. The functional category of relationship reinforcement evolved more from a close analysis of the sequences and attempting to interpret the reason why certain behaviours in certain contexts were utilised and linking these phenomena to Knapp's (1984) discussions of bonding in small talk as a means of "cementing our bond of humaness" (p.168). Reflecting upon Malinowski's statement it can be shown that these categories serve different functions within the concept of socio-communicative interaction. The reader is referred to Appendix C for full transcripts of the sequences.

Conversational Initiation

One of the central aspects of Malinowski's (1923) notion of social communication is man's (sic) desire to gather in social groups. Initiating conversation to establish and create an atmosphere of sociability amongst fellow participants, involves breaking the somewhat intimidating phenomenon of silence (Knapp, 1984). People find themselves together or gathered in social groups for many reasons, including work and leisure purposes. Within a group of friends and acquaintances silence can manifest itself as a fearful experience and thus social conversation will serve to alleviate this apparent apprehension and distress. Alternatively, conversational initiation enables the re-establishment of friendships to occur and the reinforcement of bonds of fellowship to develop.

In sequence 1, one has to question Margaret's initial remark of "I goin home tonight" as to whether it was merely just that, with no intention of initiating a conversation, or whether it was fulfilling the purpose of preventing a silence (Knapp, 1984). On the other hand she could have made the remark with the intention of obtaining confirmation. In comparison to sequence 5 and Jenny's initial remark it can clearly be seen, particularly as the 'conversation' progressed, that this was intended to initiate some interaction. In Sequence 5 the intention to initiate conversation is determined by repetition of the question.

Sequence 5 - initiating conversation

1 Jenny	Where's Molly	GZ ((looking at book))
	(3.0)	
	Hello:::=	
	=Where's Molly	

Scoville (1984) and Harding (1984) discuss the concept of communicative intention and include gaze, repetition and persistence as indicators of a desire to communicate. Although in sequence 5 Jenny directs her question to anyone, as she continues to look at her book. This therefore could be an instance where 'the breaking of silence' was the reason for speaking (Malinowski, 1923).

A similar strategy occurs in sequence 4 at line 1.

1 Jenny		PS ((has legs crossed left over right and moving slightly from side to side. Sat upright with head bent forwards)).
	Got that at the hostel	GT ((Left hand on corner of catalogue and right index finger pointing to a picture))
	(5.5)	

Although Jenny also gives an additional non-verbal cue, presumably to anyone who responds to her verbal utterance, by pointing at the picture to which she refers. In sequence 1 Jenny uses personal names and gaze to indicate to whom she is directing the question and indicating the next turn allocation. She repeats this strategy in sequence 5, line 3.

Sequence 1

6 Jenny	HOORAY:::::	EX ((smiles and laughs))
	(5.0)	
	What are you doing tomorrow Julia ?	GZ ((towards Julia))

Sequence 5

3 Jenny	+Yeah+	
	(0.5)	
	Say poor Molly	
	Where's Molly Margaret=	PS ((lifts head))
		GZ ((towards Margaret))
	=Where's Molly Margaret	PS ((leans towards Margaret))
		PX ((less than 30cm))
		HP ((touches Margaret on arm with fingers))

In sequence 4 at line 1, I am unsure as to whether Jenny expects a response from her comment as she does not glance towards anyone and remains with her head bent over looking at the catalogue. She does, however, point to what she is referring to (Bates, 1976). On this occasion Margaret responds and walks across to talk about it. Whether Margaret had noticed Jenny pointing I do not know as she was out of camera range. Jenny does respond to Margaret's question but unfortunately it was indecipherable. The roles are somewhat reversed when Margaret takes the catalogue after having noticed something in there and sits down, with Jenny following her and then leaning over to find out what she is interested in.

In sequence 2 Thomas' intention to initiate communication is shown by him standing near people to show them an object and using personal names. Had he stood at the display and asked the same question of everyone I doubt he would have received the same replies. In this instance, therefore, perhaps Thomas related the context to his intentions, noticed that everyone was busy and therefore initiated conversation by approaching others in proximity of their position. He initiates several conversations with different people using strategies of repetition and showing an object. This example describes his third conversational initiation.

5 Thomas		OR ((moves across room to stand in front of Margaret))
		PS ((bends over to lower hands))
	Margaret (.) look at the stone	GZ ((towards stone then eye contact with Margaret))

Repetition is also utilised in sequence 30 on two occasions at lines 1 and 4. In the first example a conversation is initiated with the use of a question, however the non-verbal communication is inconsistent with the intended participant. Nevertheless the initiation was acted upon with a non-verbal communicative gaze.

1 Marina	Can we talk ?=	GZ ((looks forwards to child sitting opposite, but question is directed to Rachel))
2 Rachel		GZ ((looks towards Marina))
3 Marina	=Rachel (..) Can we talk about Barbie cars ?	GZ ((makes eye contact with Rachel))
	((they talk about cars for a couple of minutes))	
	((a short period of silence follows - approx (4.0)))	
4 Marina	You know=	GZ ((makes eye contact with Rachel))
	=You know what ?	PS ((shrugs shoulders slightly))

It can only be assumed that the friendship bond between Rachel and Marina was taken for granted by Rachel and that it was to her that the remark was addressed. This is confirmed in the following line when Marina personalises the remark and introduces a topic for them to discuss. Although the communicative actions, verbal and non-verbal, were in conflict at line 1, Rachel was aware of her relationship with the speaker and perhaps also aware that the child opposite would have been effectively unable or unwilling to participate in a communicative interaction at the level Marina had intended. Perhaps Marina herself realised the inconsistency of her verbal/non-verbal communicative actions when she re-initiated at line 3 by naming her intended communicative partner. Conversely, she may not have been aware of Rachel's non-verbal acknowledgement at line 2 as she herself was directing her gaze to another child, and therefore engaged a repair strategy.

After the brief social conversation about Barbie cars, another conversation is initiated but on this occasion more carefully with verbal and non-verbal communication in synchronisation. McTear & Conti-Ramsden (1992) discuss the processes of initiating social conversations and indicate that gaining the listener's attention is a pre-requisite for successful communicative interaction. Attention seeking devices can be both verbal and non-verbal, however the speaker must have some awareness of the listener's knowledge of these socio-communicative practices for them to become effective.

Although Beveridge (1989) proposed that conversational initiations from children with learning difficulties do increase with age, one has to consider the individual nature of each child's learning disability. Their cognitive development is often influenced by organic as well as environmental factors. Consequently it may be the case that a younger child has far more knowledge and experience than an older child. However each individual will develop and gain knowledge accordingly.

The incidents of initiation in the sequences above describe several strategies employed by the pupils to achieve communicative interaction between themselves and others. The use of gesture by pointing towards a particular participant, thereby identifying that person from any other who may be in the vicinity is utilised by Chrissy in sequence 7 at line 1.

1	Chrissy	((singing to recording -Cotton Eye Joe, Rednex))	GT ((arm extends pointing towards Jon)) GZ ((eye contact with Jon))

She gives further indication that her communicative interaction is intended for one person in particular by gaining eye contact and smiling, at line 3. Certainly the use of gestural pointing is more direct than the subtleties of gaze and expression and therefore to be interpreted as a more powerful signal in this context. When the context in which this interaction took place is taken into consideration, that is, it was noisy, crowded, and with a lot of movement to and fro, Chrissy, indicated to those nearby, to whom she was addressing her socio-communicative interaction by using direct gestural pointing towards Jon,. This indication was confirmed to Jon himself, by her use of eye contact and a smile.

In previous reviews of the enculturation process (Wood, 1976; Harding & Golinkoff, 1979; Harding 1984; Goldbart, 1988) the notion of communicative intent was discussed. Non-verbal communicative behaviours such as smiling and gesturing towards a person or object are some of the first forms of communication learned by an infant and continue to be utilised throughout life Had Chrissy therefore considered her prior knowledge and experience of similar situations and taken account of the context in which they were present and utilised the most favourable strategy to accomplish the initiation process? For both participants, and presumably to those surrounding them, their accumulated exposure to communication within peer groups explains their potential ability to send and receive gestural messages more accurately and successfully (Wood, 1976) .

Smiling and gesture are again strategies employed in sequences 10 and 15 as initiators to communication and social interaction.

Conversational initiation from sequence 10.

1	Debbie	A a aa e ?	EX ((smiling))
			GZ ((looks round at members of group in a sweeping gaze))
			PS ((moves herself forward in chair so that her feet can touch the floor in front of the foot plates))
			LM ((moves towards Anna))
			PX ((less than 30cm))
			PS ((leans forward in chair))
		+Aaaaa+	HP ((stretches out right arm and gently strokes Anna's head once))
			GZ ((gaze towards Anna))

Conversational initiation from sequence 15.

1	Helen	((laughing))	GZ ((gaze towards Neil))
			EX ((smiles))
		((laughs))	PS ((leans forward))
			HP ((reaches out with her right arm & touches Neil's shoulder))
		((giggles))	

In these sequences both pupils are non-speakers, however this represents no barrier to socially engaging with their peers. Smiling is one of the most fundamental of non-verbal behaviours to indicate sociability (Greenberg, 1984). Wood (1976) discusses smiling from the onset of the 'gastric smile' of self gratification in new born infants to the 'social smile' of meaning in personal interaction as they mature. Both Wood (1976) and McShane (1980) agree that non-verbal behaviour is an integral part of the communication process, however their arguments give precedence to the verbal aspect and suggest that non-verbal communication plays a supportive role.

The two sequences mentioned though - 10 and 15 - would suggest otherwise. Although both pupils are unable to use speech, they can, and do, communicate in the form of vocalisations. However it is evident from the transcripted sequences that the non-verbal aspects of their communication are made use of to a greater extent. It is perhaps our own insensitivity that prevents us from understanding how these young people think about their communication. Applying Thurlow's (2001) concept of the multi-channel nature of communication, it is reasonable to propose a conceptual shift from 'language awareness' to 'communication awareness'. Although one could argue these vocalisations are due to the nature of their impairment and their cognitive functioning. I would suggest that they are compensating for their absence of 'speech' by exploiting their own expertise in non-verbal communicative behaviours and their verbal use of a sound system. It was noted by Graddol *et al.* (1994) that touching another person was the equivalent of calling their name.

The three socio-communicative interactions initiated by Debbie in sequence 10 are accompanied by her 'greeting' vocalisation presumably with the expectation of a similar response from her co-respondents. If the work of McTear (1985) and Hayes (1984) on proto conversations and pre-verbal dialogue are considered, the communicative aspects described signify a form of structured 'conversation'. Indeed Coupe, Barber & Murphy (1988) found that a young girl with profound and multiple learning difficulties, possibly with similar developmental potential to the pupils identified above, had a strong and varied repertoire of both verbal vocalisations and non-verbal features.

Further to this, Helen's socio-communicative contributions in sequence 15 display the classic characteristics of communicative intention cited by Scoville (1984) and Ninio &

Snow (1996). She uses gaze towards her intended communicative partner, gestures in the form of touching, and when she fails in her first attempt to engage socially with Neil, is persistent and taps his shoulder during her second attempt until eye contact is finally achieved.

2	Neil		OR ((turns head to look over left shoulder))
((Neil is unable to see Helen as his wheelchair is too far forward of hers))			
3	Helen	((still giggling))	GZ ((gaze towards Neil))
			GT ((taps Neil's shoulder once))
4	Neil		PS ((leans slightly forward))
			OR ((turns body to left))
			GZ ((eye contact with Helen))
		((laughs))	EX ((smiles))

Gaze, and in particular eye contact, as an initiation to social interaction, is used by the boys in sequence 16.

1	Martin		OR ((turns to face towards Ben))
			GZ ((eye contact with Ben))
2	Jason		OR ((turns to face towards Ben))
			GZ ((looks towards Ben))
3	Ben	Fine Mart (.) You cum	GZ ((eye contact with Martin))
		f' me if yuh get the money	GT ((points to Martin))
4	Jason		GZ ((looks towards Martin))

Although the preceding sequence is not known I would surmise that the social conversation described here is a continuation of one immediately preceding their entry into the room. Therefore the non-verbal communication of eye contact between the three boys is a re-initiation of the ongoing interaction. A re-initiation similar to that instituted by Helen at line 6 in sequence 15. Although in this example the non-verbal communication involved more than just gaze.

6	Helen		GZ ((gaze towards Neil))
			EX ((smiles))

((laughs))	PS ((leans forward))
	HP ((reaches out with her right arm &
((giggles))	touches Neil's shoulder))

Gaze and eye contact establishes and re-affirms the union of friendship. In sequence 16, it would also serve to maintain the social triad as their proximity to one another was widened within the context of the classroom.

Sequence 17 describes two very different examples of the use of initiation by means of proxemic distance in a socio-interactive sequence. The first, at line 2, shows how proximity, haptics and posture serve to indicate an initiation of an intimate social encounter. The second, shortly later at line 3, describes once again how proxemics and eye contact are used effectively between different communicative partners but within an alternative territorial zone (Hall 1969).

1	Tracy		EX ((sobbing loudly)
			PS ((face is covered with both hands,
			head is lowered))
2	Greg		GZ ((looks towards Tracy))
			LM ((moves to stand next to Tracy))
			PX ((less than 15cm))
		+Never mind Tracy+	HP ((puts left arm around her shoulder))
			PS ((lowers head so that it touches
			hers))
3	Pam		PX ((approx. 2 metres away))
			GZ ((looks towards Greg))
			EX ((frowning))
			LM ((moves towards Greg))
			PX ((approx. 60cm))
			OR ((moves head forwards towards
			Greg))
			GZ ((establishes eye contact))

The first encounter can clearly be analysed as an intimate and caring interaction whereas the second is verging on confrontational. However, both are within the boundaries of social communication, particularly when Malinowski's concept of 'phatic communion' are taken into consideration.

> A statement, spoken in real life, is never detached from the situation in which it has been uttered. For each verbal statement by a human being has the aim and function of expressing some thought or feeling actual at that moment and in that situation, and necessary for some reason or other to be made known to another person or persons - in order either to serve purposes of common action, or to establish ties of purely social communion, or else to deliver the speaker of violent feelings or passions.
>
> (Malinowski, 1923, p.467)

Applying Malinowski's theory to the interaction detailed in sequence 17, 'ties of union' are demonstrated in contrasting perspectives, but nevertheless remain social in their outcome. The first involves expressions of care and the second indicates feelings of passion and jealousy.

A further example of conversational initiation occurs in sequence 11 at line 6 following a pause in the interaction.

6	Pam	D D D Do you know what you're wearing tonight Chrissy ?	PS ((raises head & stops glueing)) GZ ((gaze towards Chrissy)) PS ((lowers head quickly and continues glueing)) OR ((slightly turns towards Chrissy))

The whole transcribed sequence begins by describing a portion of 'work based' conversation providing an example of IRF (initiation/response/feedback) exchanges, typical of those discussed by Edwards & Mercer (1987) and Thornborrow (2003). After a short pause the silence is broken by Pam initiating another IRF exchange but this time of a social nature. It is interesting to note however, the postural non-verbal behaviour at line 6 (the second instance) and line 8, when the movement of Pam's head from a raised position to lowered one occurs extremely quickly thus indicating an inner conflict between the work and social ethics of the contextual situation.

8	Pam	A a a are you going out tonight Jon	PS ((raise and lowers head quickly)) GZ ((gaze towards Jon))

It was mentioned above that 'small talk' serves the function of renewing friendships and in some cases easing and reducing feelings of apprehension. Two of the sequences 21 and 23 clearly demonstrate these functions. Sequence 21, in particular, illustrates how two of the pupils take comfort in their friendship when they find themselves in an unfamiliar context surrounded by people they do not know.

2 Janet	((Janet arrives - brought into classroom by escort))
	EX ((looks bewildered))
	PS ((stands motionless))
	GZ ((looks round room and at different people - staff and pupils. No direct eye contact is made))
	(1 min)
	GZ ((sees Judith))
	LM ((deliberately walks towards her))
	EX ((begins to smile))
	PX ((less than 30 cm))
	OR ((stands face to face))
	EX ((beaming smile))
3 Judith	GZ((head moving from side to side/ up & down, avoiding eye contact))

Janet renews and reinforces the friendship by holding hands with Judith, gaining eye contact and smiling. Judith, obviously somewhat confused by her new surroundings, eventually responds to make eye contact when Janet has taken hold of her hands. They maintain eye contact with one another for some considerable time almost in a reassuring manner.

4 Janet	HP ((takes hold of both Judith's hands in hers))
	GZ ((looks directly at her, attempts to make eye contact by following head movements)) ((giggles))
5 Judith	GZ ((looks down at her hands being held and makes eye contact with Janet))
	((they stare at each other for approx. 7 secs, Janet continuing to smile))

The initiation demonstrated by Janet in sequence 23, quite explicitly demonstrates Malinowski's concept of how the context can affect social communication. Janet, now familiar with her new classroom and new peer group, displays a quite different approach on arrival. She is more at ease, as judged by her expression, and gestures her happiness at seeing everyone by clapping (line 28). The most significant act in her reaction to familiarity with context is her almost total ignorance of Judith's presence (line 20). This is in marked contrast to her arrival at the beginning of the previous term (see sequence 21).

20 Janet	LM ((arrives in room, walks past Judith))
	PS ((stands still approx. 3 metres. into room))
	GZ ((looks round at peers))
	EX ((smiles))
	PS ((holds zipper on coat and pulls down))

Sequence 23 also provides examples of alternative forms of friendship renewal. Marina initiates a communication exchange on her arrival by running across to her friend. Geoffrey on the other hand attempts to do the same, but is unsuccessful as his strategy of standing still and announcing his arrival, fails to attract the attention of his peers (line 29). His failure to interact may be associated, in this case, to a male strategic tendency for task focussed communication rather than the social connectedness of girls talk (Thurlow, 2001).

Adjacency Pairs

Several researchers (Trudgill, 1984; Edwards & Mercer, 1987; McTear & Conti-Ramsden, 1992; Graddol, *et al.*, 1994; Crystal, 1995) have studied various types of discourse structure, one example of such is the adjacency pair. The most common of these structures found in social communication is the greeting and the question and answer routine. A selection of the first parts of greetings exchanges found in the sequences, have been discussed above in terms of initiating conversational interaction. However question and answer routines can be also be defined as initiation - response exchanges (IR) or a stage further with the additional initiation - response - feedback exchanges (IRF). When an adjacency pair structure is initiated there is an expectation from the communicator, of a response from the other participant to whom the exchange was directed.

Adjacency pairs are commonly ordered as first and second parts, in as much as a particular first part generally requires a particular second part (Graddol *et al.*, 1994). An example of adjacency pairs built upon a question and answer routine did develop in sequence 1. At line 8 in sequence 1, Jenny gives an identical answer to the one I gave at line 7, in response to her question.

6 Jenny	HOORAY:::::	EX ((smiles and laughs))
	(5.0)	
	What are you doing tomorrow Julia ?	GZ ((towards Julia))
7 Julia	I'm going shopping (1.0) What are you going to do Jenny	GZ ((towards Jenny))
8 Jenny	Shopping	
	(4.0)	
	What are <u>you</u>:: going to do tomorrow Margaret	GZ ((towards Margaret))
	(1.0)	
9 Margaret	Garden centre	PS ((sits up and back in chair)) EX ((smiles and laughs in excitement))

Although this may have been in fact quite true, she could also have given the same reply because she thought that 'shopping' was an appropriate answer to give. Ninio and Wheeler (1984) commented upon the idea that children will copy words and phrases of familiar adults as part of their developing experience in social contact. The adjacency pair routine between Jenny and myself was obviously deemed to be successful so Jenny adopted similar strategies when addressing Margaret. Margaret continues the topical theme and replies accordingly. She was thereby certainly applying three of Grice's (1975) principles, quantity, relevance and manner. The fourth principle, quality, has to be accepted at face value on the basis that Margaret's activities at the weekend were not known.

At line 8 Jenny gives a good example of a prosodic feature by placing stress on the word 'you' and lengthening it slightly. Graddol, *et al.*, (1994) and Crystal (1995) discuss prosody as serving several pragmatic functions, suggesting that it can draw attention to something new in an utterance. In this case Jenny was placing stress on the word 'you' to indicate to the group that she was requiring information from a different conversational partner.

A similar attempt at an adjacency pair routine occurs in sequence 5 although this was not as successful.

3 Jenny	+Yeah+	
	(0.5)	
	Say poor Molly	
	Where's Molly Margaret=	PS ((lifts head))
		GZ ((towards Margaret))
	=Where's Molly Margaret	PS ((leans towards Margaret))
		PX ((less than 30cm))
		HP ((touches Margaret on arm with fingers))
4 Margaret		PS ((sits up slightly lifts head))
		OR ((turns towards Jenny))
		GZ ((eye contact with Jenny))
5 Jenny		GZ ((eye contact with Margaret))
6 Margaret	((no reply))	

Although the adjacency pair initiation was successful in terms of positive non-verbal interaction with Jenny's intended conversational partner, it can only be assumed that Margaret's reluctance to respond was due to her lack of appropriate information and the presumption that she had not been listening to the preceding conversation.

There have been several examples of adjacency pair structures in the transcribed sequences presenting a range of strategies employed to accomplish the expected norms of convention. In the analysis of sequences 9 at lines 1 & 2; 10 at lines 1 & 2, 5 & 6, 9 &10; 15 at lines 1 & 2, 3 and 4, 5 & 6; 23 at lines 1, 2, & 3, and 20 - 23; 28 at lines 1 & 2; and 29 at lines 1 - 6, the examples of greetings vary in their strategy and rate of success. The greetings exchanges range from the more formal style of "Mornin" as described in sequences 23, 28 and 29 to the more casual approach of "Hello" or "Hiya" as found in sequences 9 and 23. An interesting example of deviation from expected conventional norms is described in the greeting exchange in sequence 18 where verbal play of "Oh no, not you" is transposed for the usual greeting.

Chrissy, in sequence 9 demonstrates her ability to continue from an exchange of greeting to a question and answer routine and finally an exchange of farewell. Apart from the opening greeting structure at lines 1 & 2, the whole sequence occurs devoid of the additional cues of non-verbal communication. A similar scenario occurs in sequence 10 between Debbie and Rob. Although they are both in the same room with no physical barriers separating them, Rob's posture is such that he has provided himself with personal barriers to communicative interaction. "He holds his head in his hands, eyes closed & his fingers in his ears."

Barnett (1987) noted that often children with severe handicap have been perceived as not wishing to engage in communicative interactions and the posture adopted by Rob and the immediate response given by Melissa at line 6 in the same sequence certainly support this view.

6	Melissa	UH	OR ((startled jerky movement raising and lowering body quickly)) GZ ((eye contact with Debbie)) EX ((raises eyebrows))

Conversely, Detheridge (1997) and Poikkeus, Ahonen, Narhi, Lytinen & Rasku-Puttonen (1999) noted that many individuals with severe disabilities may have learned a passivity in social interaction. This notion could be pertinent to Rob's actions particularly when he voluntarily takes himself to the quiet room. It would appear that this is potentially a learned response to self regulating his challenging behaviour. However proceeding through the sequence further it is clearly shown that the expectation of a response is understood and given, albeit via eye contact from Rob and a delayed verbal reply from Melissa. One could argue that Rob had the benefit of a more overt feature of a gesture in the form of a touch, thereby indicating a clear signal of interaction. However this feature of non-verbal communication was only the last in a sequence of many to which he had not had the opportunity of witnessing and chosen not to notice.

Sequence 24 describes a number of potential adjacency pair routines (lines 7, 12, 14) that did not follow an expected course of action. Although questions were asked by Rachel, the responses from Lisa were limited in the case of line 8 and inappropriate at lines 13 and 15 where Lisa adopts a more passive role and merely replies in the form of ownership.

7 Rachel	Lisa=d'ya want me to open yours f'ya	GT ((picks up invitation & begins to open envelope))
		PS ((sits down))
8 Lisa	Yeah::::	GZ ((watches invitation being opened))
12 Rachel	=what ya got ?	GZ ((looks in envelope))
13 Lisa	Lisa	GZ ((quick glance to Rachel's face then down))
14 Rachel	what Lisa's got (.)	GT ((brings envelope up closer to face))
	I think you got somethin	GT ((folds envelope flap back carefully))
15 Lisa	Thas Lisa	GZ ((maintains gaze to envelope))

However Rachel's more advanced skill and knowledge in social interaction allows her to interpret both the non-verbal cues with the verbal responses and continue as if an appropriate response had been given. This willingness to ascribe communicative involvement has been discussed by Wood, (1976) and Ferguson, (1994) as crucial to communicative development. Rachel has been able to acknowledge this ascription through her awareness of Lisa's limited conversational repertoire. Thus she combines gesture with her verbal conversation to add pragmatic effect to her participatory turn allocations as described by Guidetti, (2002).

Research (Wise, 1965; MacNamara, 1977; McShane, 1980; Dimitrovsky, Spector, Levy-Shiff & Vakil, 1998; Caravajal & Iglesias, 2000; McNeil, Alibali & Evans 2000) has suggested that individuals of normal development and those with learning disabilities place considerable importance on non-verbal communicative cues as an integral part of the communication process. Although the majority of instances of social communication and interaction do include both verbal and non-verbal features, these portions of interactive sequences show that young people with severe learning difficulties are able to conduct social interactions without those additional cues present.

Adjacency pair structures of question and answer routines can often be found in socio-communicative encounters. Sequence 9 reveals one such encounter extended further to an exchange of information involving eight communicative turns in total, including the initial greeting exchange. In sequence 11 Pam initiates two IR exchanges, however, although essentially a similar line of questioning, she re-words the question to Jon perhaps because she understands that a monosyllabic reply will be preferable to Jon.

6	Pam	D D D Do you know what you're wearing tonight Chrissy ?	PS ((raises head & stops glueing)) GZ ((gaze towards Chrissy)) PS ((lowers head quickly and continues glueing)) OR ((slightly turns towards Chrissy))
8	Pam	A a a are you going out tonight Jon	PS ((raise and lowers head quickly)) GZ ((gaze towards Jon))

This could potentially be an example where gender roles have been considered by Pam who is possibly aware that males are not particularly interested in discussing fashion trends. Thurlow (2001), in his study of communication awareness, found that girls have more emotional and personal relationships, whereas those of the boys were more action-centred. This clearly exemplifies Dimitracopoulou's (1990) notion of maturity increasing the child's sensitivity to the perceptions of others. In contrast however, Kravetz, Faust, Lipshitz & Shalhav (1999) have reported the tendency for pupils with learning disabilities to be unaware of the thoughts and feelings of others. The evidence from these interactions could potentially bring their proposal into refute and vulnerable for critical comment. Social communication may not yet have been studied in sufficient detail to illustrate the skills and awareness that children and young people with severe learning difficulties possess.

Similar IRF exchanges have been described in sequence 27 and reveal extended conversation between the participants. The topic of the conversation itself has been provided by the contextual cue (Malinowski, 1923) of balloons when the minibus passed the florist shop. Rachel points (Bates, 1976) to them thus prompting a social conversation on a topic that was common to both participants (Lee, 2001). Although there is some confusion regarding syntax and time (line 3), -"Just remembered. It's Antonia's birthday yesterday. Do you want to come" - this does not prevent the continuation of the conversation.

The social interaction described in sequence 14 demonstrates an IRF exchange between girls in a mainstream secondary, further extended similar to the interaction in sequence 9. The two most significant differences are the context and that sequence 9 is not peer-peer interaction. If, however, the content and style are considered, the similarities are significant. Sentences are grammatically shortened, words are clipped and the comment of one

participant follows immediately after the one preceding with no pause. For example, sequence 14-

4	D	'Member when we did( )=	GZ ((gives sweeping gaze around group and finally eye contact with A))
5	A	=Yeah we all went up	GZ ((eye contact with D then with C))

and sequence 9-

8	Chrissy	Trees =
		= See ya in a minute.

The characteristics of social communication would differ from that of more formal exchanges. Semantics, syntax, register and phonology (Halliday, 1978) need not necessarily conform to rigid standards. Social communication as Wise (1965) suggested is the free-est form of speech situation and can be experimental, flexible and unobtrusive.

The sequence of IRF exchanges that took place in the cafe described in sequence 30, clearly demonstrates Malinowski's (1923) notion of social intercourse. He suggested that, "In its primitive uses, language functions as a link in concerted human activity, as a piece of human behaviour. It is a mode of action and not an instrument of reflection." (p.474).

The two girls have finished their drinks, so whilst waiting for the rest of the class to finish, they find have nothing else to do other than talk to pass the time. The topics they talk about are common knowledge to both (Edwards & Mercer, 1987; Lee, 2001) and have been selected on that basis alone.

3	Marina	=Rachel (..) Can we talk about Barbie cars ?	GZ ((makes eye contact with Rachel))

There were no contextual cues apparent in the vicinity. Malinowski (1923) describes this mode of social action thus:

> "....we turn our attention to free narrative or to the use of language in pure social intercourse; when the object of talk is not to achieve some aim but the exchange of words almost as an end in itself."
>
> (p. 475)

IRF exchanges do not necessarily need to be based upon verbal routines and sequences 15 and 12 demonstrate the capacity to interact via non-verbal means as the primary channel of communication.

Sequence 15 demonstrates the ability to achieve communicative contact between two young people who are unable to use speech.

6	Helen		GZ ((gaze towards Neil))
			EX ((smiles))
		((laughs))	PS ((leans forward))
			HP ((reaches out with her right arm &
		((giggles))	touches Neil's shoulder))
7	Neil		OR ((turns body to left))
		((laughs))	GZ ((eye contact with Helen))
			PS ((raises & moves left arm
			backwards))
		((giggles))	GT ((holds Helen's hand))
		(3.0)	GT ((lets go of Helen's hand))
			OR ((turns to face forwards))

From birth infants are predisposed to the process of communication. Bruner (1994) proposes that they are geared to respond to the human face, voice, action and gesture by a means-end readiness for self reward. The natural non-linguistic signs (MacNamara, 1977) emanating from these sources remain with the infant throughout the developmental stages towards communicative intention. Communicative intent has been recognised by many researchers (Bates 1976; Harding, 1984; Scoville, 1984; Coupe & Goldbart, 1988; Dimitracopoulou, 1990) as the first stage in the development of an infant's ability to interact socially with another. These first stages of communicative development are formed within the context of the relationship between the infant and carer, when the infant will begin to develop a concept of self image (Collins, 2000).

In sequence 12 Jason's contributions are entirely non-verbal and although only 4 months old, he does have the ability to vocalise. The messages he communicates via mutual gaze, expression and gesture, demonstrate the onset of intentional interaction utilising IR exchanges.

7	Julia	Do you want Po ?	GZ ((gaze to Po then eye contact with
			Jason))
8	Jason		GZ ((eye contact with Julia))
			EX ((smiles))

GZ ((gaze to Po))

GT ((reaches out with arms to Po))

The development of self image continues through involvement in other communities (Collins, 2000) transforming into an increasingly complex sense of self and sense of others bound up in the social world to which people belong (Thurlow, 2001). Analysing the IRF exchanges between Helen and Neil in sequence 15, the non-verbal behaviours utilised between them have become quite sophisticated in deployment with both participants demonstrating an awareness of the other's communicative ability (Dimitracopoulou, 1990).

The example of an adjacency pair routine transcribed in sequence 18 demonstrates an exchange of greeting from a rather unconventional approach. Out of context and devoid of the non-verbal cues, the verbal exchange between the two boys could be interpreted as confrontational and verging on aggression.

1	Daniel		LM ((walking forwards into room))
			GZ ((gaze towards Khaled))
			PX ((approx. 4 metres))
		Oh no (.) not you ?	LM ((stands still))
			EX ((smiling))
2	Khaled		OR ((turns upper body to look over left shoulder))
		Ohhhh::::::::: ?	GZ ((eye contact with Daniel))

However, their socio-communicative interaction as a whole demonstrates the points made by Duncan (1968) and Knapp (1984) that sociable conversation can indeed be playful and not governed by general rules for communicating. Could small talk therefore be considered as a kind of 'release valve' whereby we can engage in talk that doesn't comply with convention and yet, as in this case, is a non-threatening activity devoid of the pressures of the more involved activities that fill the greater part of our lives ?

These simple conversational structures of adjacency pairs often take the form of greetings (Graddol, *et al.*, 1994) and can be found in both formal and informal exchanges. Rachel in sequence 23 at line 2, begins her exchange with the rather more informal greeting of "hiya" but quickly revised her approach and offered a more formal exchange of "mornin". Once again, it has to be questioned whether this sudden conversion to formality is due to the

context, where certainly the staff greet the children with the phrase "good morning" and there is an expectation of formal responses during registration. She adopts a more formal approach once again at line 21 when she takes hold of Janet's hand and shakes it although she does accompany this with a more informal greeting. It is perhaps pertinent to note that most of the children are somewhat wary of Janet as she can be inclined to covertly aggressive behaviour.

21 Rachel		HP ((takes hold of Lisa's hand))
		LM ((moves towards Janet))
		PX ((approx. 60 cm))
		OR ((face to face with Janet))
		HP ((takes hold of Janet's hand and shakes, but not handshake style))
	Look who we've got here ?	GZ ((establishes eye contact with Lisa))
	Hiya Janet	EX ((smiles))
		LM ((moves backwards 2 paces))
		HP ((maintains hold of Lisa's hand))

This type of symbolic gesture of hand shaking is offered by Rachel perhaps for two reasons. Firstly as part of the ritualistic greeting exchange and also as an additional symbolic gesture (Goodwyn, Acredolo & Brown, 2000). Rachel is aware of Janet's inability to speak as she does and the handshake was possibly offered as an alternative to the normal expected verbal response.

Rachel's communicative interaction with Janet, on the one hand challenges the view of Kravetz, *et al.*, (1999) that children with learning difficulties have a reduced tendency to consider the feelings of others. However on the other hand Rachel's withdrawal immediately after this gesture confirms their arguments concerning the lack of sensitivity regarding the social meaning of gesture. Rachel continues with several examples of adjacency pairs in the form of question and answer exchanges concerning Christmas presents, some more successful than others (lines 10, 12, 16). Geoffrey's attempts to begin a greeting exchange seem to be thwarted by his inappropriate style of address, although one could argue that had such a greeting been heard in the context of a mainstream secondary, it perhaps would have been entirely appropriate. His style appears to conform to Thurlow's (2001) findings that boys' communication was more transactional and self assured. In this context however, he

appears to sense the inappropriateness by attempting to acknowledge his own comment by smiling and nodding as though he is almost trying to preserve his self-esteem.

29 Geoffrey		LM ((arrives in room))
		PS ((stands still approx. 2 metres into room))
	+I'm back+	GZ ((looks towards Rachel & Marina))
	Mmmmm	EX ((smiles))
		GS ((nods head several times))

The greetings exchange between John and Marina described in sequence 28 was not usual for John. Normally he greets peers with the customary "Mornin" and considers this sufficient (Thurlow, 2001). However, it can only be surmised that due to Marina's absence the previous day, that his feelings of delight on her return warranted additional welcoming strategies (lines 5 & 7).

5 John	HP ((puts arms round Marina & hugs))
	PX ((body contact, but heads approx. 20cm apart))
6 Marina	PS ((leans head forward))
7 John	PS ((leans head forward))
	HP ((puts right cheek to Marina's left cheek))
8 Marina	EX ((smiles))

Although Marina remains silent throughout she responds with reciprocal non-verbal behaviours (line 6 & 8) thus acknowledging the standard routine of a courtesy expression (Crystal, 1987).

Sequence 21 provides quite a different, but appropriate form of greeting exchange for the two friends. Their communication exchange is entirely non-verbal and utilises touch and eye contact and expression as parts of their routine. These non-verbal signals have provided a means of communication between the two girls and are, as several authors (Harding, 1984; Scoville, 1984; Ninio & Snow, 1996) have discussed, part of behavioural sequences in the development of communicative intent.

The greeting exchange in sequence 29 demonstrates an awareness of differences in ability to communicate. Thurlow (2001) discussed the possibility of reflecting upon one's own and

others' communicative skills. John understands that Judith is unable to use speech as he does and therefore adopts the melodic tones of infant-directed speech (Weppelman *et al.*, 2003) to attract her attention in a greeting exchange.

5 John		PS ((lowers head slightly))
	Ju:::di:::th (..)	OR ((turns upper body towards Judith))
	Mor::::::::::nin ?	
	((increased melodic tone))	
6 Judith		GZ ((looks in direction of John))

Although the cognitive differences between John and Judith are great, there is evidence in this sequence to suggest that there was some level of communication between them at lines 5 and 6. This evidence begins to challenge the view of Kravetz, *et al's.*, (1999) contention that people with learning disabilities have difficulty discriminating facial expressions and vocal tones and that appropriate social interaction is assumed to require the application of higher order cognitive processes such as considering the perspective of the other participant.

Similar adjacency pair routines occur in sequence 20 when the girls are saying "goodnight" to one another. They use each other's names to indicate to whom they are addressing their wishes or the generic phrase 'everyone' and everybody'. Their awareness of courtesy is notable, particularly by Pam, as names are used prior to generic phrases, thus reinforcing the friendly relationship more personally.

Applications of Conversational Repair

Conversations naturally break down due to various causes. There may be a misunderstanding or misinterpretation by one or more participants, the topic of discussion may have been exhausted, there may have been an interruption, distraction, or some other reason. Whatever has occurred, the conversation needs to be stimulated and re-launched by a member of the conversational group. This can generally be accomplished using the repair strategies, ranging from a simple repetition of a phrase to re-stating the conversational topic and a summary of comments.

It was interesting to note that when Jenny failed to gain a response to her question in sequence 5 at line 1, she not only persisted by repeating the question, but she preceded it with

the opening from a greeting adjacency pair routine combined with placing emphasis on the whole utterance.

1 Jenny	Where's Molly	GZ ((looking at book))
	(3.0)	
	Hello:::=	
	=Where's Molly	

The sophistication of the alteration in the style of speech by utilising attention seeking phrases and the prosodic characteristics of pitch modification suggest that Jenny may be aware of a conversational partner who is less skilled than herself (Weppelman, *et al.*, 2003). Jenny has also developed in the enculturation process such that, she has an understanding that when a question is asked, an answer should generally follow (McShane, 1980). She failed in her first attempt, revised her strategies (McTear, 1985) and in her second, she utilised part of one of the more simpler ritualistic exchanges to gain attention to her communicative interaction (Bates, 1977). It has been suggested (Beveridge & Conti-Ramsden, 1987) that children with learning difficulties employ poor strategies for repair work and that simplification of speech by carers, is often employed when *in* conversation with them (Weppelman, *et al.*, 2003) However, in this example, it is evident that Jenny was very conscious that some form of repair was required so from her awareness of the function of a greeting exchange she deployed this immediately preceding the repetition of her question.

When Jenny repeated the question to Margaret and again received no response, she employed an alternative strategy to try to attract her attention. The proximity of one to the other was very close as they were sitting together so Jenny used an alternative means of non-verbal communication - haptics - and touched Margaret on the arm and then repeated the question. This more overt form of communication was successful and she gained eye contact with her although Margaret did not reply. It was interesting, in line 3, that Jenny placed emphasis on the first question to Margaret but not the second. Normally one would expect it to be the reverse.

3 Jenny		
	Where's Molly Margaret=	PS ((lifts head))
		GZ ((towards Margaret))
	=Where's Molly Margaret	PS ((leans towards Margaret))

PX ((less than 30cm))
HP ((touches Margaret on arm with fingers))

I therefore surmised that Jenny had perhaps anticipated Margaret's reluctance to reply and so deliberately spoke the first question in a loud voice, then immediately repeated in her normal tone with the additional utilisation of intentional body contact.

During sequence 2, at line 8, Paul ignores Thomas' instruction to look at the object. After waiting for a suitable length of pause, presumably to offer Paul the opportunity of responding, he revised his strategy by moving closer to Paul, modified his pitch by placing emphasis on his name, thus asserting a more firm directness to the instruction (line 9).

8 Paul	GZ ((ignores Thomas and continues to look at train set))
9 Thomas	OR ((squats down on haunches and moves hands nearer to Paul's face))
	PR ((30 cm))
<u>PAUL (0.5) look at the stone</u>	GZ ((towards stone then eye contact with Paul))

It has to be considered whether there was some aspect of awareness by Thomas of Paul's inability to respond via speech. Although both are, in educational terms, functioning at similar levels, Thomas may have considered Paul to be limited conversationally as he does not use speech in the conventional sense, so to counteract this assumption he adopted a style of infant-directed speech (Weppelman, *et al.*, 2003). This style of speech employs longer pauses and using names, as Thomas did in this example. The slightly longer pause between the name and the instruction gave Thomas the reassurance that he had Paul's attention. After deploying these strategies, Thomas was successful and Paul looked at the object. However he made no response other than eye contact. Beveridge and Conti-Ramsden (1987) highlighted that children with severe learning delay don't necessarily interpret fully the intention of the message given by another communicative partner, although they are able to make attempts to participate. The acknowledgement by eye contact only, may have been due to Paul's lack of, or reluctance to use speech or he could have misunderstood or perhaps he did not wish to comply at the first attempt but felt obliged to on the second and so gave a minimum response,

thus observing Lakoff's (in McTear, 1985) third rule of politeness. Following Paul's initial reluctance to his subsequent compliance could be acknowledged as man's (sic) innate desire to be sociable. If non-verbal behaviours, such as eye contact are embraced within the whole concept of communication, then Paul's final response satisfies Malinowski's (1923, p.476) notion of "a mere phrase of politeness" fulfilling "a function to which the meaning of its words is almost completely irrelevant".

Incidents of repair work within the social conversation of children with severe learning difficulties have been noted by Beveridge & Conti-Ramsden (1987) as poor in strategic employ. In the sequences several strategies of repair work were used in an attempt to counteract the misunderstandings or misinterpretation of the conversational partners. Examples of gesture by tapping (in sequence 15 at lines 3 & 5), pointing (in sequence 7 at line 5,) and haptics by stroking (in sequence 10 at line 15) indicate to the other partner that a breakdown in communication has occurred and they have failed to respond in the expected manner. These behaviours signal a non-verbal cue to continue. Verbal cues also accompany the non-verbal communication serving both as a supportive and restorative strategy. Melissa uses gesture alongside a vocalisation as a request-cum-instruction in sequence 8 at line 8.

8	Melissa	((makes grunting noise))	LM ((has moved forwards and come to a halt behind Alan))
			PX ((less than 30cm))
			EX ((frowns and extends lower lip))
		((makes a slight squeal))	HP ((hits Alan on left hand side of his body 3 times in succession with her clenched left hand))

Her first vocalisation was obviously not acted upon by Alan, so she was able to make a re-assessment of her initiation manoeuvre and follow it by an amended strategy including other non-verbal cues of expression, haptics and finally as the sequence progressed, eye contact.

The analysis of verbal repair work by Rachel in sequence 23 illustrates the unsophisticated repair work reported by Beveridge & Conti-Ramsden (1987). On this occasion Rachel merely repeats her phrases with greater emphasis (lines 12, 16), although at line 16 she does extend and refine her questioning to make her enquiries a little clearer.

12 Rachel	What what baby was it ?=	HP ((maintains pressure on Marina's arm to get zip down))
	=what baby was it ?	
16 Rachel	Which one is it ?=	HP ((taking Marina's coat off her left arm))
	=which one is it?=	
	=the potty one=	OR ((moves slightly left))
	=did you get the potty one?	HP ((takes hold off Marina's left glove))
	Y::::::::::a	HP ((pulls glove off))

The more interesting example of repair work was the non-verbal strategies she employed when Marina failed to carry out her instruction at line 4. At line 8 she begins a sequence of strategies involving a new topic of conversation and assistance utilising gaze, haptics (particularly at line 10) and body orientation to encourage Marina in completing the instruction.

10 Rachel	=What baby was it ?	HP ((places hand on Marina's lower arm & applies slight pressure downwards, releases then repeats twice more))
		GZ ((looks towards zipper))

Rachel, it appears, had reassessed her strategic approach to conclude that mere verbal communication had failed to achieve the desired response, thus more overt non-verbal means were required. But, she had combined this with an alternative conversational topic thus demonstrating some awareness of Marina's communicative and socially interactive abilities.

Rachel again demonstrates quite skilful strategies in repair work during her social interaction with Lisa in sequence 24. From Rachel's perspective, Lisa has not followed the expected course of action and therefore she institutes a variety of strategies in assistance. McTear & Conti-Ramsden (1992) highlight the developmental progression that children make in their ability to utilise indirect requests as attempts to reach a successful outcome in a communicative exchange. They also refer to strategies employed as re-initiators when compliance is not forthcoming.

Rachel focusses attention on her own invitation at line 5, asks two indirect questions and attempts a variety of non-verbal behaviours to encourage Lisa to open her invitation.

5 Rachel	=look what she's given me=	GZ ((looks at invitation))
		PS ((tilts head to one side))
		EX ((smiles))
	=let's see what Lisa's got	PS ((stands up))
		GT ((picks up envelope))
	Rachel	GZ ((looks at name))
		GT ((puts envelope down))
	Let's see who that one's	GZ ((looks towards Lisa's invitation))
	for	GT ((reaches over & picks up Lisa's invitation & turns it over on table))

By reading her own name out on her envelope and then picking up Lisa's and replacing it on the table immediately shows a skilled approach at attempts to promote socially interactive expectations. She almost concedes defeat at line 7, but offers another opportunity at lines 9 and 12 which unfortunately were not acted upon.

7 Rachel	Lisa=d'ya want me to open yours f'ya	GT ((picks up invitation & begins to open envelope))
		PS ((sits down))
9 Rachel	You may 'ave got same as=	
12 Rachel	=what ya got ?	GZ ((looks in envelope))

Lisa's relatively inactive role in this interaction supports the view suggested by (Detheridge, 1997) that by playing too active a role Rachel may have inadvertently encouraged a sense of helplessness and passivity, thus supporting Lisa's desire to acquiesce (Porter, *et al.*, 2001). The repair strategies described and analysed in sequences 23 and 24 appear to demonstrate Rachel's awareness of the social capability of her communicative partners. In an interactive sequence involving Marina, who is socially more able, Rachel deploys strategies of a more simplistic nature. Whereas interaction between herself and Lisa requires her to adopt repair strategies that combine stimulating thought and communicative creativity. It could also be argued that the supporting role that Rachel adopts with her two friends is the type of collaborative activity described by Vygotsky (1978) as working within the zone of proximal development. Thus the developmental potential of Lisa and Marina has not yet reached the

level required to successfully complete the task in hand and the skill completion depends upon the assistance of their more able peer.

INSTRUCTIONS

Generally the concept of an instruction appears to be quite a formal procedure to undertake in a communicative interaction, but if Lakoff's (see McTear, 1985) rules of politeness are taken into consideration, then analyses of social conversations, should highlight several examples of instructions. It could be argued that in a social context an instruction becomes an invitation to carry out some action. However, there are slight subtle differences between someone saying "Would you like to try one of these?" and "Try these." Whereas the first could definitely be considered an invitation, the second, could be construed as an instruction. Of course the nuances of prosody and non-verbal behaviour will also add to the style of phrasing.

In sequence 2, Thomas uses his strategies of directional gaze to good effect directing his attention from the object to his conversational partner (Bates, 1977) whilst instructing them to observe the object he is holding. The style of phrasing in his instruction to "Look at the stone" is such that the emphasis of pitch is one of excitement and wonder. Combining this with his strategy of using personal names, makes his instruction all the more direct, yet subtle in its style.

The second utterance given by Jon in sequence 7 at line 5 may serve two purposes.

5	Jon	Chrissy	GT ((points to Chrissy))
		(1.0)	GZ ((gaze towards Chrissy))
		SIT DOWN	GT ((points to chair again))

Firstly it could be viewed as an attempt at repair work if we consider it as merely a repetition of his comment at line 2. However, the emphasis he places on the second part of the phrase suggests an instruction displaying male dominance in the gender relationship. Cultural expectations and modelling of the same gender parent highlights the influences apparent in the notion of developing gender identity amongst young people (Thurlow, 2001; Weppelman *et al.* 2003). Another interpretation might be that issues of sexual awareness (Carson & Docherty, 2002) were at work and these cannot be discounted. The two friends involved were, to use modern phraseology, 'an item'. Their relationship was strong and visible in

terms of 'togetherness' and was perpetuated throughout their school days, during school social occasions and to a certain extent via parental networks. Whilst their impairments had a role to play, these pupils were also gendered beings and they were not functioning in a socio-cultural vacuum.

A further example of dominance in gender relationships is evident in sequence 17, this time from a female perspective. Once again the role of cultural and role model influences have to be considered. If experience has provided Pam with strong perceptions of self-belief then she may feel able to exhibit a powerful effect on accomplishment and persistence in certain situations (Collins, 2000; Eskritt & Lee, 2003). At line 5 Pam issues Greg with an instruction but quickly supplements it with a more sociable phrase, thus underpinning her reasoning to addressing him in this manner and thereby reducing the first phrase to a non-threatening communication.

5	Pam	DON'T YOU DO THAT	EX ((continues frowning))
		TO TRACY (..)	EX ((purses lips))
		I I gave you a Valentine	GS ((points to Greg))
		card	HP ((finger pokes his chest))
			GZ ((maintains eye contact for 7 seconds))
			OR ((turns round quickly))
			LM ((walks away))

In comparison to the first utterance in this sequence, spoken by Greg to Tracy, Pam's utterance suggests a less well developed ability to account for the thoughts and feelings of others. Conversely, Greg's verbal and non-verbal communication towards Tracy does give direct evidence of taking account of the personal emotions of conversational partners.

As a comparative example of strategic social underpinning, the boys (of normal development) in sequence 16 also show a sense of sociable politeness at lines 3 & 9 when Ben essentially gives Martin an instruction then immediately qualifies it with a rider at line 3 and repeats the complete message later to reduce any misunderstanding.

3	Ben	Fine Mart (.) You cum	GZ ((eye contact with Martin))
		f' me if yuh get the money	GT ((points to Martin))

9	Ben	Mart (.) I'll ring ya t' see	GZ ((eye contact with Martin))
		if yuh can get money then	GT ((points to Martin))
		(...) straight after school	EX ((raises eyebrows))

Although there is a marginal age difference between the two groups of young people (the boys from the mainstream secondary are approximately 2 years younger) these latter two sequences (17 & 16) demonstrate an awareness of conversational politeness. However, in sequence 17 there is the additional issue of sexual attraction and gender relationship bonding.

Pupils with learning difficulties are often regarded as being limited in their ability to express themselves (Kernan & Sabsay, 1989). Whilst this may be true superficially, further study reveals that individuals may generally develop means of communication to make their views known to others. Rob, in sequence 10 at line 16, indicates his desire not to interact socially any more with Debbie by utilising strategies of orientation and expression together with a verbal request of "Na". Unfortunately there was a foreseen potential difficulty with the interpretation of Rob's message to 'please go away' by Debbie (Beveridge & Conti-Ramsden, 1987) and staff intervention was immediately initiated.

In sequence 23 at line 4, Rachel has given Marina an instruction to remove her coat, emphasising the word 'go' and when this is not acted upon, Rachel employs several strategies to encourage Marina by moving closer and gaining eye contact.

6 Rachel		GZ ((towards Marina))
	(5.0)	LM ((moves to Marina))
		PX ((approx. 30 cm))
		OR ((moves to face to face))
		GZ ((gains eye contact))

During Rachel and Marina's conversational exchange in sequence 22, Rachel, upon giving Marina the instruction to look, also gives further emphasis by pointing.

7 Rachel		GS ((points to left window)
	Look Marina	((minibus passes fairground))
	I told ya	GZ ((looks through window to fair))
		EX ((smiles))
	(4.0)	

Gestures emerge in infancy and continue to be used throughout life. Evans, Alibali & McNeil (2001) have reported that young children often rely on them when their verbal abilities remain limited and as their skills develop, knowledge can be expressed in gesture first and then speech as Rachel has demonstrated.

The combination of gesture by pointing and displaying the object of the central topic of the social interaction supports the view of Evans *et al.* (2001) of the reliance on non-verbal means of communication when understanding is limited. Vygotsky suggested that children learn through observing, participating and interpreting social practices (Gillen, 2003) and through these co-operative interactions with their peers and the environment they internalize these developmental processes to then become independent in those skills (Vygotsky, 1978). The instruction to Lisa in sequence 24 at line 1 has followed through from Rachel's gaze towards the invitation still lying unopened on the table.

1 Rachel		GZ ((looks closely at her invitation))
		EX ((smiles))
	Oh	GT ((holds invitation up & turns it in air))
		GZ ((looks towards Lisa's invitation on table))
	Open yours=	GT ((puts invitation down & points to Lisa's))

She has perhaps noticed that Lisa is looking at the camera and so brings the invitation to her attention by pointing and issuing an instruction. (Rachel obviously realises that party invitations are much more exciting than watching me filming them!). She quickly continues with her verbal contribution with an additional comment regarding the relative attraction that the invitation holds at line 3, thus sustaining Lisa's attention to the matter in hand.

3 Rachel	=it's cute look at mine=	GT ((picks own invitation up again))

Following the adjacency pair exchanges in sequence 20, Pam follows these with an appropriately worded instruction to 'go to sleep'. Malinowski (1923) discussed the appropriateness of small talk and proposed that context had a considerable influence over what is spoken. His study demonstrated that "... an utterance becomes comprehensive only when we interpret it by its context of situation." (p.471). Other authors (Halliday, 1978: McTear & Conti-Ramsden, 1992) have also suggested that language needs to be analysed in a living environment in order to interpret its meaning. In this sequence, where the girls are staying overnight at the community flat, Pam appears to have taken on the more dominant

'carer' type role and suggested that it was probably time they should be getting to sleep. This is indicated by her instructive comment at line 5 of "now let's get some sleep" to a companionable approach of "come on, let's get some sleep" to her final, more persuasive tone "shhh let's get some sleep".

OFFERING INFORMATION

Offering information from one person to another does not necessarily assume that a response is required for instance when a teacher is addressing a class. However, in small talk, where conversation serves a different purpose, the offer of information between conversational partners could be construed to be a search for a common topic. Lee (2001) discusses the notion of common, shared and mutual knowledge. He distinguishes between the three types thus. Common knowledge is that information which is held by members of a particular community due to their similarities in background, shared knowledge refers to the common knowledge negotiated between participants during previous interactions. While mutual knowledge is information known to participants with one hundred per cent certainty. Some of the sequences have provided examples of all three of these types of knowledge conveyed as information within a conversational interaction.

The function of offering information could also be considered as part of an adjacency pair routine, that is, in response to an answer. However when no question has been raised and a communicative contribution is offered, the analytic process may be able to provide some connection between that piece of information and the preceding communication.

The information spoken by Jenny at line 1 in sequence 4, I believe was not an attempt at initiating an interaction as it was not directed to anyone specific and her non-verbal behaviour did not indicate that she was expecting any further response.

1 Jenny		PS ((has legs crossed left over right and moving slightly from side to side. Sat upright with head bent forwards)).
	Got that at the hostel	GT ((Left hand on corner of catalogue and right index finger pointing to a picture))

However, she made known some common information which was acted upon by Margaret who responds by walking over to investigate further, thus suggesting that what Jenny has discovered is potentially known by Margaret (Lee, 2001). In the subsequent sharing of viewing the catalogue, Margaret did offer information (line 4) to Jenny when she noticed something of interest and made an appropriate comment combined with a gesture of pointing.

4	Margaret	I (.) [I <u>got</u> that	GT ((right index finger points to picture on page now visible and taps))

Even though Margaret subsequently repeats her information twice more, she received no indication that other contributions were going to be forthcoming. One could argue though that Margaret, by moving away from Jenny, was ineffective in her strategies of allowing a communicative interaction to proceed and develop.

Sequence 3 gives a much clearer demonstration of developing the conversation by offering information. At line 3, Jenny offers some information to the group to the effect that she was poorly the day before. The word "poorly" spoken at line 1 by Tina, the teacher's aide, in a question to myself had obviously triggered some thoughts of mutual knowledge in Jenny's mind (Wise, 1965). Although there was an ongoing conversation between Tina and myself, Jenny, as a member of the social group felt it was appropriate to make this valid contribution to aid the flow of conversation. Malinowski (1923, p.475) indicates the social bonding created through discussion of common topics. He suggests:

> When incidents are told or discussed among a group of listeners, there is, first, the situation of that moment made up of the respective social, intellectual and emotional attitudes of those present. Within this situation, the narrative creates new bonds and sentiments by the emotional appeal of the words.

This social bonding developed through the sharing of mutual knowledge is described in sequence 3.

1	Tina	Is Nicky poorly	GZ ((eye contact with Julia))
2	Julia	No (.) One of her children is so she's had to stay at	GZ ((eye contact with Tina))

		home	
		(2.0)	
3	Jenny	I was poorly yesterday	GZ ((eye contact with Julia))

A different example recorded in sequence 6 gives a clear illustration of an offer of common information without the expectation of a response from the listeners. Although communication is considered to be a two way process, responses do not necessarily need to take a verbal form. Indeed, as Wise (1965) suggests a response may be non-vocal in form. Chrissy imparted some information regarding her completed piece of work. Although she gained eye contact with two other members of the group, she gave no indication by her tone or comment that she was seeking a verbal response. The anticipated reaction she required, one could assume, was the eye contact with others, although Pam did make a positive remark. Chrissy additionally employed the use of bold gesturing as she spoke, thus giving the listeners some indication of the importance of her information. She also, I note, communicated her information in three distinct phrases together with three examples of non-verbal communication. Each phrase of the information is linked to an occurrence of non-verbal communication - the eye contact to gain attention; placing her hands on her chest to highlight the concept of being proud; and finally she gestured towards her work with open arms.

1	Chrissy		OR ((picks up finished nest box, turns it round so that she can see the front and places it on the table directly in front of where she is sitting))
			GZ ((to her nest box for 3 seconds))
			EX ((slight smile and exhales loudly))
			GZ ((eye contact to Julia, then to Meryl))
		My Mum (2.0) very	SL ((sign for me/mine))
		proud (2.0) her daughter	SL ((sign for 'here'))
		make bird box	GT ((both hands make slight up & down movement))

Crystal (1995) in his discussion of political English, considers the rhetoric and drama of political speech. He proposes the notion of how three part lists can invoke a response from listeners by using the qualities of rhythm and intonation to convey rhetorical power,

structural control and semantic completeness. Of course it is not only in the political arena that we find three part lists. They can be found in everyday conversation perhaps in more simplistic terms for example, lock, stock and barrel; my lords, ladies and gentlemen; hello, good evening and welcome; ready, steady, go. Applying this notion to Chrissy's comment I would suggest, in this example although her vocabulary was simple, she employed the sophisticated conversational rhetoric of a three part list. When this is combined with the powerful and overt use of non-verbal communication she reinforces the facts imparted, as facts in action (Wise 1965) thus attaching to both the fundamental importance she considered appropriate at the time.

A further example of an offer of information is found in sequence 13 at line 5 by William. He had been preparing himself for the lesson by putting on an apron and was obviously listening to the ongoing conversation between the adults who were discussing the snowy weather

5	William	Yes it was in ((small town))	LM ((walks towards Julia))
		(....) then (..) when it got	PX ((walking past Julia))
		dark (.)	GZ ((eye contact with Julia))
		it stopped	LM ((sits down at table behind Julia))

In his contribution, he was able to appreciate the content, depth and breadth (Knapp 1984) of the conversation and contribute some relevant common knowledge of his own (Lee, 2001).

Applying Lee's (2001) concepts of common, shared and mutual knowledge to the communicative sequences, the information offered by Marina in sequence 22 at line 10 seems to make the assumption that they both mutually agree on the understanding of 'MacDonalds'. They confirm their understanding to one another by eye contact and a proceeding statement concerning past experience.

Sequence 25 provides further examples of offering information. Rachel is telling Marina about party invitations that have been received that morning. However, what is more interesting in this sequence are the underlying messages conveyed in the non-verbal behaviour between the two girls. Vygotsky (1962) in his discussions on thought and language suggested that the words that were actually spoken always had some kind of hidden subtext. Ostensibly, the verbal part of the interaction appears to be quite a straightforward

exchange of common information with reciprocal declarations of acknowledgement from Marina. Analysing the interaction more closely reveals almost hidden messages and highlights the inconsistencies between the verbal part of the interaction and the non-verbal communication conveyed between the two participants (Wood, 1976). Wood (1976) suggested that if the meaning of a word is unclear, then it can be decoded with the aid of facial and vocal cues. Thus :- word + prosodic element + body movement = sentence. The apparent inconsistencies between the prosodic quality of the words spoken and the non-verbal cues suggest hidden thoughts (Vygotsky, 1962). The whole sequence is subject to speculation as to whether Rachel was aware of Marina's potential feelings of displeasure.

Extract from sequence 25

3	Rachel	I got an invitation=	GZ ((raises head slightly))
		=Marina (.) I got an	
		invitation to a party ?	GZ ((looks to Marina))
			PS ((puts feet on floor))
4	Marina	(1.0)	GZ ((gains eye contact))
		Mmmmm ?	EX ((slight frown))
5	Rachel		GZ ((looks downward))
6	Marina		GZ ((continues to look at Rachel))
7	Rachel	(3.0)	
		Yeah (...)	PS ((pulls knees up with arms and rests
		I got it this mornin ?	them on edge of sofa again))
			GZ ((establishes eye contact again))
8	Marina	Really ?	GZ ((stares at Rachel's face))

The posture adopted by Rachel at the beginning of the sequence appears to be one of extreme informality. However as the interactive exchange continues, she alters her posture to a normal sitting position, but then quickly re-assumes her informal position. It appears to become apparent that this posture has been assumed to obtain some feelings of comfort and security, almost foetal in appearance. Although Marina has responded with comments of affirmation at line 4, she combines this with a non-verbal message of frowning. Once again, at line 8, Marina responds seemingly positively, but the tone of her reply has intensified in amplitude and her eye contact has now assumed a stare. Rachel's final reaction to these inconsistent messages is one of 'flight'. Wood (1976) discusses the inconsistencies between

verbal and non-verbal communication and suggests that when they occur, it is the verbal channel that conveys the superficial and potentially deceitful feelings of a message and the non-verbal channel that communicates true feelings (Eskritt & Lee, 2003).

TOPIC CHANGE

Social conversation, although seemingly superficial, is characterised by its breadth and scope more so than in depth of knowledge of topics (Knapp, 1984). In social groups the repertoire of small talk is wide and several topics can be introduced to find a common ground for conversational pursuit and social harmony. However, as mentioned previously, there are certain limits to what can and cannot be discussed within the boundaries of social conversation.

Sequence 3 is a good example of how small talk develops and moves from one topic to another (Duncan 1968). The topic of conversation which began between the adults prompted Jenny to join in and make a contribution that was relevant to her own experience.

3 Jenny	I was poorly yesterday	GZ ((eye contact with Julia))
	(2.0)	
4 Margaret	You watch video ?	GZ ((eye contact with Jenny))
5 Jenny	Tiny Tots TV	GZ ((eye contact with Margaret))
		EX ((smiles and gives a little giggle))

Margaret was probably able to relate to this from her own past experience of being poorly and therefore enquired as to whether Jenny had occupied herself at home with a similar activity (Vernon-Feagans, 1996). Margaret's assumption held true as Jenny confirmed her comparable activity.

It can also be re-iterated that social communication and 'small talk' serve to alleviate the pressures of more formal encounters and activities (Knapp, 1984). This aspect of interpersonal communication can be viewed as a pleasurable divergence and perhaps a necessary one, to lighten the intensity of the lesson for example. Sequence 11, although previously discussed as an example of conversational initiation, is also relevant in this section. Pam breaks the silence by initiating a topic change, after a period of discussion concerning their work.

3	Chrissy	Come on Jon (..)	GZ ((eye contact with Jon))
		<u>get busy</u>	
4	Jon	((hums tune))	PS ((sits back in chair))
			GZ ((eye contact with Chrissy))
		(0.5 minute)	
5	Chrissy		PS ((stands up to continue glueing))
6	Pam	D D D Do you know what	PS ((raises head & stops glueing))
		you're wearing tonight	GZ ((gaze towards Chrissy))
		Chrissy ?	PS ((lowers head quickly and continues glueing))
			OR ((slightly turns towards Chrissy))

Perhaps Pam was aware of the intimidating silence borne by the concluding remarks at line 3 of the previous conversation and to maintain the sense of community and fellowship engaged in an aspect of small talk. This confirms Malinowski's (1923, p. 477) thoughts concerning silence in the presence of others.

> Now speech is the intimate correlate of this tendency, for, to a natural man, another man's silence is not a reassuring factor, but, on the contrary, something alarming and dangerous.

A further example of the breaking of silence (Malinowski, 1923) is illustrated in sequence 30 following line 3. On this occasion however the topic change is initiated with the pragmatic marker 'you know'.

4 Marina	You know=	GZ ((makes eye contact with Rachel))
	=you know what ?	PS ((shrugs shoulders slightly))
5 Rachel	What ?	EX ((slight look of puzzlement))

Erman (2001) discussed the use of pragmatic markers in everyday conversation. The multifunctionality of pragmatic markers, in particular 'you know', seems to be oriented towards the pursuit of communication in terms of negotiating meaning and managing discourse. Conversational management signals serve, amongst other functions, as initiators, attention seekers and turn taking cues. In this sequence the use of the marker is utilised as a social monitor to invite the other participant to engage in a further topic of conversation. The

repetition of the marker 'you know' in the form of a question also provides an opportunity for Marina to ensure that she has gained Rachel's attention by yielding a turn in the conversation.

Kernan & Sabsay (1989) suggested that mildly retarded individuals (sic) are limited in their choice of topics when engaging in social communication. Following this line of thought, one might suggest that those whose difficulties are more severe would experience even greater problems. However, the range of topics described in these sequences opposes this view to the extent that selected topics are both reciprocal and sustainable.

The opening statement made by Rachel at line 8 in sequence 23 has previously been highlighted in the section concerning repair work as related to the preceding conversational interaction. However it is also appropriate to mention it in this section too.

8 Rachel	I've got a new baby now	GZ ((attempts to establish eye contact))
	I told you	
9 Marina		PS ((holds zipper & pulls down slowly))
		GZ ((continues to look downwards))
	I've got a new baby aswell=	GZ ((establishes eye contact))

The topic change Rachel initiated, specifically relates to social conversations between herself and Marina at the end of the previous term when they discussed their wishes regarding Christmas presents. Thus she was able to re-kindle an aspect of conversational knowledge shared from a previous interaction (Lee, 2001).

Re-awakening thoughts and memories is often part of the process of engaging in social communication as participants search for common ground and similar topics upon which to comment. Coupland & Jaworski (2003) report that traditionally small talk generally involves safe topics such as the weather, local knowledge and other neutral items that require economical participation and superficial content. A topic of conversation that I had not anticipated at all occurred unexpectedly in sequence 26. The topic of death still remains within the belief system of verbal taboos, alongside the supernatural, sex, and excretion (Crystal, 1987). It is not generally considered as a topic suitable for social conversation as cultural beliefs retain many superstitions concerning the dead person. In Western society the topic is often avoided simply to prevent feelings of sorrow. However in our society of ever

increasing concerns for expressing our emotions via counsellors, therapists and mentors for example, there is perhaps a need to broaden the conversational perspective on topics previously considered taboo. Arthur (2003) has argued that there has been significant neglect in considering the emotions of people with learning disabilities and how they can express them and how we, as their advocates, can interpret them. Richardson (2002) found that using various questioning techniques and presenting drawings of different emotional faces allowed the participants of his study to talk about their emotions. From a participatory perspective (Chappell, 2000), the opportunities to interpret the emotional communications of children and people with learning difficulties, offers them the provision to "articulate their experience of the world" (p.40).

Within the sequence itself there were two topic changes from the original initiating topic. The children were out in a cafe when a conversation commenced inspired by a passer by in the cafe. This in turn prompts a further discussion concerning the dolls the two girls have at home, which they refer to in other conversations and in their free play at school, as 'babies'. The second topic concerning 'baby Annabel', although not directly followed through with appropriate responses by Rachel, does provide her with a prompt to recall another doll she has, Molly, and some of the memories that the doll holds for her. Small talk concerning the death of loved ones can be rather emotive, even for the most experienced of social partnerships. Conversational partners can be placed at a disadvantage, creating feelings of unease and offering awkward shallow responses. However Rachel obviously does not sense this within her close relationship with Marina and therefore feels comfortable to broach the subject in conversation. The relationship between the two girls is such that there is a mutual confidence in their friendship (Cook, Swain & French, 2001) that allows them to discuss such emotive issues.

Relationship Reinforcement

Social communication and interaction are concerned with establishing and re-affirming friendships and creating a sociable atmosphere amongst a group of people (Malinowski, 1923). It is only reasonable to assume that within these friendship groups bonds of social union will develop. Special bonds may develop between two people or perhaps the whole group, or maybe a small section. Bonding features can manifest themselves by various

communicative devices and some may be so private as to be only interpretable by the intimates (Knapp, 1984).

As I began to formulate this study in my mind, some years ago, I gave some consideration to the types of functional communication that might occur in any social context, involving a wide variety of participants, and some of these have been detailed above. What I had not contemplated at all, in this study, was discovering examples of relationship reinforcement between children and young people with severe learning difficulties. My sub-conscious pre-conceptions of these children were of essentially developmentally egocentric characteristics, self stimulation and intrapersonal feedback, limited in conversational repertoire, with tendencies to present a learned passivity and adopt an acquiescent role. These perceptions have also been positively identified in the literature (Piaget, 1926; Schlanger, 1967; Garvey & Hogan, 1973; Wood, 1988; Kernan & Sabsay, 1989; Detheridge, 1997; Grove, *et al.*, 2000). Their relationships with their peers, I had expected, would be superficial, with little or no substance.

Special relationship bonds sometimes develop between friends and particular idiosyncratic features may manifest themselves in their social communication. These may take the form of either verbal or non-verbal features, or possibly both. Bonding features can include personal idiom, nicknames, non-verbal signals such as the I L Y written in the air by Steve Ovett to his girlfriend after winning Olympic gold, and expletives. Expletives range from the mild to the taboo and have been credited as often being markers of group social identity (Crystal, 1987; de Haan & Singer, 2001; Coupland & Jaworski, 2003). Expletives are generally confined to informal language situations, including social communication.

In sequence 2 at line 3, it was particularly significant when Thomas referred to Jenny as 'Jen'. It was my understanding that the use of a personal idiom was quite a developmentally mature style of address. As children are moving through developmental stages from infant-oriented egocentric self through adopting a framework of self within a social world (Bruner, 1986) they become aware of the special significance of names (Opie & Opie, 1959) and the relative importance of the intimacy of personal idiom and nicknames (Crystal, 1995).

In the special schools for children with severe and profound learning difficulties in which I have taught, I have found a tendency, certainly in the early years, for children to be referred to by their full name, partly to engender a sense of awareness of who they are and a referential cue when being addressed within a group. There are even some pupils in Year 10 and 11 who still refer to their peers by full name and even include their surname. The use of personal idiom therefore, I felt was extremely significant.

Personal idioms describe the type of relationship between conversational partners and generally serve two functions (Knapp, 1984). Firstly they make the pair a more cohesive unit by reinforcing it and secondly, personal idioms define the relationship between the two as special. However I must add that I do not recall Jenny ever referring to Thomas by any other name form. Perhaps what is significant though is that they have sometimes resorted to nonsense talk. They have played a game whereby they huddle together, look round to one of their peers (Susan for instance) and sing very cheekily "Susan is a wackio" and then giggle. I have not heard any other children participate in this, only those two, so I can only assume that it means something very special to them.

This secret language that they have between them, obviously has something to do with their relationship. Opie & Opie (1959) discussed the use of secret languages, suggesting that it is a way in which children communicated with each other that 'outsiders' cannot understand. Similarly Malinowski (1935) considers that all language in its earliest function is proto-magical and pragmatic, thus the knowledge of words and their correct application allow the child a mastery over his social environment.

These more overt forms of friendship bonds including personal idiom have been observed in other educational contexts. Sequence 16 demonstrates examples of shortened names. By shortening names the relationship is taken from a more formal basis to one of informality and cohesiveness.

6	Ben	=then we'll cum f' you	GZ ((eye contact with Jason))
		Jase	GT ((nods once))
9	Ben	<u>Mart</u> (.) I'll ring ya t' see	GZ ((eye contact with Martin))

if yuh can get money then	GT ((points to Martin))
(...) straight after school	EX ((raises eyebrows))

This example has been taken from a sequence of social interaction in a mainstream school whose pupils seem extremely at ease and adept in using personal idiom within their friendship groups. To date there has only been one occasion when a shortened name has been used between pupils in a special school. However the more discreet forms of non-verbal communication seem to have been more evident amongst these pupils in special schools.

Gesture and haptics have been utilised in sequence 17, in two different ways as forms of expressing personal friendship. Greg puts his arm around Tracy's shoulder and their heads touch as an expression of care and comfort. Pam, however attempts to reinforce her relationship with Greg by pointing and poking his chest.

In sequence 7, Chrissy maintains and reinforces her relationship with Jon quite overtly by extending her arm when she is disco dancing a distance away and pointing towards him.

1	Chrissy	((singing to recording -Cotton Eye Joe, Rednex))	GT ((arm extends pointing towards Jon)) GZ ((eye contact with Jon))
3	Chrissy	((singing))	EX ((smiles at Jon)) OR ((slightly raises head)) GZ ((lowers gaze)) OR ((turns 180° continues dancing))
		(1.5)	
4	Chrissy		OR ((turns upper body to face Jon)) GZ ((eye contact with Jon)) OR ((turns to face forwards again))

She constantly averts her gaze, then re-establishes eye contact, smiles and uses her body orientation to send appropriate messages of reinforcing their identity as a pair. Similarly Jon utilises gaze, eye contact and pointing to confirm their relationship bond. Knapp (1984) suggests that each message in an interpersonal communication carries information at two

levels, the first at the level of content and the second at the level of the relationship. It is the messages concerning the relationship that helps us to interpret the content.

Children place a great deal of emphasis on the concept of friendship, adopting a variety of strategies to construct a sense of togetherness (de Haan & Singer, 2001). In their research concerning the language of togetherness, de Haan and Singer (2001) highlighted three different features to provide this need for friendship. The first feature was common ground expressed in attitude and knowledge, the second relied on co-operation and the last emphasised care.

During sequence 26, expression, gesture, gaze and the prosodic characteristics of voice control convey messages, both in terms of the need and the offer of support in the relationship between the two friends. At line 4, Rachel speaks softly and lowers her eyes in deference, exhibiting a cultural awareness of the quiet respect afforded to one who has died (Wood, 1976). Although Marina responds in quiet agreement, Rachel appears to require more support than has been offered and so replies with an emotional plea (Wood 1976) using a prosodic tone that expresses her sadness. On this occasion Marina offers more support by repeating the previous phrase again in a quiet tone thus suggesting that she has listened and understood the content of the message. Although she repeats the phrase as a question, there was no rise in intonation which therefore suggests that no reply was necessary and this was merely given in rhetorical agreement. Her support in friendship is also given more overtly when she places her hand on the table in front of Rachel, potentially offering a hand of help whilst expressing compassion (de Haan & Singer, 2001).

4 Rachel		GZ ((looks down at table))
	(approx. 1 minute)	
	+Really miss my Grandma=	EX ((eyebrows lower, slight pouting of mouth))
	=my Grandma who died+	
	She gave me Molly	GZ ((looks towards Marina))
5 Marina	+Mmmm+	GZ ((eye contact with Rachel))
6 Rachel	I'm really missin her	GZ ((looks down at table))
	((there is a whining	

	tone in her voice))	
7 Marina	+Are you missin her+	GT ((puts hand on table in front of Rachel))
		GZ ((maintains gaze towards Rachel))

Sequences 19 and 20 give two examples of relationship reinforcement in the form of expletives. Both examples communicated by Pam, are forms of expletive spoken in response to an utterance made by a co-participant and, I suggest, as a verbal marker of excitement. Indeed, a dictionary defines 'yikes' as a word used informally for humorous effect to express shock (Reader's Digest, 2001). The first at line 3 in sequence 19, whose derivation I am unsure, and the second at line 9 in sequence 20 is obviously of dialectal origin.

Sequence 19

3 Pam =Ooooh (.) Yikes

Sequence 20

9 Pam Uh ? Ecky thump (...)

Although there was a period of silence following these expletives, I assume that had there been any feelings of objection from her conversational partners then some demonstrative remark would have been heard. de Haan & Singer (2001) and Coupland & Jaworski (2003) suggest that the use of "dirty" words and verbal transgressions are essentially expressions of togetherness and commitment to an intimate group membership. In sequence 19 the expletive, or dirty word, has followed a statement of commonality of experience between the girls such that they are all sleeping together. If the context is taken into account, then the expressions, and indeed the whole interactive exchange, were also perhaps statements of reassurance. Although not in unfamiliar surroundings, the girls were about to spend the night there, an event not in their normal routine. Therefore the reassurance of a friend experiencing the same common ground would have provided some comfort and security.

Summary

This study set out to investigate the social communication and interaction amongst children and young people with severe learning difficulties. The collection of 30 data transcripts has focussed on examples of actual communicative interactions and have been analysed above in an attempt to capture the multiplexity of facets integral to the concept of social communication and interaction. Whilst this study was not based on quantitative methodology

a brief statistical analysis of the sequences has provided the following data. This data has been merely tabulated to provide an at-a-glance view of the number of sequences per school, age group and context; the number of sequences per conversational function; and finally the number of sequences per data recording instrument.

	30 sequences
Special school	27
Mainstream school	2
Infant	1

	No. of sequences
8-10 yrs	16
16-19 yrs	11

	No. of sequences
In school	21
Other contexts	6

TABLE 4.1 : NUMBER OF SEQUENCES PER SCHOOL/AGE GROUP/CONTEXT

The analysis of the sequences of social communication and interaction described above have highlighted a range of seven functions in use within the context of social communication and interaction amongst children and young people with severe learning difficulties. The table below indicates the frequency of these functions within each age group together with the total number of examples analysed.

Function	8-10 yrs	16-19 yrs	Total
Conversational Initiation	8	5	13
Adjacency pairs	9	6	15
Applications of Conversational Repair	4	4	8
Instructions	4	4	8
Offering Information	5	1	6
Topic Change	4	1	5
Relationship Reinforcement	2	3	5
			60

TABLE 4.2 : FREQUENCY OF FUNCTION PER AGE GROUP

The quantitative audit has revealed high and low incidences of certain functional categories of conversation. There may be acceptable reasons for this, such as context or maturity, and these will be discussed in the following chapter.

In terms of methodological approaches, data collection had to be flexible in its method due to the irregular and unplanned nature of social communication. The three data collection instruments identified in the methodological framework were utilised to greater and lesser degrees and with differing levels of success. It can be seen from the table below that a sizeable proportion of the sequences of social interaction have been gathered by field notes.

	No. of sequences
Field notes	20
Video recording	8
Dictaphone	2

TABLE 4.3 : NUMBER OF SEQUENCES PER DATA GATHERING METHOD

The following chapter draws on these findings to provide a basis for discussion concerning the current knowledge, experience and skills that the participants have demonstrated regarding their social and communicative interaction.

Chapter 5

Discussion

General discussion

Research in schools for children with special educational needs has tended to be dominated by those trained in psychology and undertaken from an experimental position (Vulliamy & Webb, 1992). This has led to a criticism that research undertaken within these parameters bears little relation to the realities of teaching and learning in the school and classroom environment. It has been noted by Hammersley & Scarth (1993) that educational research should be an informative process, but it is often considered to be irrelevant to those who can constitute change. It has also been suggested that practitioners pay scant regard to the findings of research studies. Consequently research has insignificant impact upon school policy and classroom practice.

In national terms, special education amounts to a small percentage in the overall educational provision available in this country. Therefore this suggests that any research undertaken will focus on a minority group. The comparative smallness is further condensed when each field of special education is separated. Thus the final number of participants involved in a study amounts to what could be considered as a negligible percentage of the total population.

Where special schools may benefit, not just in terms of research, is in their potential diversity of population. In my experience the school roll has generally been drawn from a wide geographical area creating a broad base of social, ethnic and economic diversity in its population. Alternatively, the geographical location of the school may be in a catchment area that, for example, would draw from an entirely urban or rural social culture. It can also be argued that the range of educational ability is generally broad in terms of learning difficulties. The research process therefore has the potential to allow for a detailed description of the cultural practices of the participants and subsequently the ability to make analyses in terms of the complexities of that school population. This is in contrast to studies which may focus on an inner city comprehensive school, whose conclusions may not be directly comparable to a rural secondary school. Thus conclusions drawn from this research

study should, in effect, be capable of appreciable similarities to other similar institutions nation-wide.

Research issues and questions

The focus of this study was to investigate the social communication and interaction amongst children with severe learning difficulties. The aim of the study was to provide evidence for the research questions. The questions it set out to address were:-

- **What is the nature of the socio-communicative interaction that takes place between children and young people with severe learning difficulties?**

- **What conversational functions are evident within the exchanges?**

- **What, if any, patterns can be identified between conversational content or context ?**

- **What strategies do the children and young people employ in their socio-communicative interactions ?**

Data were gathered and analysed above to help to answer these questions. In this section they will be discussed in light of the analysis of the data.

What is the nature of the socio-communicative interaction that takes place between children and young people with severe learning difficulties?

Collecting data to provide rich descriptions of social communication requires instruments that are capable of recording at the immediacy of the occurrences of interaction and with as much detail as possible. During the periods of collection, data were recorded using a variety of instruments. Field notes, video recording and tape recording have all been utilised to either a greater or lesser degree of success.

THE EFFICACY OF THE RESEARCH INSTRUMENTS

The data gathering process initially concentrated on the context of the classroom with one nucleus group of children. This was a deliberate decision in order to test the various

methodological instruments. The process of gathering data progressed further to include non-classroom based contexts with much larger groups of pupils present thus introducing the scope for potential interaction with a wider variety and number of fellow interlocutors. Two sequences are also included from data gathered in a mainstream school. There were one or two opportunities to collect data outdoors during periods of leisure time, such as morning break and lunchtime, but the results of the actual data gathering process did not prove successful. This was mainly due to the field of vision being much too wide for the data gathering instrumentation to access adequately enough to provide analysable data. Either different equipment in the form of a more powerful video camera, or a greater number of observers would be required to gather data sufficiently suitable for analysis.

The sparsity of occurrences of social communication, in some way, correlates with the method of data collection. Both video and tape recordings of interaction have only been of use when the incidence of social communication is likely to be high. For example on arrival, at breaktime, lunchtime and other informal periods. The majority of data have been collected through written field notes, due to the spontaneity and randomness of socio-communicative discourse.

In the context of this study, gathering data required flexibility and opportunism. Upon observing an incident of social communication, pencil and paper were generally readily available to hand and field notes could be quickly written. In many circumstances this was the most immediately reliable method rather than resorting to the cumbersome task of finding and unwrapping a video camera only to realise that the moment had been lost. It was of course, not safe to leave expensive equipment on open display in the classroom, as inquisitive children would have undoubtedly been keen to investigate its workings.

Sequences 24 and 25 give clear examples of evidence to support the spontaneity of social communication and the relative flexibility required in capturing details of an interaction. Sequence 25 is essentially a continuation of the previous sequence 24, albeit some 10 minutes later. However, the inevitable problems of trying to be both a researcher and a teacher at the same time does mean that one has to prioritise one's responsibilities and in this case the video camera had to be put away and was therefore not readily available as the second sequence unexpectedly commenced. On critical reflection considering these two

sequences as a comparison, the video recording of sequence 24 has provided more detail certainly in terms of non-verbal communication than that of the following sequence recorded by field notes. However it must be noted that the participants remained fairly static thus enabling video recording to be focussed in one direction.

One also has to consider the additional problem of reactivity. The benefits of unstructured, ethnographic methods of observation provide raw data of low inference value. One of the prime considerations of gathering data by field notes, tape recordings or video recordings. is the concept of reactivity to these methods when judging the validity of any subsequent claims made. Video recordings are without doubt the most overt of the data gathering methods. The pupils can effectively 'play to the camera' and the camera itself is a contribution to the context that is not normally apparent. Sequence 24 provides an example of this when one of the participants looked towards the camera for awhile. There had been three other attempts previous to this sequence, when social interaction was recorded with these particular participants. However subsequent analysis was abandoned due to the excessively observable reactions of the one participant causing relative disruption to the naturalistic realism of the socio-communicative interaction.

Audio recordings could be less conspicuous, particularly if using a dictaphone tape machine. However, non-verbal communication is not recorded. The few sequences recorded by dictaphone have not proved to be highly successful. Two sequences were rejected for analysis due to lack of clarity in recording and numerous undecipherable utterances. An additional concern with using tape recordings is the subsequent synchronisation of verbal utterances with non-verbal communication taken as field notes. A further more obvious consideration is that recording by tape or dictaphone is of no use when observing the social interactions of children who have severe learning difficulties and who may rarely, or are unable to, use speech or verbalise. These children tend to rely upon non-verbal communication and therefore field notes or video recording are the only option. In terms of this study, gathering data by tape recording was not a realistically viable option. Of the few recordings made, the quality was generally poor and they did not offer the rich description of social interaction that was being sought.

Field notes were, by far, the least noticeable and therefore potentially generated the least amount of reactive force. Although table 4.3 (page 112) illustrates that two thirds of the sequences were recorded using this method, this was however due to necessity rather than preferred choice. Hand written notes relied on speed, an element of 'shorthand', coding, memory, and if at all possible a discussion with other adults present. In special schools teachers are fortunate to have the assistance of teacher's aides for the general day to day functioning of the class. The teacher's aides working alongside me have supported this research study by highlighting unobserved communicative behaviours, discussing inconsistencies in interpretation and providing both a common and an alternative perspective. On some occasions the children have enquired about my 'writing', certainly the participants of the latter sequences of data collection. These have subsequently prompted discussions concerning friends and their conversations, and have drawn some evidence of their views (see Appendix F, informal discussion 3). The children are very sure of whom they consider as friends. Some are able to distinguish between merely 'friends' and 'best friends'.

Although some instruments were better than others, no matter which method of data collection was used, even a video camera which essentially recorded as complete a socio-interactive sequence as possible, I am sure I still failed to capture all of the subtle nuances and atmosphere of the situation which often cannot be described in words alone.

Reflections of evidence in the data

The findings from the analysis and interpretation of data has provided indications of what was perhaps an unexpected level of socio-communicative skill, essentially previously unrealised to this degree of complexity in children and young people with severe learning difficulties. The findings discussed previously have indicated that there is some corroboration between what has been analysed and interpreted from the data to sources of currently available literature.

Of the 30 detailed and descriptive sequences, 27 have been taken from observations of participants from special schools for pupils with severe learning difficulties. This collection of data from children and young people with severe learning difficulties, currently encompasses a wide age range, from 8 to 19 years. There is also a small selection of data gathered from children of normal development ranging from 4 months to 16 years of age.

Although this has provided interesting comparative material, the emphasis is on the former collection of data. The evidence offered by the data from children of normal development suggests a developmental path (see Appendix A) along which the participants of this study are likely to follow, with some interpretive analyses found to be similar in function and strategy.

The range and quality of the social interactions presents a picture of socio-communicative and interactive competence amongst the children and young people, albeit relative to their developmental level of capability. They initiate and maintain friendships among themselves (e.g., sequences 10, 15, 18, 20, 21, 28), make their social and emotional feelings known to each other (e.g., sequences 6, 7, 17, 25, 26), talk about topics of mutual interest (e.g., sequences 4, 5, 11, 19, 23, 24, 27, 30), and contribute to conversations with people other than in their peer group (e.g., sequences 1, 3, 13). Although this study did not set out to make comparable judgements, the two sequences, 14 and 16, do nevertheless provide interesting comparisons with the social conversations of the participants with severe learning difficulties. For example in terms of shortening words (e.g., sequences 23, 24) and using personal idiom (e.g., sequence 2). These both show an awareness of informality and friendship in these particular communication situations and demonstrate that children and young people with severe learning difficulties, as well as their mainstream peers, have an appreciation of linguistic style and context. To substantiate this more fully, of course one would need to find contrasting examples from the more formal communicative arena. This is, however, beyond the terms of reference for this study.

An integral part of social interaction is the way we can utilise non-verbal communication to support and convey meaning to messages. The range of non-verbal communication used by the children and young people has ranged from the more overt forms of pointing, stroking and tapping (e.g., sequences 7, 8, 10, 15) to the discreet examples of facial expression (e.g., sequences 17, 21, 25, 26) and posture (e.g., sequences 2, 25, 29). The level of sophistication required to convey a positive verbal message alongside the more negative non-verbal communication in sequence 25 is, I feel, quite significant (see Appendix A - 8yrs). This example of a mixed message seems to convey an awareness of the bonds of friendship, being maintained through the verbal part, alongside expressions of aggrievement via non-verbal means.

In direct contrast to what Malinowski (1923) proposed about speech being the necessary means of communion for creating ties, there is some evidence from this study to suggest that speech is not necessarily a pre-requisite to social communion. There are examples of friendship bonds being maintained in sequences 10, 15 and 21, however on these occasions they are achieved almost entirely by non-verbal means of communication. The participants contributing to these sequences have no speech but most are able to vocalise. Their socio-interactive skills demonstrate their desire to communicate with their friends. The significance of their successful interactions testifies to their awareness of with whom they choose to communicate, in these examples it is their peers and not adults. Adults, particularly those working with children and young people with severe learning difficulties, often assume a role of advocacy when it is perhaps not needed or desired from the perspective of those with learning difficulties.

What conversational functions are evident within the exchanges?

According to Malinowski (1923) social communication serves to create an atmosphere of sociability and establish bonds of personal union. To create this atmosphere and these bonds of friendship people finding themselves in the company of others, take advantage of the art of social communication. As Malinowski (1923) suggests "it is a matter of common courtesy to say something even when there is hardly anything to say" (p.480). In social communication there are several functional characteristics that can be identified to initiate and maintain social interaction, such as greetings and farewells, questions and answers, exchanging information, changing the topic of discussion and relating to other conversational partners.

RANGE OF FUNCTIONS

Although I had previously considered function in a conversational context, I began this study, with no pre-determined ideas of what I intended to look for in terms of conversational function. As the data were analysed and interpreted it was interesting to see what was emerging in terms of functional social communication. The range of the social communication of the children and young people found in this study has been encouraging with more functions becoming apparent than I had anticipated, although my initial expectations were to find mainly adjacency pair exchanges of question and answer routines and greetings. In total I have analysed and interpreted their communication into seven broad

categories: conversational initiation; adjacency pairs; applications of conversational repair; instructions; offering information; topic change and relationship reinforcement.

The quantitative audit (Table 4.2, page 111) revealed a high incidence of initiation and adjacency pair exchanges and low incidence of topic change and relationship reinforcement. It is reasonable to assume that conversational initiation and adjacency pair exchanges are the communicative functions which probably will have been well practised throughout the school life of the child. Conversely the incidents of topic change experienced in the socio-conversational repertoire of the children would be relatively few. Even familiarity with, and participation in, the more formal aspects of topic change would probably have been led by adults. This proposal could equally be applied to the remaining functions of conversational repair, instruction, offering information and relationship re-inforcement.

The evidence from the findings has supported Malinowski's (1923) contention that conversational initiations are subject to the intimidating force of silence. It is apparent from the sequences and our own experience that at whatever stage of development we, as humans are essentially social beings and enjoy the company of others. The findings show this desire to interact, at work amongst children and young people with severe learning difficulties.

The examples of conversational initiation, have been in some instances difficult to determine. In some cases there was perhaps some uncertainty as to whether the children's utterances were intended as conversational initiation or not. However the evidence of researchers (Wood, 1976; Harding & Golinkoff, 1979; Harding, 1984; Goldbart, 1988; Dimitracopoulou, 1990; Garton, 1992) suggests that we should consider that infants are pre-disposed to communicate from birth. Sequence 12, describing the interaction between myself and the infant demonstrates some of these early interactive signals, such as eye contact and reaching out. The enculturation process ensures that the infant's verbal and non-verbal intentions are accepted as communicative acts. Therefore even early expressive signals should not be discounted (Porter, *et al.*, 2001). Clear examples of these signals can be found throughout the data, particularly notable are those from children and young people who are unable to use speech and rely on non-verbal communicative behaviours to initiate interaction. Facial expression, gaze and posture are in evidence in sequence 10 as initiators to

a greetings exchange and, in sequence 15, with the additional cues of reaching out and touching.

The awareness of the children and young people of the conventional patterns in social exchanges, particularly in terms of greetings and question and answer routines is very apparent. These types of communicative exchange are well practised during the school life of the child, generally in the more formal context of lessons. As the child progresses developmentally these skills are generalised to the more informal contexts in their daily lives. This generalisation can be exemplified by considering the greetings exchanged in sequences 23 and 28 for example. In the former, both an informal and a semi-formal word of greeting is spoken between the two pupils. In the latter example a single semi-formal greeting is used by the pupil, whereas in the more formal arena of class registration, these pupils would normally respond with the greeting 'good morning'. Halliday (1978) discusses this in terms of "functional continuity" (p. 90). He suggests that "the child continues to build on the functional origins of the system" and thus generalises from a "mathetic or learning function" to a "pragmatic or doing function" (p.90). Although his discussion is based upon family socialising processes, it could be argued that similar processes also occur in the school situation.

In light of Beveridge and Conti-Ramsden's (1987) view of repair work in the conversations of children with severe learning difficulties, my own perceptions were confirmed as they reported the achievement of this function to be poor. It is pertinent to recognise, though, that repair work in conversational interaction did take place, more so than perhaps expected, thus confirming that some of the children are able to recognise a breakdown in communication and make attempts to rectify the situation. Attempts at conversational repair were, however, limited in terms of strategic skill. However two notable examples include vocalisations combined with haptics in sequence 8 and an alteration to prosodic style in sequence 29. These examples of conversational repair demonstrate a commitment on the part of the initiator to pursue alternative means of communication in order to regain an interactive 'dialogue' with their conversational partners.

Instructions within a conversational framework differ from the general interpretation of instruction. Wood (1988) discusses the notion of effective instruction amongst other things,

as specific verbal directing, assistance, and demonstration. The standard interpretation of instruction is more implicit in the more formal arena of teaching where, as Wood (1988) proposes it is a necessary requirement for a child to transform his/her spontaneous activities into symbolic rational thinking. However his proposals regarding contingent instruction have the potential to relate to the more informal domain of social conversation. He suggests that contingent instructions "helps children to construct local expertise - expertise connected with that particular task or group of tasks - by focussing their attention on relevant and timely aspects of the task, and by highlighting things they need to take account of" (page 80). Imparting an instruction in social interaction is potentially a difficult task in view of the nature of social conversation itself. It has been noted (Wise, 1965; Duncan, 1968; Knapp, 1984) that the concept of maintaining friendships is one of the central aspects of small talk and therefore participants need to have an awareness that their contributions should be non-threatening. Thus the phrasing of an instruction is one that requires subtlety and politeness in both verbal and non-verbal aspects of communication.

The examples of instruction analysed in the sequences, ranging from attendance to an object, initiating action, emotional appeal and gender dominance, show evidence of the relatively casual and uncertain nature of socio-interactive instructions. Their relative contingency supports the view that within the domain of social conversation there is no compulsion for compliance (Wise, 1965). However the innate sociability of humans suggests that some degree of compliance is necessary to avoid emotional disagreement. Therefore within the boundaries of socio-communicative interaction, the concept of instructive comment should be considered in relation to the contextual situation. Malinowski (1923, p.473) forwarded the notion: "The structure of all this linguistic material is inextricably mixed up with, and dependant upon, the course of the activity in which the utterances are embedded". An interesting example to highlight this is found in sequence 7 involving the non-compliance to an instruction. Analysing the verbal part of the interaction the instruction is seemingly ignored on two occasions. However when combined with the non-verbal communication between the two participants, the messages emanating from these acts of instruction and non-compliance appear to be more gender related. Whilst the young man is clearly displaying a dominant role, the young lady is effectively 'playing to his masculinity' and is not adopting a non-compliant stance, but is ostensibly flirting.

The function of offering information, as opposed to providing it in response to a request as part of a question and answer routine, is perhaps a more advanced level of skill in social communication. Social conversations are essentially unsupervised improvisational events (Anderson & Meyer, 1988). Participation in social conversations depends partly on knowledge and experience of the social world and a consideration of not only the form of an utterance but also its function (Dimitracopoulou, 1990). The offer of related information to an ongoing conversation, such as those found in sequences 3 and 13, shows that the speaker is aware of the content and is able to relate their own experience or knowledge to that conversation (see Appendix A - 13 yrs). This aids the flow of the conversation itself and also allows members of the social group to be able to participate with an appropriate contribution should they wish to do so (Garton, 1992). The offer of information in its widest sense, to the social group, not only supports and maintains the bond between the members through the dissemination of mutual knowledge but also creates opportunities for individuals to enjoy elements of social self esteem, as described in sequence 6, by making appropriately acceptable and valid contributions.

It has been suggested (Dimitracopoulou, 1990; McTear, 1991) that children are often unable to initiate social conversations or to maintain them further than a couple of turns. There has also been suggestions made that 'mildly retarded individuals' (sic) are limited in their repertoire of conversational topics (Kernan & Sabsay, 1989). However it could be argued that this limited ability to maintain continuity of conversation together with the comparatively few number of topics available for discussion, is due to their relative inexperience and practice of their young age and with developmental progression this is likely to expand. In this small sample though, the difference between the younger (8 -10 year olds) and older (16 -19 year olds) age group does not support this. Overall the findings do however suggest that a reasonable range of age and interest related topics, such as those in sequences 1, 22, 27 and 30, have been discussed amongst the children and young people.

The conversational function that, I would suggest is particularly interesting, and the one I have found personally to be the most thought provoking, is that of relationship reinforcement. The view of the characteristics of children and young people with severe learning difficulties as being somewhat egocentric (Piaget, 1926; Schlanger, 1967; Wood, 1988; Kernan & Sabsay, 1989; Booth & Booth, 1996; Detheridge, 1997; Kravetz *et al.* 1999; Grove *et al.*

2000) has to a great extent been challenged. Brown (1998) noted that since 1892 there has been much written on the subject of the social and emotional development of children. Two aspects of personal identity were recognised as the awareness of self developing a self-reflective (e.g. sequences 17, 26) viewpoint and the ability to form relationships recognising the attributes, gender (e.g. sequence 7), cultural identity (e.g. sequence 11) and social role of others (e.g. sequence 2). It has been argued that whether childrens' talk is more egocentric or social depends on the social conditions of the moment (Vygotsky, 1962). The findings from Brown's study suggest that these social aspects of personal identity are discernible in the characteristics of these children and young people. Cook, Swain & French (2001) found that pupils in a special school for physical disabilities had very strong friendship bonds with their peers which crossed both age and gender. The evidence of relationship reinforcement found in this study, certainly in terms of expressions of care and gender relationships, is supported in the findings of de Haan & Singer (2001) and Cook *et al.* (2001). Although the examples of evidence are few in number, the fact that they are manifest within these peer relationships, I would propose warrants further investigation and study.

CONVERSATIONAL FUNCTIONS - FROM EXPERIENCE TO LIMITATIONS

A comparative analysis of the sequences of social communication amongst children and young people with severe learning difficulties, reveals that the functions identified are common to both age groups to a greater or lesser degree (Table 4.2, page 111). Greetings and question and answer exchanges are the most common of language functions that have been well practised not only throughout their school lives, but within their home environments too. These functions not only occur in the more formal situations of lessons but can also be found in the informal daily routines of school and possibly home life. In terms of these functional categories the children and young people obviously benefit in the development of their socio-communicative expertise from the experience they gain in the classroom which they can then generalise to other situations.

The functional categories that are less well utilised are those which, in the context of a classroom, are generally teacher led, such as instructions, language repair work, information giving and selection of topics. The children and young people, therefore, have few opportunities to practise these linguistic and conversational skills. Perhaps what is of greater

significance to them, is the notion that these types of function are related to the role model of the teacher and not the pupil.

The evidence found in the category of relationship reinforcement, such as the use of personal idiom, expletives and close personal contact are those which are not apparent in the teacher - pupil relationship. These relationships tend to remain on a more formal basis and in terms of sociability can perhaps appear to a child or young person with severe learning difficulties as somewhat distant. Thus engendering a distinction with certain roles as those commanding a respectful distance, such as a teacher, to those which are caring, such as a parent. Thus, the child or young person, may have limited access and experience of relationship reinforcers at work.

The children and young people with severe learning difficulties involved in this study appear to present some limitations in their use of other, different conversational functions. There is either limited, or no evidence of supportive minimal responses, tag questions, and negotiations for example. However, viewing the data as a corpus does suggest that through their normal course of development the children's and young people's functional communication skills have the potential to expand and improve.

What, if any, patterns can be identified between conversational content or context ?
Many special schools are fortunate to have the benefit of being situated in a local community where the pupils can place their educational skills in a real life context within the parameters of the curriculum, such as shopping locally and visiting community facilities. This study has benefited from the range of contexts to which the children and young people have access.

Collins (2000) discusses the concept of self-image and suggests that its development begins in the family within the home context. In her discussion she highlights that participation in other communities assist the child in developing the various dispositions and habits required in each context. One of the most influential contexts in a child's early experience is that of going to school, however, she argues that the daily transition between the home and school culture may be too difficult for some children to manage. Thus they may be prone to developing feelings of exclusion and decreasing self-esteem. I would argue, that the findings from this study challenge this view to some extent. Although there was one example of an

attempt at initiating a conversation that was subsequently ignored, which may have had some effect on the emotional feelings of the participant. The majority of social interactions between the children and young people have demonstrated a degree of self confidence in both conduct and content.

RANGE OF CONTEXTS

The majority of data recorded from observations were classroom based, however 6 were from other contexts. Two of the transcribed sequences, 19 and 20, have been taken from an educational context other than the school. Although the community flat is part of the school and students regularly have 'lessons' there, it is sited approximately one mile away from the school grounds in the heart of the local community. On this occasion the students were experiencing an overnight stay, not something in their normal daily school routine. The majority of social conversation that took place was teacher led, other than the occasions when the students were in their room and there was no intrusion from staff.

Two more sequences, 22 and 27, were again in a context outside school. The pupils and staff were out on a community visit and were on the school minibus. The final two sequences 26 and 30, were taken from observations in cafe areas of large stores, whilst members of the class were out of school on a community visit. This range of contexts provides some interesting foundations on which to base some primary reflections of the influences evident in the children and young people's social conversation.

The widening of context based data has provided an opportunity to discuss the concept of the emergence of patterns relating to context or content. Other researchers (Leudar, 1989; Kernan & Sabsay, 1989; Butterfield & Arthur, 1995; Whitaker *et al.* 1998; Stalker, 1998) have argued that people with learning difficulties are often within contexts which are distorted and not conducive to developing and contributing to quality interactions. Whilst there has been a discussion concerning the limitations of functional categories of conversation, the analysis of data does offer a foundation of creditable examples of social communication and interaction both within the contexts of school and outside in the community.

Conversational content

These six sequences, 19, 20, 22, 26, 27 and 30, have provided an opportunity to study and analyse the social communication of the children outside of the school context. They have given credence to the suggestion that an utterance can only be fully understood within the context of the situation in which it was spoken (Malinowski, 1923). In a study of the language of togetherness, de Haan & Singer (2001) concluded that the context affects language use. Their study of young children in two different contexts found that one context yielded a greater incidence of caring communications. Similarly the analysis of these six sequences has provided evidence to suggest that context plays an integral role in the social communication of children with severe learning difficulties. Halliday (1978) proposed that in order to interpret the meaning of language, it has to be placed in the living environment. Prutting (1982) described context as highly complex and including multidimensional aspects of the environment. Thus the notion of current social reality (Ninio & Snow, 1996) including context, people, and action all impact on the quality, style and function of communication (Barnett, 1987). The six sequences cited here support this argument by suggesting that the context in which the pupils and students were situated, played an integral role in their selection of conversational topic. Topics in small talk are usually those of which can be considered to be of a general and perhaps superficial nature. As Coupland & Jaworski (2003) noted, the topic, or content of a conversation appears to less important than the actual action of talking. The content of the socio-communicative encounters in this study, has certainly matched these general terms of typical and inconsequential.

Informal and formal contexts

During the course of the data collection, my perceptions of when social communication occurred changed considerably. I had naturally assumed that 'small talk', 'social chit-chat' and 'gossip' mainly occurred when people are at leisure in a relaxed informal context. However I was forced to alter my opinion quite dramatically when it became apparent that a certain amount of social communication did occur within the context of a lesson, generally of the more practical type, such as art, and design and technology.

Although evaluating the analysis of data, it appears that social interaction within the context of the classroom and particularly during lesson time is prone to be more stifled and stilted, as if the pupils are aware of the ground rules for classroom discourse (Edwards & Mercer,

1987) and 'shouldn't really be talking socially in lessons'. Of the 21 sequences observed in school, only 5 of them were recorded during lessons. Within the more informal context of a leisure area or during free time, their interpersonal verbal and non-verbal behaviour becomes more overt and less restrained. Their options regarding with whom, to whom and how the pupils occupy their time are entirely their choice. However, in contrast, the classroom based lesson, actively forces pupils into each other's company, therefore their communicative partners are effectively chosen for them.

Further to this, the context in which social interaction occurs, appears to have some relative influence upon the number of participants involved. In the enforced situation of the classroom, the question arises as to whether socio-communicative interaction becomes obligatory between those persons adjacent to one another. This did not however deter the three boys from a mainstream secondary school in sequence 16, where the expectation was for them to sit in certain places in the classroom. The majority of classroom based sequences in the special schools in this study, suggest that the pupils are able to socially interact with generally more than two others. Whereas in the more informal contexts the choice of communicative partner is clearly more actively voluntary and in most cases the social interaction has occurred between two participants only.

This apparent finding may naturally develop to form a conclusion concerning the children and young persons inability to wholly free themselves from the dependence on the ethos of the institution, adults as advocates and perhaps more able pupils as scaffolding mentors. Therefore their apparent preference of communicative partners is not based on choice alone but involves an element of egocentrism based on supporting and promoting their own needs and desires.

In my experience of working in special schools for children with severe and profound learning difficulties, this egocentric focus is nurtured and sustained to a great extent through the processes of teaching and learning. The sense of *self* to the exception of *others* (Bruner, 1986) is often fostered through individualised teaching programmes where there is little opportunity to *have* to work collaboratively with peers, thus engendering non-interactive experiences. This egocentric view of children with severe learning difficulties is rooted in

society's view of disability as a 'deficit model' (Booth & Booth, 1996) both socially and medically (Davis & Watson, 2001).

Although it is assumed that social interaction occurs during the more informal periods of the day, this is not always necessarily the case. During the latter period of data collection, the instances of social communication at break and lunch times, in terms of Malinowski's concept of fulfilling a purely social function, were significantly low. Whereas during the more formal periods of the day, such as registration and during lessons, unexpected snippets of social communication between the children have taken place.

In summary, the apparent randomness of occurrences regarding context, is essentially the essence of social communication. It is spontaneous and unplanned and although there are certain contexts when social interaction is more likely to occur one cannot predict them. These contexts however do not guarantee interactions and those that frequently do occur, may be beyond the terms of reference of this study, for example peer - adult interaction. Although there is some relevance in including data from peer - adult interaction, particularly when spontaneity and complexity of context are considered. It is within such examples (e.g., sequences 1 and 13) that the pupils can perhaps demonstrate their use of more complex and adaptable communicative strategies.

What strategies do the children and young people employ in their socio-communicative interactions ?

The strategies available for negotiating a way through social encounters are diverse and numerous. Some strategies may be more effective than others in certain situations and some may be very specific between familiar communicative partners. Findings from the analysis of data have highlighted a range of strategies employed by the pupils in their functional and pragmatic use of language in social interaction. Non-verbal strategies, as discussed previously, can contribute as much, and on occasions more, information to a message to that of the verbal portion. Indeed some social interaction may consist entirely of non-verbal communication.

Strategies utilised in the process of social communication vary between verbal and non-verbal. The type and style of strategy employed by communicative partners is very much dependant on their developmental skill and the socio-interactive function. A range of communicative strategies have been found to be used as a primary means of communication and as secondary reinforcers.

NON-VERBAL STRATEGIES

Pupils with severe learning difficulties, perhaps due to the developmental procedures within their educational career, appear to be well practised in strategies of non-verbal communication. This is somewhat contrary to Argyle's (1987) argument that young people and adults with learning difficulties use strategies of gaze, expression and gesture less often. The findings from this study indicate that on several occasions the children and young people have used their non-verbal skills very effectively such as pointing (e.g. sequences 4, 7), tapping (e.g. sequences 5, 10, 15, 21, 23), showing (e.g. sequences 2, 6) and gesture (e.g. sequences 8, 24, 27).

In their study of speech and gesture Evans *et al.* (2001) found that, compared with typically developing children, those children who were speech and language impaired used gesture more to express knowledge and reasoning. Similarly children with severe learning difficulties, who have been exposed to potentially more overt forms of non-verbal communication via the normal process of education, are more likely to rely on non-verbal strategies to achieve understanding. This interdependency of social and learning related competencies has been highlighted by Fantuzzo & McWayne (2002).

Some of the participants, who have no speech, have revealed a perceptive capability in their communicative encounters through their non-verbal strategies. Particular attention is drawn to two examples in sequences 15 and 21. Persistence, by repeatedly tapping on the shoulder indicated to a communicative partner that their attention was required. Likewise, in sequence 21, the determination indicated by mirroring head movements to achieve communicative interaction demonstrated not only an awareness of the communicative diffidence of her friend, but also how to utilise alternative strategies in order to effect an interaction. Indeed, if the studies of developing infants (Harding, 1984; Bates *et al.* 1997) are considered, the role of non-verbal behaviour has a significant impact in the advancement of their language

learning potential. It has been reported by some authors (Wise, 1965; MacNamara, 1977; McShane, 1980; Carvajal & Iglesias, 2000) of the importance of non-verbal communication and it's integral role in conversation. They suggest that on occasions when apparent misunderstanding occurs or when an indicator of assurance is required, then non-verbal communication will provide the key message. Apposite indicators of reassurance were demonstrated in sequence 26 when one communicative partner offered a friendly, caring gesture accompanied by maintaining her gaze thereby suggesting an apparent and reflective understanding of the emotions of the moment. Conversely there have been indications of the powerful inference (Eskritt & Lee, 2003) contained in inconsistent non-verbal/verbal messages where deception, in sequence 25 and conflict, in sequence 17, have been exhibited.

Verbal strategies

In terms of using verbal actions as strategic enforcers, pupils with severe learning difficulties may not be as adept as their mainstream peers or do not understand the inappropriateness of their actions. A suggested reasoning behind this may of course be part developmental delay. However, their own self awareness may also shadow their inaccurate responses to account for a hidden agenda they hold of retaining their self esteem (Kernan & Sabsay, 1989; Donahue & Lopez-Reyna, 1998).

The findings have provided examples of a wide variety of strategies ranging from talking loudly, repetition and several prosodic features. However the evidence suggests that these primary and secondary strategies are more of a simplistic style rather than re-phrasing or using different vocabulary. These latter examples are considered as higher order strategies (Garton, 1992) requiring a degree of intuition, skill in terms of inherent knowledge and a repertoire of experience (see Appendix A).

The evidence of the range of strategies, noted in the analysis of data, has included some interesting examples of repetition and persistence. Persistence has been proposed as an indicator of the desire to communicate with a partner, whether via audible communication, as in sequence 29, visual means, such as sequence 24, or tactile signals as found in sequence 15 (Scoville, 1984). Verbal and non-verbal strategic signals provide the means for participants to understand and manage conversations. When language is spontaneous, as in

social conversation, meanings are conveyed through both these avenues of communication (Evans *et al.* 2001).

The concept of social communication and interaction relies upon the ability of the participants to manage the conversation. This requires an awareness of turn taking rules including allocating turns by using attention getting and directing strategies. Some research has shown (Beveridge & Conti-Ramsden, 1987; Kernan & Sabsay, 1989; McTear & Conti-Ramsden, 1992) that children and adults with learning disabilities have difficulty in understanding and applying the rules of conversational interaction. It has been reported that children with severe learning difficulties in particular, often cannot anticipate the possible completion of a turn nor provide appropriate signals to indicate their own turn completion, thus conversation is interspersed with lengthy pauses that may interrupt the flow.

Although some of the findings of this study do confirm these views where a lack of understanding and application of the rules of conversational management has stilted the flow by creating pauses between turns. Overall the findings suggest that conversational strategies have enabled conversations to flow at a reasonable pace. I was particularly surprised to find considerable use of prosodic features of speech. The children and young people have demonstrated significant awareness of how they can manipulate their vocal range to achieve communicative effect. Their use of pitch, both loud and soft, was used very effectively in sequences 2, 7, 17 and 26, for example to create emphasis in terms of a demonstrative remark or expressions of comfort. The rhythmical quality of some of the verbal communications in sequences 6 and 29 are arguably highly intuitive. Not only do some of the children and young people show an awareness for the importance of the content of their communications by combining this rhythmical form of speaking interspersed with appropriately timed pauses, but they have also demonstrated an awareness of to whom they are speaking. This awareness of communicative partner in sequence 29 has been effectively illustrated by extending the duration of speaking the name in this rhythmical style. There has been some appreciation of how intonation can be used in conversation particularly in sequences 18, 25 and 26. These examples, from sequences 18 and 26, give evidence of a style of humour and how to effect compassion from a communicative partner. The use of intonation, in sequence 25, is used to exhibit both a sense of disconcertedness from one communicative partner and indifference from the other. During the analysis of data, I had

anticipated finding evidence of interruptions or conversational overlap, a feature of a potential misunderstanding of conversational rules of management. There has been no significant evidence of this to report. Graddol *et al* (1994) suggested that brief overlaps in conversation are quite common particularly when one conversational partner is yielding a turn to the other. However the anticipated overlapping of significant verbal phrases, was perhaps not evident due to the participants' lack of knowledge about how conversational turns can be gained. In contrast Lewis (2003) did report some findings of overlap in conversations between children with Down's syndrome and their parents. She concluded that one factor significant to this may be due to the childrens' inattentiveness to the conversational contributions of others.

Summary of research agenda

Referring back to the principles adopted from Mertens & McLaughlin (1995), this study has investigated the social communication and interaction of children and young people with severe learning difficulties. According to these principles their relative success and achievement, analysed and interpreted from their data recordings, will be addressed through three areas of discussion.

Socio-communicative competence

Social communication has been described in many ways. According to Knapp (1984) small talk is "a form of public dialogue that serves a number of crucial personal and social functions, is omnipresent, quantitatively superior to almost any other form of talk, and according to Malinowski, is pan-cultural" (p.175).

Duncan (1968) proposed that although we talk to one another for many reasons, at a social gathering, we talk merely for sake of talking. In social conversation we seek to achieve a sense of harmony and common consciousness. Dimitracopoulou (1990) described conversational discourse thus: "The speaker and hearer follow a chain of inferences from the literal meaning to the meaning in context on the basis of reasonable assumptions about the world and peoples' interactions in it" (p.24). Similarly Garton (1992) describes social interaction as an exchange of information between a minimum of two people. The sociability of the interaction further implies a degree of reciprocity and bidirectionality, thus making the

assumption of active involvement by the participants who both bring differing quantitative and qualitative experiences and knowledge.

Small talk, or social communication, is suggested to be inherently superior to other types of communicative encounter, such as business meetings for example. It's apparent superiority emanates from the ability to draw on a vast repertoire of topics, strategies and feelings without which the human sociable condition would critically suffer (Knapp, 1984). From the inception of this study categories of conversational function and communicative strategy have emerged as the data collection process progressed, illustrating this inherent social need amongst the participants. The strategic relationships between verbal and non-verbal communication has been quite significant in the small talk of the children and young people.

Although small talk is influenced by personal, relational, group and societal rules, it is nevertheless carried out on a superficial level. In this study, these influences have highlighted a weakness in the area of repair strategies amongst the children and young people and overall there is limited evidence of sequences involving more than two participants. However, the corpus of data has highlighted a major discovery into the strengths of how the children and young people reinforce their relationships between themselves via their communicative interactions. Overall the notion of small talk, or social communication, from the perspective of the children and young people participating in this study emerges as being sufficiently compliant with the characteristics concurrent in the standard descriptions described above. These areas of weakness and strength, however, perhaps warrant further study to ascertain more tangible and valid conclusions.

Knapp (1984) further proposes:

> Small talk helps us maintain a sense of community with our fellow human beings, provides a nonthreatening and revealing proving ground for new and/or established relationships, provides a safe procedure for indicating who we are and how others may come to know us, offers a diversion from uncomfortable big talk, and helps us to uncover integrating topics. (p.176)

Knapp's descriptor 'small talk' suggests a verbal repertoire although he does acknowledge the relative importance of non-verbal communication. For the purposes of this study,

however, if the more appropriate terminology 'social communication and interaction' is interposed for the descriptor 'small talk', the evidence from the findings is supported by Knapp's notion albeit, at a preliminary level.

RANGE OF SOCIAL COMMUNICATION

An overall discussion of the findings from this corpus of data in this study leads to the issue of whether some of the children are potentially more socially aware of themselves and others in their socio-communicative interactions than is suggested in the literature. From a unitary perspective, the range of verbal to non-verbal communication suggests these pupils have the potential and some level of ability to adapt their communicative strategies to accommodate the elements of who and with whom, when, what and where, that constitute social communication (Pomerantz & Fehr, 1997). The children and young people appear to have not only an awareness of the positive aspects involved in social communication but also the more subtle negative connotations at their conversational disposal (e.g. sequences 17, 18, 24 & 25). There is evidence to suggest that they are capable of assessing the appropriate parameters of the situation - participants, setting, topic and task described by Wood (1976). She proposed that exposure to cultural norms and expected practices enables children to generalise rules for appropriate behaviour. Shevlin & Moore (2000) and Whitehouse, Chamberlain & O'Brien (2001) both suggest that natural social environments and social networks are important for the cultivation of meaningful relationships for people with severe and profound learning difficulties.

During the course of this study, analysing the many positive examples of the children's awareness of social friendships and their need to develop and sustain them, has been welcome and altered my limited perceptions. The superficiality I had expected, has instead manifested itself as, at times, a very caring consciousness and need for one another's friendship.

This potential to engage in social interaction with their peers at different levels of communicative action suggests that we as the professionals, carers and advocates in their lives should be more aware of their communicative endeavours. McLarty & Gibson (2000)

emphasised the relative inattention and lack of awareness on the part of educators and carers leading them to not recognise behaviour which constitutes communication. Revisiting the concept of social communication as a shared behaviour, they further highlight the difficulty of seeing this sharing when the person with severe handicap communicates via unconventional modes. Often non-verbal communicators are considered as non-communicators. Barnett (1987) also proposed that communication should be explored from both an ethological and ecological perspective. Such an approach would potentially highlight behaviours previously classified as abnormal, bizarre or non-communicative, to be acknowledged as having communicative functions for particular individuals.

Breadth of social communication

Small talk or social communication is characterised by its breadth as opposed to depth (Knapp, 1984) thus the range of topics associated with social conversation, although general and superficial in content, is fairly broad. The abundance and richness of the topical content of the social conversations of the children and young people has been quite revealing. Their range of communication has covered the usual form of greetings; clothes, presents and personal belongings have been discussed; local and family events and subjects related to current common experiences are mentioned. As relationships become more established however, small talk has the potential to become more intimate. It is within these types of friendships that opportunities become accessible to communicate on a more intra and inter personal level. Topics concerning gender relationships, discussed by the young people and emotional feelings discussed in both age groups describe an age appropriate awareness of familiarity and understanding.

In consideration of this range of conversational topics, it perhaps would be pertinent to review them more closely. Graves (2000) studied the range of topics discussed between staff and clients in day care services for adults with learning difficulties with the intention of providing more client related resources based on their vocabulary interests and needs. If the children and young people have the understanding and flexibility of thought and action to convey and respond appropriately to these topics (Newton, 2001), then there is surely some educational value in acknowledging and encouraging language development via these conversational frameworks. Encouraging discussion about language and conversation

awareness not only amongst professionals and carers but also with the pupils themselves will serve to increase the interpretation and value of their communications and also allow an awareness to become more apparent regarding the functional and strategic characteristics of their social communication.

The preceding discussion is based on evidence from a small minority of children and young people with severe learning difficulties. Although it could be argued that this descriptive picture when generalised to the majority, some degree of similarity could be recognised consistent with these findings. However there will be some children and young people who will function at more and lesser levels of sophistication.

Chapter 6

Conclusions

The aim of this study was to provide a rich description and analysis of the data that contributed evidence to respond to the questions set out for this research:-

- **What is the nature of the socio-communicative interaction that takes place between children and young people with severe learning difficulties?**

- **What conversational functions are evident within the exchanges?**

- **What, if any, patterns can be identified between conversational content or context ?**

- **What strategies do the children and young people employ in their socio-communicative interactions ?**

The professional objective was to address an issue based upon the premise that current school curricula, policy and practices, would be able to support the socio-communicative and interactive educational development of pupils with severe learning difficulties.

Throughout the course of this study children and young people with severe learning difficulties have engaged in socio-communicative interaction with their peers. Their contributions to the data have presented sequences of social communication including initiating conversations, continuing a dialogue of small talk by asking questions, offering information and changing the topic of conversation. They have also been able to demonstrate some level of restorative techniques when conversations have seemingly broken down. Their means of reinforcing their peer relationships have been, at times distinctly perceptive. The range and quality of verbal and non-verbal strategies to reinforce and enable participation has shown variety and some appreciable awareness of peer competence and conversational structure. To sum up, their ability and skill in engaging in social

communication on a range of topics, in both informal and formal contexts, has been revealing.

Educational research covers a broad spectrum of topics and forms, and studies in the area of special education are few in comparison to the educational canon of mainstream schooling. This research report and its conclusions contribute to the body of knowledge in the area of special education and, in particular, the education of children with severe learning difficulties, where a general awareness of the issues surrounding 'small talk' is limited.

Whilst traditional educational research is often deemed to be generalisable to the wider population or context, it is often perceived to be unrelated to the reality of the classroom. In contrast, teacher research, although potentially much greater in depth than breadth, tends to focus on aspects to which fellow professionals can relate their own experiences (Vulliamy & Webb, 1992). This study has sought to embrace this notion.

Although the data have been gathered from a range and number of educational establishments, Hegarty (1998) reminds us that classrooms do not exist in isolation from the rest of society. In the conclusions and judgements proposed, the researcher and reader need to consider the multifarious influences such as the children's families, the media and popular culture. These all affect, to a greater or lesser extent, the individual life experiences of each participant in the study. Therefore, differences within and between institutions will be apparent and should be accounted for by readers applying their existing knowledge and experience to these findings.

Mertens and McLaughlin (1995) describe the importance of qualitative research methodologies in special education in terms of the need for a more holistic analysis of the dilemmas and issues regarding policy and practice. They also argue for a greater attention to the descriptive 'world' as experienced by all those involved in special education whether from a teaching or learning perspective. This study has described aspects of part of the social world of pupils with severe learning difficulties. Their contribution to professional understanding has highlighted a need to promote educational awareness and practices regarding social development However, the risk of conceiving professionally designed interventions (Ferguson, 1994) creates a dilemma between developments that reflect the

needs of the professionals (e.g. National Curriculum) against the individual day to day needs of the children and young people (Graves, 2000). This study has placed the pupils at the hub and the findings that radiate outwards present professionals and carers alike with a better informed perspective of their individual and aggregate skills and needs.

The findings from this study could be placed in a variety of contexts -

- As evidence to support communication development, particularly in the informal arena;
- As a curricular tool for developing and promoting interpersonal and social skills;
- As a recognition of social connection and the value of friendships;
- As a form of empowerment in imparting values and perspectives.

These contexts are discussed below.

Communication development

The impact of studies such as this, may have immediate significance upon the classroom practice of the teacher. It has already had some significant influence on my own professional practice, such that social interaction and small talk are actively encouraged through prompted suggestions to converse about favourite activities, or discuss an associated lesson topic in an informal manner, encouraging speaking and non-speaking peers to find ways of communicating with one another by using sign, symbol and objects of reference and lastly by both asking for and accepting impromptu contributions within adult conversations. These tentative explorations into developing socially interactive skills are apparently already paying dividends with two children who now actively chat at break and lunchtimes and approach visitors with increased confidence to explain their activities. McNamara & Moreton (1995) suggested that many children with special needs are reluctant to talk in school, simply as a response to experiences which have taught them that there are right and wrong answers in question and answer routines. To counter these feelings of rejection, judgements concerning the correctness of response should perhaps not be paramount, but instead the response itself should be valued as a contribution.

An informal interview with a speech therapist suggested that her preferred professional agenda was for greater collaboration within the classroom, that aimed towards functional communication, integrated and generalised to all aspects of the child's educational and social

life. This functionalist approach promotes independence in daily activities and discourages reliance on adults. It promotes the ability to respond appropriately in communicative situations (Barnett, 1987), focusses on social competence and opportunity (Whitehouse *et al.* 2001) and explores and facilitates social membership (Ferguson, 1994). As a consequence of this study, collaborative work between myself and the speech therapist has begun to encourage the children in my class to interact and communicate socially with one another using description and personal narrative. McNamara & Moreton (1995) suggested that the best way to encourage children with special needs to communicate was to ask them to talk about themselves. They remarked that after all "they are the world's authority on themselves;" (p.72). This type of encouragement began by suggesting that certain children work together during speech therapy sessions, for instance two boys, one of whom was more vocal than the other. Latterly our collaborative work has included a group of four speaking children who are encouraged by example to talk about everyday objects and pictures, their uses and descriptive characteristics. This has then led to impromptu comments and observations concerning personal experience from both adults and children alike.

Curriculum

The context of this study may have significance in the interpretation of aspects of the English curriculum, particularly within the attainment target of Speaking and Listening. The findings of the study may also support and extend features within the Personal, Social and Health Education curriculum, including aspects of Citizenship. A framework to encompass these aspects may include equality of opporunity; access and participation; developing self confidence and a positive outlook; sharing responsibilities, choices and decisions; and developing communicative relationships (Byers, 1998; Ferguson & Lawson, 2003). It has been suggested that people with severe learning disabilities have difficulty in forming and maintaining relationships due to their lack of social skills. Their more stable relationships are usually those established as part of the educative and/or care opportunities presented in their daily environmental routine. Several authors (Hastings & Graham, 1995; Webster, 1989; Shevlin & O'Moore, 2000; Miller *et al.* 2000; Whitehouse *et al.*, 2001) propose an increase in opportunities for social contact and social skill development. These opportunities, however need to be relevant. Ferguson (1994) argues for a shift in focus from relying on inference to facilitating socially effective communicative repertoires by relying more on 'real world' situations and naturally occurring activities with typical people. Some of the evidence

presented in this study has served to highlight the range of contextual opportunities for promoting and facilitating more socially interactive communication.

James & Mullen (2002) advocate a social roles curriculum that facilitates the acquisition of practical skills oriented to daily life activities. They suggest the curriculum should consider both present and future conditions that impact upon society and the teacher's role is to facilitate learning occasions grounded by developmental events in which students are enabled to produce new understandings. In terms of the children, and particularly the young people, participating in this study their educational careers are short and the time when they leave this comparatively small, protective environment of the school to enter into a world of vast uncertainty, one hopes they will be well equipped both educationally and socially, for their continuing journey. The findings from this study present issues concerning socio-communicative development and practice that require some attendant recognition if these young people are to become more active members of an inclusive society.

Consideration must be given to the opportunities available to professionals with regard to the development of social communication and interaction amongst pupils with severe learning difficulties. Classrooms and the whole school environment are essentially social settings where social interaction is potentially an ongoing process. However in situations where social communication is structured there is a danger that it can be turned into an artificial act (Beveridge, 1989). Professionals at the ground level, are in a position to either enable or potentially disable pupils in their development of social relationships by the environments they create in the classroom and the school environment. This study has indicated the multifarious contexts in which the participants have demonstrated their ability to engage in social communication and interaction and these can be further encouraged and nurtured. The contexts both within the school environment and in the community highlighted in this study, suggest opportunities where encouraging pupils to communicate should broaden their understanding of society and assist in developing their personal qualities within it (Dorchester Curriculum Group, 2002).

Whilst this study does not suggest recommendations advocating specific socio-interactive skills teaching as structured lessons, it is proposed that professionals examine the potential offered by classroom activities and events to engender an ethos supportive of development

of social capability. Some events and activities are very specific to individuals, such as a physiotherapy session for example. However, during the daily course of our lives there are other events and activities that are common throughout our culture. Children and young people will have experienced these and come away with some comparable knowledge and level of familiarity (Pace & Feagans, 1984) upon which to base some form of social activity. The contexts from which this study has provided evidence indicates that these events and activities are likely to be found during the normal daily routines of the classroom and school day.

Miller *et al.* (2000) have highlighted the need for social interaction to become a priority in order to help children integrate socially into their communities. Similarly, Whitehouse, *et al.*, (2001) challenge professionals working with people with severe learning difficulties to facilitate the development of friendships and social networks by supporting and encouraging socially engaging behaviour. This study has provided evidence of how relationships between staff and pupils can be enhanced through informal social connection and facilitated learning experiences through peer group support networks (Vygotsky, 1978). James & Mullen (2002) emphasise the need for schools to support their pupils in making sense of society and surviving in potentially unpredictable environments. Some of the findings in this study have shown that the potential apprehension of pupils with learning difficulties concerning the unfamiliar and unknown has, to some extent, been diminished through the confidence promoted in talking to visitors and engaging in socially interactive encounters with members of the public in the community.

Social connection

During the course of this study, those children who are verbally able have been encouraged to 'have a chat' and 'go and talk about something' during those unstructured periods when there is a free choice of activity and this has led to their increasing independence in peer social interaction (e.g. sequence 30). Those children, whose developmental communicative skills remain at the pre-verbal/gestural stage are encouraged to sign to their peers instead of relying on adult intervention for ownership and use of play equipment for example. An issue to consider however, is the revelation that although socio-communicative interaction did take place, there were occasions when it was by chance and not choice (e.g. sequence 15).

Children and young people who are pre-verbal and non-ambulant are to an extent limited in their personal choice of with or near whom they are situated during their leisure time.

Throughout the course of this study, the findings have increasingly suggested that children and young people with severe learning difficulties place value on their friendships with their peers, their carers, both personal and professional and other adults with whom they come into contact. This suggests a more sociocentric position (Malinowski, 1923; Vygotsky, 1962) rather than the egocentric (Piaget, 1926). Social networks are part of our lives through which we develop friendships and relationships. It is within these networks that we find particular friends that we can turn to, rely on and share with when we need support, help or celebration (Carson & Docherty, 2002). The sequences of social interaction have demonstrated some of these social networks at work.

Social networks can be fostered and encouraged between peers via initiatives from professionals. They may discover a starting point for socio-communicative interaction by focussing on daily news items via 'home-school' diaries or items of interest that children and young people bring from home. Another approach could involve support staff and the topics of conversation that they inevitably use when assisting the children and young people with their personal needs. Graves (2000), in her study, focussed on the topic areas that staff used with the adult client group in day care and residential services for people with mild, moderate and severe learning difficulties. She found that, on average there were more conversations centred on 'functional' topics such as interests and leisure, the community, activities and holidays or trips, rather than the 'social' topics of family, friendships and clients or staff. However, it would appear that the majority of these conversations were staff led, although one must accredit the assumption that conversations are events of 'exchanges of information' therefore some level of participation from the clients would be expected. This study has already highlighted a selection of topics ranging from personal experiences to subjects of common interest that the children and young people readily engage in during their social encounters. Exchanging personal views and information leads to an awareness of like-minded people who share the same interests and with whom social connection provides value in friendship.

Empowerment

Through description, interpretation and discussion this study has indicated that children and young people with severe learning difficulties have values and perspectives to offer. They have been able to talk about what is important to them; have indicated what they choose to talk about; demonstrated how they talk about things and when and where they choose to do so. If they continue to be encouraged to communicate in a social environment, this may increasingly have an empowering influence upon their future communicative encounters. Their views and opinions are important to them and to the social networks to which they belong and their increasing confidence in expressing ideas and feelings enables their participation, whether active or assisted (Ferguson & Lawson, 2003), to broaden within their socio-cultural communities. If people with severe learning difficulties are to be included and empowered in their communities their inherent values and perspectives as members of those communities should be acknowledged (Whitehouse *et al.* 2001). This sense of belonging and being part of a group is essentially a community concept (Ferguson, 1994). This can, however, begin in the communities to which they already share a place, such as the school environment. It is from here that opportunities can be made available to create and provide contexts that will capitalise on these emergent and developing skills of social and communicative interaction.

This study has pursued Malinowski's (1923) claim that we all possess an innate desire to be sociable, to enjoy each other's company and to engage in phatic communion. The data, transcribed and analysed based upon conversation analysis techniques, have presented the reader with an opportunity to discover the potential for socio-communicative interaction amongst children and people with severe learning difficulties. The richly described sequences testify to Malinowski's claim and offer illustrations of the range of functional and strategic means and methods by which the participants have engaged in their social interactions. Contextual cues also suggest the diversity of circumstances and conditions when socio-communicative interaction can potentially occur. This leaves the reader with indicators for raising their own awareness at first hand, of further evidence to support the promotion and development of this under-rated, but necessary skill.

Appendix A

Development of (Social) Communication

The chart provides an at-a-glance view of when children of normal development generally begin to express certain communicative characteristics and features of language development. The age specified is only given as a guide and there will be younger and older children whose developmental characteristics will differ from the norm. It supports and enhances the discussion of communicative development and provides reference points along a developmental path to which the communicative features of children and young people with severe learning difficulties may correlate, albeit at possibly delayed and different levels of attainment. The chart below has been compiled from the work of various authors and their contributions are recognised and acknowledged (Weitz, 1974; Stevens, 1976; Feldstein & Welkowitz, 1978; Rosenfeld, 1978; Wood, 1981; Argyle, 1988; Jordens & Lalleman, 1988; Menyuk, 1988; Coupe O'Kane & Goldbart, 1998; Buckley, 2003; Gillen, 2003).

Age	Vocal/Verbal	Non-verbal
newborn	Able to distinguish between different linguistic sound systems (Gillen, 2003) Cries in response to, e.g., hunger, discomfort (reaction of physical state) (Jordens & Lalleman, 1988; Gillen, 2003) Identify mother's voice (at approx. 4 days) (Jordens & Lalleman, 1988)	Exhibits turn taking in feeding patterns (Gillen, 2003) Short distance vision good, restricted at long distance (Gillen, 2003) Gaze is not fixed (Jordens & Lalleman, 1988) Reacts to human face (Jordens & Lalleman, 1988) Startle reaction (Argyle, 1988) Follows moving object with eyes (at approx. 1-2 hours) (Argyle, 1988)
2-3 wks	Identifies human voice from other noises (Jordens & Lalleman, 1988)	Can synchronise gross movements to adult speech patterns (Weitz, 1974) Responds to body contact (e.g, carry/rock) (Argyle, 1988) Selective looking (Coupe O'Kane & Goldbart, 1998)
1 mth	Vocalises but not as social activity (Jordens & Lalleman, 1988)	Exhibits spontaneous smile (Wood, 1981; Buckley, 2003)) Focuses on eyes (Argyle, 1988) Imitates facial expression of adult (Menyuk, 1988)
2 mth	Cooing sounds, may be musical, usually vowel sounds (Gillen, 2003) Sensitive towards distinctions between consonants (Jordens & Lalleman, 1988)	Begins to grasp objects in reach (Wood, 1981) Begins to fix gaze & establish eye contact (Jordens & Lalleman, 1988) Searches for gaze from others for mutual attention (Jordens & Lalleman, 1988) Exhibits social smile (Jordens & Lalleman, 1988)
3 mth	Potential for producing fully articulated sound, but cannot control vocal mechanism (Menyuk, 1988) Discriminates between female & male voices; mother's voice & female stranger; friendly & unfriendly voices (Menyuk, 1988) When focussing on face & given combined cues of pause/rising intonation/expression, will respond with vocalisation (turn taking) (Menyuk, 1988)	Begins to discriminate emotions of mother (e.g., joy/sadness, surprise, fear) (Argyle, 1988) Responds to touch/body contact (e.g. Cuddle/tickle) (Argyle, 1988) Looks at, grasps, mouths objects & repeats if pleasurable (Coupe O'Kane & Goldbart, 1998)

4 mth	Able to initiate interaction by vocalisation, e.g. squeal, gurgle, chuckle, & growl (Gillen, 2003)	Reaches for unattainable object in view (Wood, 1981) Express emotions of interest, sadness, surprise, anger (Argyle, 1988)
5 mth	Ceases vocalising when mother appears (Jordens & Lalleman, 1988) Relates articulation of sound to what it looks like on lips (Menyuk, 1988) Varies intonation by duration/intensity (Jordens & Lalleman, 1988) Sounds various vowels & some consonants (/b/p/t/k/m/) (Jordens & Lalleman, 1988)	Listens & watches when mother appears (Jordens & Lalleman, 1988) Begin to respond to facial emotions of others (e.g., happy/sad, surprise, fear) (Argyle, 1988
6 mth	Begins to discriminate sounds acoustically (e.g. duration, amplitude, frequency) (Menyuk, 1988)	Gestures with intent (e.g. by pointing) for unattainable object (Wood, 1981) Begins to sense attitude of communicative partner (Gillen, 2003) Begins to visually orient themselves in environment (Jordens & Lalleman, 1988) Expresses emotion of fear (Argyle, 1988)
7 mth	Discriminates between questions & statements (i.e. rising & falling intonation) (Menyuk, 1988) Produces contrasting intonation patterns in babbling (e.g. /bababa/) (Menyuk, 1988) Begins to engage in proto-conversations (e.g. vocalising in alternation) (Jordens & Lalleman, 1988)	Begins to direct own gaze to focus attention of others to desired object (Jordens & Lalleman, 1988) Begins to develop motor abilities (e.g. touch, reach, grasp, mouth) (Jordens & Lalleman, 1988) Participates in repetitive interactional games (e.g. give & take) (Jordens & Lalleman, 1988) Moves rhythmically (Jordens & Lalleman, 1988)
8 mth	Produces syllables in babbling (Menyuk, 1988)	Follows pointing gesture (Jordens & Lalleman, 1988) Begins to establish goal prior to action/behaviour (Coupe O'Kane & Goldbart, 1998) Awareness of behaviour regulators (e.g. in turn taking) (Coupe O'Kane & Goldbart, 1998) Initiates for social interaction (Coupe O'Kane & Goldbart, 1998)
9 mth	Begins to produce proto words (Gillen, 2003) Uses intonation patterns (e.g. questions, exclamation, declaration) (Jordens & Lalleman, 1988)	Visual attention more based on intentionality and mutuality (Jordens & Lalleman, 1988
10 mth	Begins to produce recognisable words by parroting (e.g. Mummy) (Menyuk, 1988) Conveys pragmatic intent (Menyuk, 1988)	Uses specific gestures to indicate intent (Menyuk, 1988) Gains attention by gesture (e.g. showing object, giving) (Argyle, 1988; Jordens & Lalleman, 1988) Participates in social routines (e.g. bye bye) (Gillen, 2003)

11 mth	Increasing use of holophrastic utterances (e.g. 1 word to represent phrase - "biccy" for "give me a biscuit") (Gillen, 2003)	Begins to follow mother's gaze (Argyle, 1988) Imitates actions out of context (e.g.,eating, drinking, sleeping) (Argyle, 1988) Combines gaze/gesture/vocalisation to achieve joint attention (Coupe O'Kane & Goldbart, 1998)
1 yr	Understands 10 words (Menyuk, 1988) Participates & sometimes initiates predictable routines e.g. farewells (Gillen, 2003) Begins to negotiate in interaction (Jordens & Lalleman, 1988)	Smiles as a social behaviour (e.g. greeting) (Wood, 1981) Begins to understand interchangeable roles in interactions (Jordens & Lalleman, 1988) Ceases expression when no person present to see/hear & exaggerates when person present (Argyle, 1988) Spatial orientation satisfied if other person near, in view, in hearing (Argyle, 1988)
15 mth	Understands 50 words (Menyuk, 1988) Produces 10 words (Menyuk, 1988) Associates familiar name to object (Menyuk, 1988) Associates certain words to social memory (e.g. "no-no" for something cannot have) (Gillen, 2003)	Uses pointing more purposefully (Jordens & Lalleman, 1988) Gestures to imitate object/action (e.g. move legs to indicate running) (Argyle, 1988) Girls seek more body contact than boys (with mother) (Argyle, 1988)
1½ yr	Understands 100 words (Menyuk, 1988) Produces 50 words (Menyuk, 1988) Begins to combine 2 words to represent phrases (Gillen, 2003)	Begins to combine gestures & words (Jordens & Lalleman, 1988; Coupe O'Kane & Goldbart, 1998)
2 yr	Provides back-channel responses e.g. uh-huh (Menyuk, 1988) Replicates intonation pattern (Menyuk, 1998) Categorises objects/events & begins to understand arbitrariness of language (e.g. orange = fruit/drink/colour) (Menyuk, 1988; Gillen, 2003) Understands word order (SVO) rules (Menyuk, 1988)	Consistently uses common smile (Wood, 1981) Emergence of gender related communicative behaviours (Wood, 1981) Recognises 6 main facial expressions of emotion (happy/sad, surprise/anger, disgust, fear) (Argyle, 1988) Personal spatial zone at 0•2 metres (Argyle, 1988)
2½ yr	Refers to absent objects (Menyuk, 1988) Understands that turns in conversation alternate (Buckley, 2003)	Contrasts between 2 objects with pointing (Wood, 1981)
3 yr	Can question, state, demand, negate (Menyuk, 1988) Begins to combine 3 words (Menyuk, 1988) Demonstrates turn taking skills, avoiding overlap (e.g. recognises a pause as a cue) (Buckley, 2003)	
3½ yr	Begins to accurately produce 2 consonant blends (Menyuk, 1988)	
4 yr	Adjusts language to age of listener (e.g. speak in simpler terms to younger child) (Menyuk, 1988) Sustains dialogue of familiar event with adult & peers (Menyuk, 1988) Finds humour in comical & physical situations (Menyuk, 1988) Begins to produce puns, riddles & jokes (Menyuk, 1988) Begins to develop ability to consider perspective of others (Buckley, 2003)	Becomes more selective in use of smile - gender related (e.g., boys reserve social smile for other boys, rarely with girls) (Wood, 1981) Begins to interpret and use simple gestures (e.g.,go away; how many; greetings; shape; yes/no)(Wood, 1981) Begins to utilise gesture for emphasis (Wood, 1981) Gaze levels increase (Argyle, 1988)

5 yr	Begins to comprehend inferential cues (Menyuk, 1988) Uses anaphoric reference (e.g. cross referencing) (Menyuk, 1988) Lies (Menyuk, 1988)	Begins to copy gender behaviours of adults within their peer groups (e.g. posture, position, body movement) (Wood, 1981)
6 yr	Begins to comprehend indirest request (Menyuk, 1988) Can bargain, insult, praise, lie (Menyuk, 1988) Begins to detect sarcasm (Menyuk, 1988) Begins to use plural, possession & past tense (Menyuk, 1988)	Gestures become more abstract (e.g. cupped hands for container) (Argyle, 1988) Begins to use batons (gestural emphasis) in phrases (Argyle, 1988)
7 yr	Comprehends non-literal interpretation (Menyuk, 1988) Judges message for quality, quantity & type of information (Menyuk, 1988) Applies simple associations between objects/events (Menyuk, 1988) Uses some irregular verb forms & plurals (Jordens & Lalleman, 1988)	Becomes increasingly aware that other's inner emotion may be different to that which they are expressing (esp. negative emotion) (Argyle, 1988) Most body contact with same gender (Argyle, 1988) Increases in positive & negative behavioural cues (Rosenfeld, 1978) Employs pause congruence in interaction (Feldstein & Welkowitz, 1978)
8 yr	Conversational turns tend to be tangential (minimally related) (Menyuk, 1988) Topics include story telling (Menyuk, 1988) Can use altruistic lying (Menyuk, 1988) Can explain simple metaphors (Menyuk, 1988) Begins to incorporate semantic features into vocabulary use (Wood, 1981)	Body contact begins to decline (Argyle, 1988) Recognises communicative functions of neutral & subtle negative facial reactions (Rosenfeld, 1978)
9 yr	Compares & contrasts referential & non-referential information (Menyuk, 1988) Applies more conscious rather than intuitive semantic knowledge (Menyuk, 1988)	Gender differences in visual interaction become more apparent (girls interact more than boys) (Weitz, 1974)
10 yr	Begins to appreciate deliberate deception (Menyuk, 1988) Applies intonation and stress more accurately (Menyuk, 1988)	
11 yr	Makes cross-modal associations & explains reasoning (Menyuk, 1988)	
12 yr	Makes criticisms in friendships (Stevens, 1976)	
13 yr	Begins to effectively maintain conversational topics (Menyuk, 1988)	Gaze levels decline (Argyle, 1988)
14 yr	Begins to develop conversation around psychological & social topics (Menyuk, 1988)	
18 yr	Turn taking more factual & perspective related (Menyuk, 1988) Discusses social issues (Menyuk, 1988)	Gaze levels increase (Argyle, 1988) Personal spatial zone at 0•5 metres (Argyle, 1988)

Appendix B

Profiles of pupil participants

Notes: AT1 levels refer to English curriculum Speaking & Listening; published by DfEE & QCA (1999)

P levels refer to 'Supporting the Target Setting Process'; published by DfEE (2001)

Makaton - simplified sign language based on British Sign Language developed by Margaret Walker in 1976 to aid people with speech and learning difficulties in their communication

BSL - British Sign Language

None of the participants had a specific visual or hearing impairment, other than some, who wore spectacles to correct eyesight

name	age	school learning difficulty/ impairment	comments
Margaret	10	Special; severe	Uses speech with good range of vocabulary; AT1 level 1. Sentence length - short (approx. 3-6 words).Attended from nursery onwards. Lives at home with parents and elder sister. Quiet. Enjoys books to look at.Wears spectacles.
Jenny	10	Special; severe; epileptic	Uses speech with good range of vocabulary; AT1 level 1.Sentence length - short to medium (approx. 4 - 10 words). Attended from nursery onwards. Lives at home with parents and 2 sisters, one older, one younger. Talks quite a lot.
Thomas	8	Special; severe; Down's syndrome	Uses speech with fair range of vocabulary AT1 level 1 and some Makaton type signs to supplement (stage 1). Sentence length - short (approx. 3-6 words). Stutters occasionally.Attended from nursery onwards. Whilst in Years 1 & 2, attended his local primary school for one day per week.Lives at home with his parents and younger brother. Ranges from very quiet (formal situation) to very chatty (informal situation). Often resorts to silence when being asked direct questions by adults.

Paul	8	Special; severe; autistic	Uses Makaton type signing quite well (up to stage 3). Beginning to use speech in imitation. Has spontaneously used up to 20 single words or 2 word phrases, but not consistently. Attended from nursery onwards. Lives at home with parents and older brother and sister. Sister is profoundly deaf and uses BSL.Does not often spontaneously interact with peers.
Susan	8	Special; severe; epileptic	Uses speech with a very good range of vocabulary AT1 level1/2. Sentence length - medium (up to 10+ words). Has been at the school for approx. 1 year. Previously attended another special school in different area. Lives at home with mother and younger sister. Very chatty, but repeats a lot of adult talk. Often directs conversation to adults.
Chrissy	17	Special; severe; Down's syndrome	Uses speech with a good range of vocabulary; AT1 level 2/3; sentence length-medium (up to 10 words);some Makaton signs; attended from age 7 (previously at unit attached to mainstream primary); lives at home with mother & older brother & sister.Wears spectacles.
Pam	18	Special; severe; Fragile X syndrome	Uses speech with a good range of vocabulary; AT1 level 2; sentence length- long (up to 15+ words) attended from age 11 (previously at unit attached to mainstream primary & 1 term at unit in secondary); lives at home with parents
Jon	17	Special; severe; autistic	Uses speech with a good range of vocabulary; AT1 level 2/3; sentence length short to medium (4-10 words); attended from nursery; lives at home with parents & younger sister.

Melissa	16	Special; severe; epileptic	No speech other than "Hiya"; uses some sounds to convey mood; level P2 (i); attended from age 16 (previously at other special school); lives at home with parents & younger sister
Anna	16	Special; severe; Down's syndrome coeliac	No speech; uses Makaton up to stage 2; level P3 (i); attended from age 16 (previously at other special school); lives at home with parents
Debbie	18	Special; severe; cerebral palsy; uses wheelchair (capable of moving herself around by moving her feet in front of her chair	No speech; uses some sounds to convey mood; uses some basic Makaton signs; level P3 (i); attended from age 16 (previously at other special school); lives at home with parents
Rob	16	Special; severe; challenging; autistic	Uses some repetitious basic speech usually out of context; uses some basic Makaton signs; level P1(ii); attended from age 16 (previously at other special school); lives at home with parents & elder brother
Helen	19	Special; severe; severe cerebral palsy; uses wheelchair; requires assistance for all needs	No speech; uses some sounds to convey mood; level P3 (i); attended from nursery; lives at home with parents
Neil	17	Special; severe; epileptic; uses wheelchair; capable of moving wheelchair using hands on wheelbars	No speech; uses some sounds to convey mood; uses Alphatalker for basic requests; level P 3 (i); attended from age 16 (previously at other special school); lives at home with parents.Wears spectacles.
Tracy	17	Special; severe; Down's syndrome	Uses speech with a fair range of vocabulary; AT level 1/2; sentence length-short (up to 5 words);attended from age 16 (previously at other special school); lives at home with parents

Greg	17	Special; severe; Down's syndrome	Uses speech with a good range of vocabulary; AT level 2/3; sentence length-medium (up to 10 words); attended from age 16 (previously at other special school); lives at home with father
William	10	Special; severe	Uses speech with a good range of vocabulary AT1 level 1;sentence length-medium (up to 10 words); attended from age 9 (previously at other special school); lives at home with parents and older brother (who attends same school)
Jason	4 mths	Normal development	Vocalizes pleasure/displeasure
A B C D Girls	16	Mainstream secondary; normal development	Use speech with a wide and fluent range of vocabulary AT1 level 7/8
Ben, Martin & Jason	15	Mainstream secondary; normal development	Use speech with a wide and fluent range of vocabulary AT1 level 7
Barbara	18	Special; severe	Uses speech but with very poor articulation; uses some Makaton signs to support communication; AT1 level 1;sentence length-short (up to 5 words); attended from age 16 (previously at other special school); lives at home with mother
Judith	8	Special; severe; autistic	No speech; uses some sounds to convey mood; level P 2 (i);attended from nursery; lives at home with parents
Janet	8	Special; severe;challenging	No speech other than 'Hiya'; uses a few basic Makaton signs; uses some sounds and gestures to convey mood; level P 3 (ii); attended from nursery; lives at home with parents and older sister

Rachel	9	Special; severe	Uses speech with fair range of vocabulary; AT1 level 1;sentence length-long (up to 15 words); attended from age 7 (previously at mainstream primary); lives at home with parents and older sister
Marina	8	Special; ssevere	Uses speech with fair range of vocabulary; AT1 level 1; sentence length-long (up 20 words);attended from age 7 (previously at mainstream primary); lives at home with parents
Geoffrey	9	Special; severe; autistic	Uses speech with fair range of vocabulary; AT1 level 1; sentence length-short (up to 5 words);attended from nursery, lives at home with parents and older sister
Lisa	8	Special; severe;epileptic	Uses speech with small range of vocabulary; AT1 level 1; sentence length- short (up to 5 words); attended from age 7; (previously at other special school); lives at home with parents & younger sister & brother
John	8	Special; Severe; Down's syndrome	Uses speech with fair range of vocabulary; uses Makaton signs (up to stage 2);AT1 level 1; sentence length-short (up to 5 words); attended from age 6 (previously at mainstream primary & other special school); attends local primary for 2 afternoons per week; lives at home with parents & younger sister

Appendix C

Transcribed sequences of social communication and interaction
(please refer to Appendices D & E for key to transcription symbols and non-verbal communication codes)

SEQUENCE 1 - field notes
Context - The group are in their classroom engaged in a Design and Technology lesson. The pupils Jenny and Margaret, and 2 members of staff, Julia (myself) and Kim (aide), are all sat around a table working on a project. The rest of the class are working at another table. It is fairly quiet.

1	Margaret	I goin home tonight	GZ ((continues looking at picture she is cutting out))
2	Julia	So am I	GZ ((towards Margaret))
3	Kim	We all are (3.0) No school tomorrow	
4	Jenny	No school tomorrow	PS ((raises head and sits back in chair)) GZ ((towards Julia))
5	Julia	Shout hooray:::::	GZ ((towards Jenny))
6	Jenny	HOORAY:::::	EX ((smiles and laughs))
		(5.0)	
		What are you doing tomorrow Julia ?	GZ ((towards Julia))
7	Julia	I'm going shopping (1.0) What are you going to do Jenny	GZ ((towards Jenny))
8	Jenny	Shopping	
		(4.0)	
		What are <u>you</u>:: going to do tomorrow Margaret	GZ ((towards Margaret))
		(1.0)	
9	Margaret	Garden centre	PS ((sits up and back in chair)) EX ((smiles and laughs in excitement))

SEQUENCE 2 - field notes

Context - The group are in their classroom after lunch during free time. Thomas is standing by a collection of objects on an art display. He picks up a stone and holds it very carefully in his cupped hands. The other pupils are engaged in their own activities. Jenny is sitting at same table as Julia (myself) looking at some photographs, whilst Julia is writing. Margaret is sitting in the book corner looking at book and Paul is lying on the floor playing with a train set. It is fairly quiet.

1	Thomas		OR ((walks across room to stand beside Julia))
		Julia (.) look at the stone	GZ ((towards stone then eye contact with Julia))
2	Julia	Oh::: it's beautiful	GZ ((towards stone then eye contact with Thomas))
3	Thomas		OR ((moves around table to stand beside Jenny))
		Jen (.) look at the stone	GZ ((towards stone then towards Jenny))
		(2.0)	
4	Jenny		GZ ((towards stone then back to photographs))
5	Thomas		OR ((moves across room to stand in front of Margaret))
			PS ((bends over to lower hands))
		Margaret (.) look at the stone	GZ ((towards stone then eye contact with Margaret))
6	Margaret	Ah::::::	GZ ((towards Thomas then to stone))
7	Thomas		OR ((moves across room to stand next to Paul))
			PS ((bends over to lower hands))
		Paul (.) look at the stone	GZ ((towards stone then towards Paul))
		(8.0)	

8 Paul		GZ ((ignores Thomas and continues to look at train set))
9 Thomas		OR ((squats down on haunches and moves hands nearer to Paul's face))
		PR ((1 ft))
	PAUL (0.5) look at the stone	GZ ((towards stone then eye contact with Paul))
10 Paul		GZ ((eye contact with Thomas then towards stone then back towards train set))

SEQUENCE 3 - field notes

Context - The group are in their classroom. Jenny, Margaret, Thomas, Paul and Susan are sitting around a table at breaktime having a drink and biscuit. Julia (myself) is sitting at the same table and Tina (aide) is sat nearby. It is quiet.

1 Tina	Is Nicky poorly	GZ ((eye contact with Julia))
2 Julia	No (.) One of her children is so she's had to stay at home	GZ ((eye contact with Tina))
	(2.0)	
3 Jenny	I was poorly yesterday	GZ ((eye contact with Julia))
	(2.0)	
4 Margaret	You watch video ?	GZ ((eye contact with Jenny))
5 Jenny	Tiny Tots TV	GZ ((eye contact with Margaret)) EX ((smiles and gives a little giggle))
	((begins to sing song from programme))	

SEQUENCE 4 - video recording

Context - The group are in their classroom after break-time during free time. Jenny is sitting at a table looking through a catalogue and Margaret is sitting in the book corner looking at a book. It is fairly quiet.

1 Jenny		PS ((has legs crossed left over right and moving slightly from side to side. Sat upright with head bent forwards)).
	Got that at the hostel	GT ((Left hand on corner of catalogue and right index finger pointing to a picture))
	(5.5)	
2 Margaret		OR ((walks over to table where Jenny is sitting))
		PX ((less than 30cm))
		PS ((stands at left with palms flat on table next to catalogue slightly leaning forward))
	What's that	GZ ((looks at catalogue continuously))=
3 Jenny		=GT ((turns one page back))=
4 Margaret	I (.) [I <u>got</u> that	=GT ((right index finger points to picture on page now visible and taps))
5 Jenny		GT ((tries to turn page back to original))
6 Margaret		GT ((puts right hand on catalogue and moves page back to prevent Jenny turning it))
7 Jenny	( )]	GT ((hands on catalogue))
8 Margaret		GT ((picks up catalogue))
	I got that	OR ((turns to right and walks back to chair lifts head slightly
	(1.0)	

	I got that thing	and sits down))
9 Jenny		GZ ((looks at Margaret's face and watches her sit down))
10 Margaret	It's Maisie( )	GZ ((looks at catalogue and begins turning pages))
	((begins singing))	
11 Jenny		OR ((gets up and walks over to Margaret, leans over and looks at catalogue, sees other catalogue on floor, picks it up and goes back to table))

SEQUENCE 5 - video recording

Context - The group are in their classroom after break during free time. Jenny and Margaret are sitting together in the book corner. Jenny is looking at a book and Margaret is flicking the page corners of a catalogue against her fingers. Trudy (aide) is sitting a short distance away from the children.

1	Jenny	Where's Molly	GZ ((looking at book))
		(3.0)	
		Hello:::=	
		=Where's Molly	
2	Trudy	She had to go home didn't she	
3	Jenny	+Yeah+	
		(0.5)	
		Say poor Molly	
		Where's Molly Margaret=	PS ((lifts head))
			GZ ((towards Margaret))
		=Where's Molly Margaret	PS ((leans towards Margaret))
			PX ((less than 30cm))
			HP ((touches Margaret on arm with fingers))
4	Margaret		PS ((sits up slightly lifts head))
			OR ((turns towards Jenny))
			GZ ((eye contact with Jenny))
5	Jenny		GZ ((eye contact with Margaret))
6	Margaret	((no reply))	

SEQUENCE 6 - field notes

Context - The group are in a classroom working at tables during a Community Art lesson. They have been involved in a project making nest boxes. Chrissy is sitting at a table with her completed work in front of her. Pam is finishing off her nest box. Nicky has just completed hers and Meryl (aide) is helping Lyn to finish her box. Julia is helping 2 other students (with PMLD) with their work. The students and staff are fairly spaced out (e.g. approx. no more than 2 people at a set of 2 tables) around the classroom. There is some quiet verbal prompting between the staff and students who are working together. There is some classical music playing quietly in the background.

1	Chrissy		OR ((picks up finished nest box, turns it round so that she can see the front and places it on the table directly in front of where she is sitting))
			GZ ((to her nest box for 3 seconds))
			EX ((slight smile and exhales loudly))
			GZ ((eye contact to Julia, then to Meryl))
		My Mum (2.0) very	SL ((sign for me/mine))
		proud (2.0) her daughter	SL ((sign for 'here'))
		make bird box	GT ((both hands make slight up & down movement))
2	Pam	Mmmm	GZ ((towards Chrissy and then to nest box))
			EX ((raises eyebrows))

SEQUENCE 7 - video recording

Context - In the dining area at morning break. All the students (approx. 25) are present in the area. The CD player is on playing loud pop music. 4 students are disco dancing near the CD player in front of some mirrors. 2 students are sitting directly in front of the CD player with their heads next to the speakers. The remaining students are either sitting or standing around the area engaged in other activities (e.g., jigsaws, looking at photographs, talking to staff sitting quietly). Jon is sitting in the corner. Chrissy is disco dancing in front of him approximately 1 metre away. She has previously put on her sunglasses and black gloves. 5 members of staff are present positioned around the area.

1	Chrissy	((singing to recording -Cotton Eye Joe, Rednex))	GT ((arm extends pointing towards Jon))
			GZ ((eye contact with Jon))
2	Jon	Chrissy sit down	GZ ((eye contact with Chrissy))
			GT ((points to chair next to his))
3	Chrissy	((singing))	EX ((smiles at Jon))
			OR ((slightly raises head))
			GZ ((lowers gaze))
			OR ((turns 180° continues dancing))
		(1.5)	
4	Chrissy		OR ((turns upper body to face Jon))
			GZ ((eye contact with Jon))
			OR ((turns to face forwards again))
		(1 min.)	
5	Jon	<u>Chrissy</u>	GT ((points to Chrissy))
		(1.0)	GZ ((gaze towards Chrissy))
		<u>SIT DOWN</u>	GT ((points to chair again))
6	Chrissy		LM ((moves to other side of counter and turns to face Jon. Continues dancing))
			EX ((smiles to Jon))
		(2 mins)	

			LM ((moves back around counter and continues dancing in front of Jon facing him))
			GZ ((eye contact with Jon))
7	Jon	((begins singing to recording - Voulez vous, Abba))	GZ ((gaze towards Chrissy))

SEQUENCE 8 - field notes

Context - At the end of morning break in the dining area. The students (approx. 20) have been asked to move back to their classrooms from the dining area. Most of the students are making their way towards their classrooms. The staff are asking some students by name to go to their classrooms, whilst others are requiring physical prompting or assistance. Julia and Alan (aide) are prompting Melissa and Anna to return to the classroom.

1	Julia	Come on Melissa (..)	PX ((approximately 3 metres))
		Back to class	LM ((moving towards Melissa whilst pushing another student in their wheelchair))
2	Melissa		LM ((begins to move towards corridor leading to classroom))
			GZ ((gaze towards floor))
3	Alan	Come on Mellissa	PX ((approximately 2 metres))
4	Alan	Come on Anna	PX ((standing next to where she is sitting))
			GT ((gestures with left hand to get up and continues to keep arm extended))
5	Anna	(..)	PS ((remains seated))
			OR ((puts feet up on bench in foetal position and puts head on knees))
6	Alan	Anna (..) Come on	GT ((moves left hand sharply upwards))
7	Julia		LM ((moved forwards with student in wheelchair and come to a halt behind Melissa))
8	Melissa	((makes grunting noise))	LM ((has moved forwards and come to a halt behind Alan))
			PX ((less than 30cm))
			EX ((frowns and extends lower lip))
		((makes a slight squeal))	HP ((hits Alan on left hand side of his body 3 times in succession with her clenched left hand))

9	Alan	Ugh	OR ((turns upper body to left)) GZ ((gaze towards Melissa))
10	Melissa		GZ ((raises head and makes eye contact with Alan)) EX ((raises eyebrows))

SEQUENCE 9 - field notes

Context - In the girls toilet at the end of lunch time. Chrissy had arrived back from the sports centre and is getting changed back into her ordinary clothes. Julia is going to the toilet.

1	Julia	Hello Chrissy ? =	LM ((enters girls toilets)) GZ ((eye contact with Chrissy))
2	Chrissy	Hi ::::::	GZ ((raises head slightly and gazes towards Julia))
		(...)	
3	Julia		LM ((goes into cubicle and closes door))
4	Chrissy	We got you now ?	
5	Julia	Mmmm	
		(1.0)	
6	Chrissy	Art ?	
		(..)	
7	Julia	Ye :::s	
		Can you remember what we're doing ?	
8	Chrissy	Trees =	
		= See ya in a minute	
9	Julia	Okay ::::	
10	Chrissy	See ya in a minute Julia	((Julia - can hear door opening and voice getting fainter))

SEQUENCE 10 - video recording

Context - In the classroom during a Leisure Options activity in the afternoon. The lesson focus is music. The group of 4 students comprises those who are functioning at the lower end of the SLD range, all of whom have little or no speech. Debbie is in her wheelchair (she can move herself around in it using a walking movement with her feet), Rob and Julia are sitting on mats and fabrics on the floor, Anna, Melissa, and Meryl (aide) are sitting on chairs. The group is sitting more or less in a circle. I have just introduced the activity and what we are going to do during the afternoon. There is some quiet restful music playing in the background. Rob gets up and takes himself into the quiet room.

1	Debbie	A a aa e ?	EX ((smiling))
			GZ ((looks round at members of group in a sweeping gaze))
			PS ((moves herself forward in chair so that her feet can touch the floor in front of the foot plates))
			LM ((moves towards Anna))
			PX ((less than 30cm))
			PS ((leans forward in chair))
		+Aaaaa+	HP ((stretches out right arm and gently strokes Anna's head once))
			GZ ((gaze towards Anna))
2	Anna		GZ ((eye contact with Debbie))
			EX ((gives slight smile))
3	Debbie		LM ((turns and moves towards Melissa))
			EX ((smiling))
			PX ((less than 30cm))
4	Melissa		LM ((pushes chair backwards with feet approximately 15cm))
5	Debbie		HP ((stretches out right arm and gently strokes Melissa's head once))
			EX ((smiling))
		+Aaaaa+	GZ ((gaze towards Melissa))

6	Melissa	UH	OR ((startled jerky movement raising and lowering body quickly)) GZ ((eye contact with Debbie)) EX ((raises eyebrows))
7	Debbie	Aaaayyymmmm	LM ((moves back to where she started from))
8	Melissa	Hiya ?	OR ((raises head)) EX ((smiles)) GZ ((gaze towards Debbie))

The session continues with some movement to music activities (loud and fast). Rob is asked to come and rejoin the group at several intervals but refuses. Towards the end of the movement to music session Rob rejoins the group and sits on some mats and fabrics on the floor. He holds his head in his hands, eyes closed & his fingers in his ears. The movement to music session finishes and a tape is played of quiet restful music for relaxation.

9	Debbie		GZ ((gaze towards Rob)) EX ((smiling)) PS ((moves herself forward in chair so that her feet can touch the floor in front of the foot plates)) LM ((turns and moves towards Rob)) PX ((less than 30cm)) HP ((stretches out right arm and gently strokes Rob's head once))
		+Aaaaa+	GZ ((gaze towards Rob))
10	Rob		OR ((raises head)) GZ ((eye contact with Debbie))
11	Debbie	A aa ?	EX ((gives a huge smile)) OR ((turns to Julia)) GZ ((eye contact with Julia))
12	Julia	Mmm	EX ((smiles)) GZ ((eye contact with Debbie))

13	Debbie		GZ ((eye contact with Meryl))
14	Meryl	Ah:: Debbie	GZ ((eye contact with Debbie))
15	Debbie		OR ((turns back to face Rob))
			GZ ((eye contact with Rob))
		+Aaaaa+	HP ((stretches out right arm and gently strokes Rob's head once))
16	Rob	Na	OR ((lowers head and puts fingers in ears))
			EX ((closes eyes and frowns))
17	Julia	Debbie go and sit back over there	GT ((points towards space where Debbie was sitting))
18	Debbie		EX ((stops smiling))
			GZ ((gazes towards Rob))
19	Meryl	Come away now Debbie	LM ((gets up from chair to pull Debbie's wheelchair away from where Rob is sitting))
20	Debbie		EX ((frowns))

SEQUENCE 11 - tape recording & field notes

Context - In a classroom during a Community Art lesson. Chrissy, Pam & Jon are sitting together at a set of tables painting sheets of paper with glue to make some tree pictures. They are sitting at a separate table to the rest of the group. There is some quiet classical music playing in the background.

1	Chrissy		PS ((raises head but continues glueing))
		All over	GZ ((gaze towards Pam))
2	Pam		
		Yes (.) That's right	GZ ((eye contact with Chrissy))
		All over	
		(2.5 minutes)	
3	Chrissy	Come on Jon (..)	GZ ((eye contact with Jon))
		<u>get busy</u>	
4	Jon	((hums tune))	PS ((sits back in chair))
			GZ ((eye contact with Chrissy))
		(0.5 minute)	
5	Chrissy		PS ((stands up to continue glueing))
6	Pam	D D D Do you know what	PS ((raises head & stops glueing))
		you're wearing tonight	GZ ((gaze towards Chrissy))
		Chrissy ?	PS ((lowers head quickly and continues glueing))
			OR ((slightly turns towards Chrissy))
7	Chrissy	Mmmm Yeah	PS ((stands upright continuing to hold brush in right hand))
			GZ ((gaze towards Pam))
		TOOMORROW (...)	SL ((sign for 'today'))
		((voice deepens))	
		wear::: (.) nice close	
		(3.5)	
8	Pam	A a a are you going out	PS ((raise and lowers head quickly))
		tonight Jon	GZ ((gaze towards Jon))

9	Jon	Yes ? (.)	EX ((raises eyebrows))
		Mmmm	GZ ((gaze towards Pam))
		No	EX ((frowns))

SEQUENCE 12 - field notes

Context - In a classroom setting. Jason, who is 4 months old, is sitting in his carrier on a chair next to his mother whilst she is attending an adult education class. Jason and Julia. Jason has his soft toy "Po" (teletubby) with him.

1	Julia		EX ((smiling)) PS ((at eye level with Jason holding "Po" at same level to left hand side)) PX ((faces approximately 60cm apart)) GZ((gaze to Jason))
2	Jason		GZ ((turns towards Julia then eye contact established))
3	Julia	What's this ?	GT ((waving Po in hand))
4	Jason		GZ ((gaze towards Po))
5	Julia		GT ((held Po back just slightly out of reach))
6	Jason		GZ ((eye contact with Julia))
7	Julia	Do you want Po ?	GZ ((gaze to Po then eye contact with Jason))
8	Jason		GZ ((eye contact with Julia)) EX ((smiles)) GZ ((gaze to Po)) GT ((reaches out with arms to Po))
9	Julia		GT ((move Po nearer to Jason))
10	Jason	((short intake of breath))	GT ((puts hands/arms around Po and moves into chest))

SEQUENCE 13 - field notes

Context - In a classroom at the beginning of a Food Technology lesson. Karen (teacher), Mary (aide) and Julia have taken the group over to another building for the lesson. Within 2 minutes it had started to snow. Karen was busy setting out the ingredients on a table. Mary & Julia were moving the tables to provide a suitable working area for the pupils. A brief discussion about the weather was ongoing between the adults. William, a pupil, joined in the conversation.

1	Karen	Had much snow ?	GZ ((eye contact with Julia then lowers head and continues setting out ingredients))
2	Julia	A fair bit (..) What's it like in ((rural town)) ?	GZ ((raises head and eye contact to Karen then lowers head to continue moving table))
3	Mary	Snow all day (..) awful going home	GZ ((gaze towards Julia and eye contact))
4	Julia	Ye:::s (.) I was in ((large city)) yesterday (..) It snowed all day (...) was like a <u>blizzard</u> going home	GZ ((eye contact with Mary))
5	William	Yes it was in ((small town)) (....) then (..) when it got dark (.) it stopped	LM ((walks towards Julia)) PX ((walking past Julia)) GZ ((eye contact with Julia)) LM ((sits down at table behind Julia))

SEQUENCE 14 - field notes

Context - During morning registration in a mainstream Secondary school. A group of 6 Year 11 girls are sitting around a table. They are referred to here by an initial letter only. E & F remain silent but follow the conversation by gaze and orientation of head.

1	A	+Did you see Dale+ ?	GZ ((eye contact to B))
			PS ((leans forwards over table))
2	B	(.)	GZ ((eye contact with A))
3	C	Yeah::: (..) e came up t'	GZ ((eye contact towards B then A))
		me and went	GT ((gestures 'pushing away to side'
			action))
4	D	'Member when we did( )=	GZ ((gives sweeping gaze around group
			and finally eye contact with A))
5	A	=Yeah we all went up	GZ ((eye contact with D then with C))
6	A	Somebody had a go at <u>me</u>	GZ ((resumes eye contact with D))

SEQUENCE 15 - video recording

Context - In the dining area at morning break. All students (approx. 20) are present either in the dining area or outside on the grass. The CD player is on playing loud pop music. The students who are indoors are either sitting or standing around the area engaged in various activities (e.g., jigsaws, looking at photographs and books, talking to staff, sitting quietly). There are 3 members of staff present positioned around the area and 2 outside. Helen and Neil are in their wheelchairs next to one another. Neil's chair is slightly forward of Helen's and to her right.

1	Helen	((laughing))	GZ ((gaze towards Neil))
			EX ((smiles))
		((laughs))	PS ((leans forward))
			HP ((reaches out with her right arm &
		((giggles))	touches Neil's shoulder))
2	Neil		OR ((turns head to look over left
			shoulder))
((Neil is unable to see Helen as his wheelchair is too far forward of hers))			
3	Helen	((still giggling))	GZ ((gaze towards Neil))
			GT ((taps Neil's shoulder once))
4	Neil		PS ((leans slightly forward))
			OR ((turns body to left))
			GZ ((eye contact with Helen))
		((laughs))	EX ((smiles))
		(4.5)	OR ((turns to face forwards))
5	Helen		PS ((sits back in chair))
			GZ ((looks around to other students))
		(approx. 5 minutes)	
6	Helen		GZ ((gaze towards Neil))
			EX ((smiles))
		((laughs))	PS ((leans forward))
			HP ((reaches out with her right arm &
		((giggles))	touches Neil's shoulder))
7	Neil		OR ((turns body to left))

		((laughs))	GZ ((eye contact with Helen))
			PS ((raises & moves left arm backwards))
		((giggles))	GT ((holds Helen's hand))
		(3.0)	GT ((lets go of Helen's hand))
			OR ((turns to face forwards))
8	Helen		PS ((sits back in chair))

SEQUENCE 16 - field notes

Context - During afternoon registration in a mainstream secondary school. 3 Year 10 boys have come into the classroom together but are sitting separately for registration. They are sitting on the same side of the room but Ben is at the back and the other two, Martin and Jason, are towards the front, sitting at tables each side of the aisle.

1	Martin		OR ((turns to face towards Ben))
			GZ ((eye contact with Ben))
2	Jason		OR ((turns to face towards Ben))
			GZ ((looks towards Ben))
3	Ben	Fine Mart (.) You cum	GZ ((eye contact with Martin))
		f' me if yuh get the money	GT ((points to Martin))
4	Jason		GZ ((looks towards Martin))
5	Martin	Yeah=	GT ((nods in agreement))
6	Ben	=then we'll cum f' you	GZ ((eye contact with Jason))
		Jase	GT ((nods once))
7	Martin		GZ ((gaze towards Jason))
8	Jason		GZ ((eye contact with Ben))
9	Ben	<u>Mart</u> (.) I'll ring ya t' see	GZ ((eye contact with Martin))
		if yuh can get money then	GT ((points to Martin))
		(...) straight after school	EX ((raises eyebrows))

SEQUENCE 17 - field notes

Context - In the dining area at morning break. All students (approx. 25) are present in the dining area. The CD player is on playing loud pop music. The students are either sitting or standing around the area engaged in various activities (e.g., jigsaws, looking at photographs and books, disco dancing, talking to staff, sitting quietly). There are 5 members of staff present positioned around the area. Tracy is standing in the corner crying. Greg and Pam are nearby.

1	Tracy		EX ((sobbing loudly) PS ((face is covered with both hands, head is lowered))
2	Greg		GZ ((looks towards Tracy)) LM ((moves to stand next to Tracy)) PX ((less than 15cm))
		+Never mind Tracy+	HP ((puts left arm around her shoulder)) PS ((lowers head so that it touches hers))
3	Pam		PX ((approx. 2 metres away)) GZ ((looks towards Greg)) EX ((frowning)) LM ((moves towards Greg)) PX ((approx. 60cm)) OR ((moves head forwards towards Greg)) GZ ((establishes eye contact))
4	Greg		OR ((turns head towards Pam)) EX ((raises eyebrows in surprise))
5	Pam	DON'T YOU DO THAT TO TRACY (..) <u>I I gave you a Valentine card</u>	EX ((continues frowning)) EX ((purses lips)) GS ((points to Greg)) HP ((finger pokes his chest))

GZ ((maintains eye contact for 7 seconds))

OR ((turns round quickly))

LM ((walks away))

SEQUENCE 18 - field notes

Context - In the classroom during morning registration. Fairly quiet, relaxed environment. The students are arriving from their transport into the classroom. 6 students already present. 2 members of staff present in room. Students all engaged in activities (e.g., looking through books, magazines, completing a jigsaw, colouring a picture). Khaled is sitting at a table with his back to the door and is working on a maths puzzle. Daniel has just arrived and is walking into the classroom. Some talking between staff and other students regarding news from home, money, engaging in an activity.

1	Daniel		LM ((walking forwards into room))
			GZ ((gaze towards Khaled))
			PX((approx. 4 metres))
		Oh no (.) not you ?	LM ((stands still))
			EX ((smiling))
2	Khaled		OR ((turns upper body to look over left shoulder))
		Ohhhh::::::: ?	GZ ((eye contact with Daniel))
3	Daniel		LM ((moves towards table))
			PS ((sits next to Khaled))
			PX ((clothing of upper arms touching))
			GZ ((re-establishes eye contact))
4	Khaled	+Or righ ?+ ((alright))	GZ ((maintains eye contact))
		(5.0)	EX ((smiles))
			PS ((lowers head))
			GZ ((looks down & continues work))
5	Daniel	de de de du dum((hums tune))	GZ ((looking round room))
6	Khaled	((laughs))	GZ ((looks towards Daniel))

SEQUENCE 19 - field notes taken from adjacent room (therefore no non-verbal communication observed) ; another member of staff was present as recording took place

Context - On arrival at the community flat after school. Pam & Tracy are in their room unpacking. (The school rents a domestic flat, within a block of flats, approximately 1 mile from the school. It is used as an educational resource to allow opportunities for the students to practise their daily living skills, e.g., cooking meals and snacks; housework; shopping. Some students have the opportunity to experience an overnight stay to further develop their personal and social skills. There are usually 2 or 3 students with 2 members of staff for an overnight stay. They will generally go out for a meal and possibly go bowling, to the cinema, to the theatre or a similar activity.)

1	Pam	((giggling)) wi (.) wi (.) we're <u>sleeping together</u> ? ((giggles))=	((noises of unzipping bags and the rustle of clothes can be heard))
2	Tracy	= Aaaaah ?=	
3	Pam	=Ooooh (.) Yikes (3.0)	
4	Pam	Come on (...) let's get unpacking	
5	Tracy	Mmm	

SEQUENCE 20 - tape recording from adjacent room (therefore no non-verbal communication observed); another member of staff was present as recording took place

Context - at the community flat (see sequence 19 notes). Pam, Tracy & Barbara have just gone to bed.

1 Pam	We're sleeping together=	
2 Barbara	=Hahaha ?	
3 Pam	+goodnight then+	
4 Tracy	N nigh ?	
5 Pam	+now let's get some sleep+	
6 Tracy	Nigh	
7 Pam	Night night Tracy	
8 Tracy	((heard yawning))	
9 Pam	Uh ? Ecky thump (...) Come on let's get some sleep (6.0)	
10 Pam	Night Barbara	
11 Barbara	Ah	
12 Pam	Night night everybody	
13 Barbara	Nigh Pa (..) Nigh Tray (4.0)	((Barbara tends not to sound the final syllables of words))
14 Pam	HAHA (.) <u>I can hear somebody snoring</u> ((loud giggles from all)) (2.0)	
15 Pam	Night night everyone	
16 Tracy	Uuuugh ?=	
17 Pam	=Shhh let's get some sleep	

SEQUENCE 21 - video recording

Context - On arrival in classroom. This is the first day back after the summer break. Janet and Judith have both been moved to the next class for the new academic year. Therefore they have been brought into an unfamiliar room and are surrounded by unfamiliar people. Both pupils have no speech, but can make their mood known by recognisable noises.There are 2 members of staff present and 3 other pupils. They are busy taking their coats off and sorting out their bags.

1	Judith	LM((wandering round the classroom))
		(approx. 5 mins)
2	Janet	((Janet arrives - brought into classroom by escort))
		EX ((looks bewildered))
		PS ((stands motionless))
		GZ ((looks round room and at different people - staff and pupils. No direct eye contact is made))
		(1 min)
		GZ ((sees Judith))
		LM ((deliberately walks towards her))
		EX ((begins to smile))
		PX ((less than 30 cm))
		OR ((stands face to face))
		EX ((beaming smile))
3	Judith	GZ((head moving from side to side/ up & down, avoiding eye contact))
4	Janet	HP ((takes hold of both Judith's hands in hers))
		GZ ((looks directly at her, attempts to make eye contact by following head movements))
	((giggles))	
5	Judith	GZ ((looks down at her hands being held and makes eye contact with Janet))
		((they stare at each other for approx. 7 secs, Janet continuing to smile))

SEQUENCE 22 - field notes

Context - The group are on the school minibus returning to school froma morning visit into the community. Rachel & Marina are sitting next to one another. Marina is sat next to the window. The rest of the class (6 pupils), 3 members of staff and 1 student are sitting quietly.

1	Rachel	Where did you go to ?	GZ ((looks towards Marina))
2	Marina	I went in a caravan	GZ ((eye contact with Rachel))
3	Rachel	Did you ?	GZ ((maintains eye contact))
		I did too ?	EX ((smiles))
4	Marina		GZ ((turns & looks out of window - right))
		(5.0)	
		Rachel (.) we might see the fair again	GZ ((continues to look through window))
5	Rachel	(...)	GZ((looks through window to right then to left))
		It's on my side	
6	Marina	Is it ?	GZ ((looks towards left window))
		(3.0)	
7	Rachel		GS ((points to left window)
		Look Marina	((minibus passes fairground))
		I told ya	GZ ((looks through window to fair))
			EX ((smiles))
		(4.0)	
8	Marina		PS ((rests head on Rachel's right shoulder))
		(..) Wake me up Rachel	
9	Rachel		GZ ((looks down at Marina's head))
		Okay	GS ((shrugs right shoulder))
10	Marina		PS ((sits up straight))
		I'm going to MacDonald's	GZ ((looks out of window))
11	Rachel	You might see me at MacDonald's	GZ ((looks towards Marina))
12	Marina		GZ ((eye contact with Rachel))
13	Rachel	I've been to MacDonald's before	

SEQUENCE 23 - video recording

Context - On arrival in the classroom. This is the first day back after the Christmas break. Rachel, Judith & Lisa have already arrived. Rachel is standing on the far side of the room. Judith is standing near the door looking around the room. Lisa is standing near the book boxes. Marina, Janet and Geoffrey arrive over a period of 10 minutes. There are 2 members of staff present. It is a relaxed environment with some talking between pupils, and staff and pupils

1	Marina		LM ((enters room & runs over to Rachel))
			EX ((slight smile))
2	Rachel	Hiya Marina=	GZ ((to Marina's face))
		=Mornin Marina	GZ ((gains eye contact with Marina))
3	Marina	+Mornin+	GZ ((looks downwards & to side))
4	Rachel	Go take your coat off	GZ ((looks down to Marina's hands))
5	Marina	+yeah+	LM ((move apart))
			PX ((approx. 1 metre.))
			PS ((holds zip on coat))
			GZ ((looks round to coat hooks))
6	Rachel		GZ ((towards Marina))
		(5.0)	LM ((moves to Marina))
			PX ((approx. 30 cm))
			OR ((moves to face to face))
			GZ ((gains eye contact))
7	Marina		GZ ((looks downwards))
8	Rachel	I've got a new baby now	GZ ((attempts to establish eye contact))
		I told you	
9	Marina		PS ((holds zipper & pulls down slowly))
			GZ ((continues to look downwards))
		I've got a new baby aswell=	GZ ((establishes eye contact))

10 Rachel	=What baby was it ?	HP ((places hand on Marina's lower arm & applies slight pressure downwards, releases then repeats twice more))
		GZ ((looks towards zipper))
11 Marina	+What+	GZ ((looks downwards))
12 Rachel	What what baby was it ?=	HP ((maintains pressure on Marina's arm to get zip down))
	=what baby was it ?	
13 Marina	( )	GZ ((continues to look downwards))
14 Rachel	I think it was baby ( )	
15 Marina	I don't think it was (.)	
	I think it was baby ( )	GZ ((still continues to look downwards))
16 Rachel	Which one is it ?=	HP ((taking Marina's coat off her left arm))
	=which one is it?=	
	=the potty one=	OR ((moves slightly left))
	=did you get the potty one?	HP ((takes hold off Marina's left glove))
	Y::::::::::a	HP ((pulls glove off))
17 Marina		OR ((moves slightly left to face Rachel again))
18 Rachel		HP ((takes hold of Marina's right glove))
	Y::::::::::a	HP ((pulls glove off))
19 Marina	((quiet giggle))	EX ((smiles))
	((both move off towards coat hooks))	
20 Janet		LM ((arrives in room, walks past Judith))
		PS ((stands still approx. 3 metres. into room))
		GZ ((looks round at peers))
		EX ((smiles))
		PS ((holds zipper on coat and pulls down))
21 Rachel		HP ((takes hold of Lisa's hand))
		LM ((moves towards Janet))
		PX ((approx. 60 cm))
		OR ((face to face with Janet))
		HP ((takes hold of Janet's hand and shakes, but not handshake style))
	Look who we've got here ?	GZ ((establishes eye contact with Lisa))

	Hiya Janet	EX ((smiles))
		LM ((moves backwards 2 paces))
		HP ((maintains hold of Lisa's hand))
22 Lisa		LM ((moves backwards))
23 Marina	Hello Janet	LM ((walks towards Janet))
		PX ((approx. 1 metre))
		LM ((moves backwards))
24 Janet		EX ((continues smiling))
		PS ((takes coat off shoulders))
		LM ((moves towards coat hooks))
25 Rachel		LM ((moves backwards))
26 Lisa		LM ((moves backwards))
27 Marina		LM ((moves backwards))
28 Janet		PS ((puts coat back on shoulders))
		LM ((moves towards peers))
		GS ((claps hands together))
		EX ((beaming smile))
	(3.0)	
29 Geoffrey		LM ((arrives in room))
		PS ((stands still approx. 2 metres into room))
	+I'm back+	GZ ((looks towards Rachel & Marina))
	Mmmmm	EX ((smiles))
		GS ((nods head several times))

SEQUENCE 24 - video recording

Context - The group are in their classroom, before registration. Rachel and Lisa are sitting at a table colouring. A girl from the next class brings 2 party invitations for Rachel and Lisa. They sit at the table again side by side. Rachel opens her invitation. Lisa is looking towards the camera. Marina arrives. Stands with her coat on & holding her bag in both hands, approx. 1 metre away to the side. She remains motionless and stares at the invitations on the table. There are 4 other pupils present and 2 members of staff engaged in routine morning activities (e.g. toileting, checking messages). It is a fairly busy environment.

1	Rachel		GZ ((looks closely at her invitation))
			EX ((smiles))
		Oh	GT ((holds invitation up & turns it in air))
			GZ ((looks towards Lisa's invitation on table))
		Open yours=	GT ((puts invitation down & points to Lisa's))
2	Lisa		GZ ((looks down towards own invitation))
3	Rachel	=it's cute look at mine=	GT ((picks own invitation up again))
			OR ((slightly turns her back on Marina for 0.5 second))
4	Lisa		GZ ((looks towards Rachel's invitation))
5	Rachel	=look what she's given me=	GZ ((looks at invitation))
			PS ((tilts head to one side))
			EX ((smiles))
		=let's see what Lisa's got	PS ((stands up))
			GT ((picks up envelope))
		Rachel	GZ ((looks at name))
			GT ((puts envelope down))
		Let's see who that one's	GZ ((looks towards Lisa's invitation))
		for	GT ((reaches over & picks up Lisa's invitation & turns it over on table))
6	Lisa		GZ ((looks down at own invitation))
7	Rachel	Lisa=d'ya want me to open	GT ((picks up invitation & begins to open
		yours f'ya	envelope))
			PS ((sits down))

8 Lisa	Yeah::::	GZ ((watches invitation being opened))
9 Rachel	You may 'ave got same	
	As=	
10 Marina		GZ ((quick glance to Rachel's face then looks down again))
11 Lisa		PX ((moves closer, leans over to look in envelope))
12 Rachel	=what ya got ?	GZ ((looks in envelope))
13 Lisa	Lisa	GZ ((quick glance to Rachel's face then down))
14 Rachel	what Lisa's got (.)	GT ((brings envelope up closer to face))
	I think you got somethin	GT ((folds envelope flap back carefully))
15 Lisa	Thas Lisa	GZ ((maintains gaze to envelope))
16 Rachel		GT ((carefully takes invitation out of envelope))
17 Lisa	Thas Lisa	
18 Rachel	Oh (.) +Winnie the Pooh+	GT ((turns invitation round, holds piece in each hand))
		PX ((moves closer to Lisa))
	Oh (..)	PS ((leans towards Lisa))
	an a piglet Ah	GT ((puts invitaion down on table in front of Lisa))
19 Lisa		GZ ((down towards invitation on table))
		GT ((puts hand on invitation))
20 Rachel	( )	GT ((puts hand over mouth then picks up own invitation))
21 Lisa		GT ((picks invitation up))
		LM ((gets up to show someone else in class))
22 Rachel	+look what I got+	GT ((lifts invitation in air towards Marina))
		LM ((gets up to show someone else in class))
23 Marina		GZ ((watches Lisa & Rachel move off))

SEQUENCE 25 - field notes (continuation of sequence 24 approx. 10 minutes later)

Context - in classroom, before registration.Children are occupying themselves with puzzles, colouring and table activities whilst other pupils are arriving. Rachel has already been in class for approximately 15 minutes. She and Lisa have received party invitations from a friend in the next class. Marina has taken her coat off and removed her belongings from her bag. As soon as Marina has sorted her things out, Rachel moves across to her and they go and sit on the sofa. Marina is sat on the left and Rachel on the right. There are 5 other pupils present and 2 members of staff engaged in routine morning activities. It is a fairly busy environment.

1	Marina		PS ((head slightly bowed and leaning towards Rachel. Her hands are clasped in her lap.))
2	Rachel		PS ((her feet up resting on the front edge of the sofa. Her arms are clasped around her knees & she is leaning towards Marina))
			GZ ((looking downwards))
			PX ((with side body contact))
3	Rachel	I got an invitation=	GZ ((raises head slightly))
		=Marina (.) I got an invitation to a party ?	GZ ((looks to Marina))
			PS ((puts feet on floor))
4	Marina	(1.0)	GZ ((gains eye contact))
		Mmmmm ?	EX ((slight frown))
5	Rachel		GZ ((looks downward))
6	Marina		GZ ((continues to look at Rachel))
7	Rachel	(3.0)	
		Yeah (...)	PS ((pulls knees up with arms and rests them on edge of sofa again))
		I got it this mornin ?	
			GZ ((establishes eye contact again))
8	Marina	Really ?	GZ ((stares at Rachel's face))
9	Rachel	Yeah=	GZ ((maintains eye contact))
		=Lisa got one aswell	
		(1.0)	

	I'll show ya ?	LM ((gets up and moves across to coat and bag hooks))
10 Marina	(2.0)	LM ((follows Rachel))

SEQUENCE 26 - field notes

Context - The class is out of school on a community visit. They are in the cafe area of a large store having a drink. The cafe area is not particularly busy with approximately 4 other customers present. The tannoy system in the store can be heard occasionally. Marina, Rachel, Lisa & Mark are sat at a table together. The rest of the class, 4 pupils are sat at 2 other tables with 3 members of staff and 1 student. A mother with a baby in a pushchair walk past.

1 Marina	((giggles))	GZ ((watches mother and baby walk by))
	Isn't that baby cute ?	GZ ((gains eye contact with Rachel))
		PS ((raises shoulders slightly))
		EX ((screws face up and smiles))
	Isn't that baby cute ?	GZ ((looks towards baby))
2 Rachel	+Yeah+	GZ ((looks towards baby))
3 Mother		GZ ((turns & looks towards Marina))
		EX ((smiles))
		LM ((stops and turns pushchair round slightly so that the children can see the baby)
	(5.0)	LM ((turns and sits at an empty table))
3 Marina	Is your baby Annabel cute ?	GZ ((eye contact with Rachel))
4 Rachel		GZ ((looks down at table))
	(approx. 1 minute)	
	+Really miss my Grandma=	EX ((eyebrows lower, slight pouting of mouth))
	=my Grandma who died+	
	She gave me Molly	GZ ((looks towards Marina))
5 Marina	+Mmmm+	GZ ((eye contact with Rachel))
6 Rachel	I'm really missin her ((there is a whining tone in her voice))	GZ ((looks down at table))
7 Marina	+Are you missin her+	GT ((puts hand on table in front of Rachel))
		GZ ((maintains gaze towards Rachel))

SEQUENCE 27 - field notes

Context - The group are onn the school minibus travelling to town on a community visit. Marina and Rachel are sat together. Marina is next to the window. They are both looking out of the window. The bus has just gone past a florist shop where there was a collection of celebration balloons tied to a plant stand outside. The rest of the class, 6 pupils, 3 members of staff and 1 student are sat on the minibus. 1 member of staff is talking quietly to the pupil she is sat next to. Everyone else is sat quietly.

1	Rachel	Ooh	GT ((she points to the balloons))
2	Marina		GZ ((looks towards balloons then turns to Rachel))
3	Rachel	Just remembered (..)	GZ ((gains eye contact with Marina))
		It's Antonia's	EX ((broad smile))
		birthday yesterday ?	
		(..)	
		Do you want to	EX ((raises eyebrows))
		come?	GT ((clasps hands together in lap))
4	Marina	What is it ?=	GT ((raises lower arms and flaps hands in the air))
		((in a giggling tone))	
5	Rachel	=It's a disco d'ya	GZ ((maintains eye contact))
		want to come	EX ((maintains smile))
6	Marina	oo::::: ?	GT ((continues flapping hands))
7	Rachel	I'm after Antonia=	GZ ((maintains eye contact))
		=It's my birthday	PS ((crosses ankles and swings legs to and fro))
		after Antonia:::'s	

SEQUENCE 28 - field notes

Context - On arrival in the classroom. John & Lisa have already arrived approximately 8-10 mintues ago and have now gone to the toilet. Marina arrives, stands near the coat hooks and takes her coat off. Lisa returns to the room. There are 2 members of staff present. The radio is on playing classical music, minimal volume.

1	Lisa	Mornin Marina ?	LM ((walking towards table))
			GZ ((eye contact with Marina))
			EX ((smiles))
2	Marina	+Mornin+	GZ ((eye contact, then looks down to bag on table))
			((begins to take belongings out of bag))
		(1 min.)	
3	John		LM ((enters classroom))
			GZ ((looks towards Marina))
			EX ((smiles))
			LM ((runs to Marina))
			GT ((arms out in front))
		<u>Marina:::</u>	GZ ((gains eye contact))
4	Marina		PS ((stands upright))
			OR ((faces John))
			((holding scarf in right hand))
5	John		HP ((puts arms round Marina & hugs))
			PX ((body contact, but heads approx. 20cm apart))
6	Marina		PS ((leans head forward))
7	John		PS ((leans head forward))
			HP ((puts right cheek to Marina's left cheek))
8	Marina		EX ((smiles))
		(3.0)	
9	John		PS ((lets go of Marina))
			LM ((moves to table to resume activity))

SEQUENCE 29 - field notes

Context- On arrival in the classroom. John has arrived, taken his coat off and is removing his belongings from his bag onto the table. Judith arrives. There are 2 members of staff present. It is a fairly busy environment with staff engaged in routine morning activities. There are no other pupils present.

1	John		PS ((leaning forwards slightly))
			GZ ((looks up to see Judith being brought in to classroom))
			PS ((stands upright))
		Mornin Judith	EX ((smiles))
2	Judith		PS ((stands where she has been left))
			GZ ((looking round room))
3	John	Ju:::di:::th ?	GZ ((continues to look towards Judith))
		((melodic tone))	EX ((continues smiling))
4	Judith		GZ ((continues looking round room))
5	John		PS ((lowers head slightly))
		Ju:::di:::th (..)	OR ((turns upper body towards Judith))
		<u>Mor::::::::::nin</u> ?	
		((increased melodic tone))	
6	Judith		GZ ((looks in direction of John))

SEQUENCE 30 - field notes

Context - The class has gone out of school on a community visit. They are in the cafe area of a supermarket. It is a busy environment. The cafe is approximately half full of customers, talking, eating and drinking. Some assistants are clearing tables. People are coming and going. Rachel and Marina are sat at a table side by side. They have finished their drinks. Another pupil is sat opposite Marina and I am sat next to him. The rest of class, 5 pupils, are sat at 2 adjacent tables with 2 members of staff and 1 student.

1 Marina	Can we talk ?=	GZ ((looks forwards to child sitting opposite, but question is directed to Rachel))
2 Rachel		GZ ((looks towards Marina))
3 Marina	=Rachel (..) Can we talk about Barbie cars ?	GZ ((makes eye contact with Rachel))
	((they talk about cars for a couple of mintues))	
	((a short period of silence follows - approx (4.0)))	
4 Marina	You know=	GZ ((makes eye contact with Rachel))
	=You know what ?	PS ((shrugs shoulders slightly))
5 Rachel	What ?	EX ((slight look of puzzlement))
6 Marina	I::::ve got some videos	GT ((raises lower arms and flaps hands))
	((giggles))	EX ((smiles))
		GZ ((maintains eye contact))
7 Rachel	Where are they	OR ((turns upper body slightly towards Marina))
		GZ ((maintains eye contact))
8 Marina	In the cupboard at home ?	GT ((lowers arms))
9 Rachel	At home ?	OR ((turns & lowers head slightly to one side))
		GZ ((maintains eye contact))
		EX ((looks puzzled))
10 Marina	Yeah (....) The cupboard	GT ((raises lower arms and flaps hands))
	under the stairs	EX ((broad smile))
11 Rachel	Which ones have ya got ?	GT ((places folded arms on table))
		GZ ((maintains eye contact))
		EX ((raises eyebrows))

Appendix D

Transcription Symbols

(( ))	transcriber's description
( )	indecipherable utterance
(3.0)	pause in seconds
(.)	pause of one tenth of second
[ ]	overlap of utterances
= =	no pause between lines
::::	prolongation of immediately prior sound
?	rise in intonation
<u>underlining</u>	emphasis by pitch or amplitude
UPPER	loud utterance
+ +	quiet utterance

(ten Have 1999)

Appendix E

NON-VERBAL COMMUNICATION

GZ	gaze or eye contact
GT	gesture
EX	facial expression
PX	proxemics in feet
PS	posture
OR	body orientation
HP	haptics
SL	sign language

Appendix F

INFORMAL DISCUSSION 1a

Chat with Rachel & Marina about conversational topic

Context - All three of us are sat on soft chairs in the classroom, waiting for lunch to arrive

Marina	What's for dinner today ?
Julia	I don't know
	what did you have in the cafe this morning ?
Marina	Coke
Rachel	and chips
Julia	Oooh yummy I bet they were nice
	You were talking about Barbie cars
	((silence))
Julia	What are Barbie cars ? I don't know what Barbie cars are
Marina	Well they're cars for Barbie's you know
Julia	No I don't know
Marina	Ugggh you know for Barbie's to go in
Julia	But what are they like ?
Rachel	They're pink for Barbie's
	I've got some cars at home
	I've got a new car it's blue
	((lunch arrives))

INFORMAL DISCUSSION 1b

Chat with Marina about non-verbal communication/behaviour

Context - On arrival back at school after a community visit

Julia	Do you remember sitting on the bus next to Rachel ?
Marina	Mmm we saw the fair and we went to the cafe
Julia	That's right when we were coming back to school
	You put your head on Rachel's shoulder
Marina	Mmm
Julia	I wonder why you put your head on Rachel's shoulder like this ((demonstrates))
Marina	Well I put my head on Rachel's shoulder like that ((copies demonstration))
Julia	Mmmm I wonder why you did that ?
Marina	Well because I was tired
Julia	Oh dear were you tired ?
Marina	Yeah well I was watching telly last night
Julia	Did you go to bed late then ?
Marina	I was watching a video

INFORMAL DISCUSSION 2

Chat with Marina & Rachel about social conversation

Context - At home time. Marina and Rachel were preparing to go. As Marina was putting on her coat and collecting her belongings we began to chat about friends. When she was ready to go, but we were still waiting for others, I invited her to sit on the table next to me. Rachel did so too.

Julia	What were you talking about just then ?
Marina	I've got my bag and coat
Julia	Were you talking about your dolls to Rachel ?
Marina	Mmmm my Barbie doll
Julia	Why were you talking about your Barbie doll ?
Marina	Well I like to talk about Barbie's
Julia	What else do you like to talk about ?
Marina	((She looks across to Rachel))
	Mmmm I don't know
	What do we talk about Rachel ?
Rachel	Barbie's discos
Marina	Yes ((very emphatically & giggles))
Julia	Is there any thing else you talk about ?
Marina	Well what else do we like to talk about Rachel ?
	((we have to move off to the hall for departure))

INFORMAL DISCUSSION 3

Chat with Rachel about friends and social conversation

Context - In the classroom sitting on a table during morning arrival time

Julia	Who are your friends ?
Rachel	You
Julia	Who else ?
Rachel	You
Julia	Who else is your friend ?
Rachel	Marina, Lisa
Julia	Anyone else ?
	(silence)
Julia	Marina, Lisa and
Rachel	John
Julia	Do you talk to your friends ?
Rachel	Yeah
Julia	What do you like to talk about ?
	(Rachel moved off and got paper and crayons)

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