The role of communication partners in conversations
with people with learning difficulties

Submitted by Celia Todd to the University of Exeter
as a thesis for the degree of

Doctorate of Education in December 2012

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Celia Todd
Abstract

This study looks at what happens in informal conversations between three people with learning difficulties (intellectual impairment) and a range of non-disabled partners. It takes a participatory approach using data collected by the participants with learning difficulties who chose their communication partners; these partners included family and staff who were paid to support them. The study uses descriptive statistics to highlight areas where there was apparent asymmetry in the conversations. Conversation Analysis combined with features taken from Systemic Functional Linguistics is then used to look in detail at some of these aspects. Important features identified include turn design, repair, and the use of evaluative language and the contribution of non-verbal aspects in particular eye gaze, gesture and the use of artefacts. The study highlights possible strategies for assessing and supporting more effective and equitable interaction for those with learning difficulties and communication impairment and identifies features that should be considered when training professionals working in the field of learning difficulties.
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Transcription Conventions

Sequencing
[
point of overlap onset
]
point at which utterance overlap ceases
=
at end of one line and one at the beginning of the next indicates no gap
between the two lines

Time intervals
(0.0) Numbers indicate elapsed silence in tenths of a second
(.) indicates a tiny gap within or between utterances

Characteristic of speech production

Word indicates some form of stress
:: indicates prolongation of prior sound
- indicates a cut-off
↓ indicates a falling tone (Tone 1)
↑ indicates a rising intonation (Tone 2)
↓↑ indicates fall the rise tone (Tone 4)
↑↓ indicates rise then fall tone (Tone 5)
°word° indicates relatively quieter than surrounding talk
< > indicates speeding up
hhh out breath
W(h)ord indicates breathiness within word

Eye Gaze
{€→} Look towards
♀ Look away
♀ Look down

Transcriber’s doubts and comments
(*** indicates inability to hear what was said, may reflect rhythm of speech
(word) dubious hearings or speaker identification
{word} Suggested gloss
((word)) description of gestures and action
Chapter 1: Setting the Scene

“The single biggest problem in communication is the illusion that it has taken place.”

George Bernard Shaw

The term ‘communication’ can be used with a variety of meanings, and a singular definition is impossible. However, Dance (1970) outlined a number of dimensions that are useful to consider. The three most important dimensions are outlined here. Firstly, the level of abstraction or specificity - all communication or focusing on human communication. Secondly, the level of intentionality - it is accepted that much is communicated without that being the intention of the communicator. Thirdly, the level of success - does the message need to be received for communication to have taken place.

For the purpose of this study the following definition has been formulated:

‘Communication is the intentional verbal and non-verbal exchange of information and affect, between at least two people, that may or may not be successful.’

Communication will be discussed in greater detail in chapter 2 page 28.

Background to the study

This study looks at what happens for a group of people who have learning difficulties¹ when they engage in communication with others. The researcher is a speech and language therapist who has worked in the field of learning difficulties for over forty years. During this time there has been a considerable change in the life opportunities available to people with learning difficulties with an emphasis on community inclusion and greater individual empowerment. However this journey is far from complete and this group still experience significant prejudice and mistreatment (Flynn, 2012; Commission for Social Care Inspection, 2006).

At the same time the field of speech pathology has moved from having a narrow linguistic focus (concentrating on phonology and syntax) to a more pragmatic view of language and greater recognition of the importance of supporting and enhancing reciprocal communication using all modalities; and viewing this within a wider environmental context.

¹ The decision to use this term is discussed on page 8.
Money (1997) proposed the Means, Reasons and Opportunities model which has significantly influenced the assessment and intervention for adults with learning difficulties with limited communication. This is illustrated in Figure 1. This highlighted the importance of the context (where and when), the communication partner (who) as well as considering the particular skills (how) and motivations (why) of the individual. However this model still focuses on the individual as the source of difficulties and has limited recognition of the contribution of the conversation partners.

More recently the focus of speech and language therapy services for people with learning difficulties has expanded to include the development of communication capability within specialist and mainstream services, and the wider community (Baker, Oldnall, Birkett, McCluskey and Morris, 2010). This model is illustrated in Figure 2 (page 13). This reflects the tiered or pyramid model widely used in health and social care services. Previous research has demonstrated that conversations between a person with a learning difficulty and a non-disabled partner are frequently asymmetrical, with the unimpaired speaker usually taking the lead role (Collins and Markova, 1999). People with learning difficulties can be seen as incompetent in interaction with more able communicators who usually hold the power and dominate the direction of the conversation (Brewster, 2007; Antaki, Finlay and Walton, 2007a).
However, as Blackstone, Williams and Wilkins (2007) suggest it is useful “to view interactions, rather than the individuals involved, as being either successful or impaired.” (p.197).

The researcher wished to gain a greater understanding of the contribution of all partner’s in the interaction in order to engage in sensitive and meaningful evaluation and to inform staff training and development so that they provide appropriate, sensitive and respectful communication support. The research explores what happens in interactions between people with learning difficulties and others. Problems with communication are central to definitions of learning difficulty. For example, The Valuing People (Department of Health, 2001b) definition of learning difficulty includes “a significantly reduced ability to understand new or complex information” (p. 14).

There is an estimated population of 1.2 million individuals in the UK with learning difficulties, approximately 2% have severe difficulties and require ‘significant help’ with daily living (Department of Health, 2001b). Individuals with learning difficulties have a wide range of communication skills and deficits. It is estimated that between 50-90% have some difficulty with communication, ranging from having no recognisable speech through to difficulty with written communication (Foundation for People with a Learning Disability, 2000). Some may have no spoken language, but will use other
symbolic means of communication such as keyword sign language, while up to 20% of those with a severe learning difficulty will not achieve intentional communication (Bradshaw, 1998). However, the strengths and problems with communication are varied, and people with learning difficulties cannot be seen as a homogenous group.

Aims of the Research

The original principal research questions were:

1. What happens in informal conversations between people with learning difficulties and their communication partners? What factors impact on the communication between people with a learning difficulty and their communication partners?

2. What makes communication successful? What happens when communication breakdown occurs?

With the following secondary questions:

1. How can the research findings be used to improve professional practice?

2. What compensatory strategies do both partners use, who initiates and controls these and is it effective?

3. How can people with learning difficulties be involved in research and how can their skills as researchers be developed?

However the National Health Service (NHS) ethical approval process limited the scope of recruitment of research participants to individuals who could fully consent to their involvement. This resulted, by definition, in the recruitment of a group of people with learning difficulties who were able to understand more complex verbal concepts, so therefore, communication breakdown became less prominent. Also as the project developed the importance and relevance to professional practice became more apparent so the relative emphasis of the research questions has been adjusted to reflect this:

Research questions:

1. What happens in informal conversations between people with learning difficulties and their communication partners?
2. How can the research findings be used to improve professional practice?

3. How can people with learning difficulties be involved in research and how can their skills as researchers be developed?

A group of people with learning difficulties (referred to as ‘research partners’) were loaned video cameras to record conversations with whomever they chose (‘conversation partners’). This material was then closely scrutinised and analysed by the researcher. The research planned to adopt a participatory or ‘inclusive’ framework, with people with learning difficulties as co-researchers. However their full participation at all stages of the research was restricted by the NHS Ethical approval system. No participants could be approached until the proposal had received full approval. This meant that people with learning difficulties had little influence on the overall design of the research. They also have had little involvement in the data analysis phase but they have been involved with the selection of data and will be involved in the dissemination of findings. These limitations are discussed in chapter 5 page 181.

Examining the data

The data were analysed using aspects of Conversation Analysis. It was important to take a stance of ‘unmotivated looking’ (Psathas 1995 cited in ten Have, 2007 p.120) to allow features of interest to emerge rather than beginning with preconceived categories for identification. According to Halliday (1995):

“an essential feature of research in language [is] that it must be kaleidoscopic, constantly turning language round and around.”

1995 Quoted in Kilpert (2003 p.204)

This analysis was augmented by the use of frameworks from Systemic Functional Linguistics; in particular to undertake a more systematic examination of the use of evaluative language. According to Togher (2001) Systemic Functional Linguistics has been used within discourse analysis to:

“extend our understanding of the relationship between language, the meanings we can express, the contexts in which these meanings occur, and the effects of factors such as social distance, power, and authority.”

(p. 133)

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2 This is discussed further in Chapter 3.
This more holistic examination of the conversations, which looked in both breadth and depth, resulted in a more nuanced reflection on the data; this will be discussed in greater detail in Chapter 3.

**Terminology: Learning Disability, Learning Difficulty or Intellectual Impairment**

There is considerable confusion and debate about the terminology used to describe the group of individuals who are the focus of this study (Emerson and Heslop, 2010). The terms ‘mental handicap’ and ‘mental retardation’ were commonly used within health service in the United Kingdom until the 1990s; up until this point mental health legislation covered people with mental impairments, this including both people with mental health problems and people with learning disabilities. The adoption of the term ‘learning disability’ by the Department of Health in the mid-1990s hastened an alignment of interests with the growing disability movement, and helped to establish a public distinction from mental illness (Walmsley, 2003).

#836) Most government documents now use the term ‘learning disability’ (Department of Health, 2001b; Joint Committee on Human Rights, 2008a).

Educational legislation uses the broad term ‘learning difficulty’ (Department for Education and Skills, 2001) adding the qualifier ‘specific’ to differentiate conditions such as dyslexia. The authors of Progression through Partnership (Department for Education and Skills, 2007) acknowledge the problems with the use of this terminology and admit that the three government departments involved in that report – the Department of Education, the Department of Health and the Department for Work and Pensions, used different definitions.

However, the professional choice of the term ‘learning disabilities’ tends to dominate the educational, political and research literature (Walmsley, 2003)

#836); with the term ‘learning difficulty’ used to describe specific learning problems such as dyslexia. The terms ‘intellectual impairment’ and ‘intellectual disability’ appear to be the current labels used in the United States (Eisenhower and Blacher, 2006) and Australia (Clapton, 2008) and are increasingly being used in British research articles (Antaki, Finlay, Walton and Pate, 2008; Bigby, Clement, Mansell and Beadle-Brown, 2009). This diversity of terminology makes direct comparison of information difficult, and the collection and analysis of statistics extremely problematic.
Valuing People (Department of Health, 2001b), the key legislation that governs services for this group, also used the term ‘learning disability’ rather than ‘learning difficulty’ which they view as an educational term. However, the self-advocacy movement ‘People First’ prefers the term ‘learning difficulty’ (Goodley, 2005). This is the term preferred by the research partners involved in this project, and so will be used throughout the rest of this document, except where reference is being made to the work of others.

A Glossary of terminology and acronyms used is included in Appendix 1.

Structure of the Thesis

Chapter 2 considers the literature in relation to disability, people with learning difficulties and their communication partners and communication disability.

Chapter 3 discusses methodology, issues for ethical consideration and the ethical approval process, and describes the methods adopted for this research. It concludes with a review of the key concepts that provided the basis for analysis.

Chapter 4 presents details of the research partners and in-depth analysis of the data gathered by the research partners Connor, Cate and Alan (The names of all participants and locations have been changed to preserve anonymity). This chapter concludes with a comparison of the similarities and differences between the conversations.

Chapter 5 considers the key themes that emerged during the analysis and relates these to the research questions. It also includes discusses the implication for practice, reflection on the limitation of the research and the identification of potential areas for further study. It concludes with consideration of contribution of this research to theory and practice.
Chapter 2: Disability, Learning Difficulties and Communication

Introduction

The definition of learning difficulties was explored in Chapter 1. This chapter will consider the concepts of disability and learning difficulties within the current political context. It will examine how people with learning difficulties are perceived by others and how they see themselves; and will explore how this influences and is influenced by communication opportunities and style.

It will go on to explore the issues of competence and capability which are central to definitions of learning difficulties. In particular it will consider the concept of communicative competence. It will conclude with a review of current research on the interaction of people with learning difficulties with their family and with professional and support staff.

Models of Disability and Impairment

Services for people with disabilities have been dominated by the medical profession and a medical model of disability prevailed until the later part of the twentieth century. This model focused on assessment, diagnosis, treatment and cure (Ryan and Thomas, 1987). During the second half of the twentieth century this medical dominance began to be questioned and alternative models of disability have emerged.

The social model of disability was formulated in opposition to the prevalent medical model, and has its roots in the Union of the Physically Impaired Against Segregations (UPIAS) fundamental principles published in 1976. They defined disability as:

“The disadvantage or restriction of activity caused by contemporary social organisation which takes no or little account of people who have physical impairments and thus excludes them from the mainstream of social activities.”

{(UPIAS), 1976 #51 p.3}

The social model was seen to break the link between “our bodies and our social situation” (Shakespeare, 1992 p.40) and focused on what were seen as the prime causes of disability: oppression (Abberley, 1987), discrimination and prejudice (Shakespeare 1992). Later formulations included the influence of culture in creating and maintaining the disabled/non-disabled distinction or ‘otherness’ of disability. This
view also challenged the “personal tragedy model of disability” (Oliver, 1990) and promoted positive images of disability.

The conceptualisation of the social model of disability has had a massive impact on the lives of disabled people as well as public and political thinking. It promoted a strategy of social change with greater acceptance of disability rights and a positive duty to promote equality (Crowther, 2007). This growing acceptance was occurring at the same time as a rise in interest in the ‘sociology of the body’ which challenged the biomedical dominance of knowledge about the body (Foucault cited in Hughes and Paterson, 1997 p.332) and questioned professional intervention and power. However, more recently this model, with its exclusion of all consideration of impairment has been questioned. As Shakespeare and Watson (2002) suggest: “People are disabled both by social barriers and by their bodies” (p.15). They suggest that in reality impairment is relevant to many people with a disability, and its exclusion can ignore individual difference and devalue personal identity.

More recently a bio-psycho-social model has been suggested. This incorporates consideration of the psychological and social impact of disease with accurate diagnosis, and sees the patient as an active contributor to the process (Biderman, Yeheskel and Herman, 2005). For example, in some instances the individual may have a bio-medical problem such as cancer, that has psychological consequences (anxiety, depression) and social implications (loss of earnings, status, changes in family relationships). Swain and French (2000) suggest an ‘affirmative model’ of disability which supports a ‘non-tragic’ view of both impairment and disability, with the promotion of a positive identity.

The early development of the social model of disability concentrated on those with physical impairments, and did not make reference to learning difficulties or disabilities. The exclusion of individuals with learning difficulties from the UPIAS definition was not questioned at the time (Tregaskis, 2002) and this group is still not included as part of the disability rights movement in the United States of America (Smith, 2006). People with learning difficulties have often been neglected (Wendell, 1996) or marginalised within the disability community (Goodley, 2001), and there has remained an emphasis on unchangeable organic impairment and personal tragedy that has often ignored their social and cultural identity. Medical dominance is still exerted in a number of ways. For example doctors may be the gatekeepers for access to
specialist services (Shakespeare, 2006) and researchers frequently use diagnostic criteria to establish homogeneous research samples, such as on individuals with autism (Lewis, Murdoch and Woodyatt, 2007), Down’s syndrome (Cleland, Wood, Hardcastle, Wushart and Timmins, 2010) and William’s syndrome (Annaz, Van Herwegen, Thomas, Fishman, Karmiloff-Smith and Rundblad, 2009).

There has been much written about the experience of disability, but it is only in the last half century that the experience of those with a learning difficulty has begun to be voiced. There is now a strong movement of self-advocacy and a rich literature of life stories is beginning to emerge. This helps us to understand the history and present life condition as someone with a learning difficulty (Atkinson, Jackson and Walmsley, 1997; Atkinson, McCarthy, Walmsley, Cooper, Rolph, Aspis, Barette, Coventry and Ferris, 2000). Although many life histories have been forgotten, and people are left with little sense of their past life as they are dependent on others to remember and recount them (Grove, 2007).

**The Political Context**

Public policy for individuals with learning difficulties has been shaped by dominant ideologies. Following the Second World War and the growing awareness of racial issues there was an increasing interest in human rights (Universal Declaration of Human Rights 1945, European Convention of Human Rights 1950). However, these initial declarations did not make reference to disabled people, who were only specifically included in the 1970s. This recognition of rights coincided with increased awareness of the stigmatisation of individuals with learning difficulties, the beginning of the move to ‘normalisation’ (Wolfenberger, 1972) and the provision of universal public services.

**Normalisation and community care**

Normalisation originated in Scandinavia and promoted the concept that people with learning difficulties should enjoy the same: “patterns and conditions of everyday living as close as possible to the norms and patterns of mainstream society.” (Nirje 1969 in Yates, Dyson and Hiles, 2008 p.248). This philosophy drove the move away from institutional care to community options and had a positive impact on many people. Normalisation was reconceptualised as Social Role Valorisation (SRV) by
Wolfenberger in the 1970s as: “the use of culturally valued means in order to enable, establish and/or maintain valued social roles for people” (Wolfenberger and Tullman, 1989 p.211).

SRV emphasises the feedback loop between competency and self-image that can be either positive or negative (Osburn, 2006) and considers action to enhance these, from the level of the individual through to society as a whole. Here competence is set within a framework where the ultimate goal is independence. However, it fails to recognise the inter-dependence we all share – needing others to help us achieve our goals (Williams and Robinson, 2001). However, normalisation and SRV have dominated service thinking and treatment for individuals with learning difficulty, and have been responsible for positive changes in their life experiences.

The White paper “Better Services for the Mentally Handicapped” (Department of Health and Social Security, 1971) began the closure of long stay care institutions and a move to community care, but these smaller group homes were still often run by the NHS. The 1980s saw a rapid rise in ‘consumerism’ (Day, 2007) which emphasised individualistic and egalitarian values and a reduction in collective responsibility. This move brought criticism of large public sector agencies, and led to a radical reformulation of public services, a commitment to consumer choice between service providers and government responsibility for ‘market’ management – focussing on strategic direction and quality assurance (Carter, 2000). The twenty-first century has seen an increased commitment to personalisation and a further move towards the managerialism and privatisation of care services with the outsourcing of service delivery from the public sector to the community and private sector and the promotion of personal budgets (Routledge and Porter, 2011). For example, there was a commitment to transfer all NHS residential care to private providers following the Health Commission Inquiry (Commission for Social Care Inspection, 2006), although this commitment has yet to be fully realised. It has also been argued, that this move has led to increased state control through increased compliance requirements and control of finances, and has engendered a culture of compliance and a preoccupation with risk management within care organisations (Clapton, 2008).

Valuing People 2001 (Department of Health, 2001b) was developed within this context with a culture of market competition, privatisation and radical individualism
which believed that problems would not be solved by state intervention or collective action but by individual achievement. This report recognised individuals with learning difficulties as one of the most socially excluded and vulnerable groups, and following normalisation principles it described inclusion as “enabling people with learning disabilities to do....ordinary things make use of mainstream services and be fully included in the local community” (p.24).

This policy recognised that, for too long, people had received traditional services based on professional assessment of need rather than being supported to live the life they desired. It promoted the principles of consumer choice and **personalised approaches** that embraced the development of personalised responses rather than professional-led services. The key drivers for personalisation of services in Valuing People (Department of Health, 2001b) and reiterated in Valuing People Now (Department of Health, 2007b) were direct payments and individual budgets, person centred planning and advocacy.

**Direct Payments and Individual Budgets**

Direct payments were introduced in the mid 1990s (International Conference on Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use, 1996). This allowed people with disabilities to organise their own support rather than this being provided through an established service; for example they could use their budget to employ a personal assistant. However, there was slow uptake of direct payments by people with learning difficulties and their families (Department of Health, 2001a). There was also criticism of this approach to funding because of the resulting impact on existing support services (Burton and Kagan, 2006).

There has been a gradual increase in the numbers using direct payments since 2007, and a model for its use with people with learning difficulties was developed by In Control, a national charity whose aim is to create a fairer society for everyone needing additional support (Duffy, 2005). Individual Budgets were introduced in 2005 (Rabiee, Moran and Glendinning, 2009). These provide an allocation of funding which can either be used as a direct payment or used to fund services commissioned by the local authority, or a combination of the two. However, for many people with learning
difficulties the prospect of handling their own budget and employing staff remains daunting (Williams, Simons, Gramlich, McBride, Snelham and Myers, 2003).

**Person Centred Planning**

Person centred planning (PCP) was promoted in Valuing People (Department of Health, 2001a) as a tool for change. It is now widely used across services and is accepted as ‘best practice’. By 2004 about 40% of young people referred to adult services had a Person Centred Plan (Valuing People Support Team, 2005).

An extensive report by Robertson et al (2005) showed that PCP can have a positive impact, however much of the evidence was based on individual case studies. This research showed that those with a Person Centred Plan had more contact with family and friends, got greater choice and were involved in more day time activities. However there were still problems with aspects of health and employment (Robertson, Emerson, Hatton and Elliot, 2005). Kinsella (2000) found little to support the effectiveness of PCP compared to other approaches, and also recognised that it was not being extensively used.

**Advocacy**

People First, the United Kingdom self-advocacy group for people with learning difficulties, started as a user-led resistance movement but has received formal support and significant government funding (Department of Health, 2001b). The increase in the membership of People First and other self-advocacy groups has meant that people with a learning difficulty have begun to have a voice within the services they use and a greater public identity. These groups have increasingly been drawn in to consultation, representation on Partnership Boards and service-user groups which Goodley (2005) believed may change their focus from being activists to becoming ‘professional’ consultants. He challenged the assumption that the ‘bankrolling of self-advocacy’ is necessarily a good thing, and highlighted the danger of homogenising groups to fit in. There is also the risk that the voice of those who have more difficulties with communication, for example those with ‘complex support needs’ remain unheard (Bigby et al., 2009).
Perceptions of disability and learning difficulties

People with disabilities are frequently marginalised in society by those who see themselves as ‘able-bodied’. The concept of ‘the other’ borrowed from feminist theory (Wendell, 1996) is a useful way of understanding the social position of people with a disability.

“When we make people other we group them together as the objects of our experience instead of regarding them as subjects of experience with whom we might identify, and we see them primarily as symbolic of something else – usually, but not always, something we reject and fear and project onto them.”

( p.60)

However people with disabilities sometimes make each other ‘the other’. Those who appear most like the non-disabled sit at the top of a hierarchy, while those with least control of their bodies are at the bottom. As a result people with learning difficulties have often been marginalised within the disability movement (Barnes, Mercer and Shakespeare, 1999).

Public perception of disability is shaped by cultural representation. We learn to classify people from our elders and from media stereotypes (Tregaskis, 2002) and cultural identity has its basis in narrative, the stories we tell about ourselves (Barresi, 1999). Krumland (2008) argues that the public learns more about disability from books and films than from policies or personal interaction. Disability is variously portrayed in public policies and fiction. People with disabilities can be seen as targets for ridicule and hate crime (Joint Committee on Human Rights, 2008b), a personal tragedy (Barnes et al., 1999), a source of parental stress and depression (Edwards, 2005; Davies, 2008), a recipient of charity (Deacon, 1974), a burden on society (Lawson, 2008), deviant and depraved (Krumland, 2008; Murray, 2008) or a superhero (Horwood, 1988).

Although the disability movement has made some impact on positive media representation, adults with learning difficulties still encounter a higher degree of public prejudice than most other disabled groups (Staniland, 2009). The drive for inclusive education has increased the numbers of children with learning difficulties in mainstream schools and increased their visibility and acceptance and there is evidence that things are changing for some groups as they enter adulthood (Henley, 2007). However, those with severe and complex needs can still remain excluded both in the education system (Skidmore, 2004) and within adult society (Klotz, 2004).
Self-perception of people with learning difficulties

Many writers have recognised the link between competence, self-image and self-esteem. Goffman (1968) was concerned with impression management and the way actors “work the system for the enhancement of self” in order to appear competent (Chriss, 1995 p.553). Sacks (1974) comments that everyday social life is accomplished by “doing being ordinary” the presentation of self as an ordinary actor. Edgerton (1993) suggested that the patients with learning difficulties he studied wove a ‘cloak of competence’ to hide the stigma of their intellectual shortcomings. Bogdan and Taylor (1994) suggest that rather than people with learning difficulties taking on this cloak, that society clothes them in a ‘cloak of incompetence’ that it is almost impossible for them to reject.

Todd and Shearn (1997) and Davies and Jenkins (1997) looked at self-perceptions of people with a learning difficulty. They found that many did not have an understanding of the terms and associated meanings used to refer to people with learning difficulties, but were aware of differences they experienced with work opportunities, relationships and parenthood. Further research (Rapley, Kiernan and Antaki, 1998) demonstrated that people with learning difficulties were aware of the ‘differentness of their social experiences’ and worked at ‘passing’ (Goffman, 1968) or ‘doing being ordinary’. They were also aware of the control exercised over their lives by others – in particular by parents and paid carers.

Jahoda, Markova, & Cattermole (1989) showed that there was often a hierarchy with people with mild learning difficulties distancing themselves from those they perceived as more severely ‘handicapped’. There was a distinction between general difficulties experienced by those with more severe difficulties and the specific difficulties the people with more mild learning difficulties experienced with such skills as reading and writing. They held a view that their inclusion within the learning difficulty population by attendance at an adult training centre was because of their failure to find employment.

**Competence and capacity**

Issues of competence and capacity dominate the lives and services for people with learning difficulties and these terms are often used interchangeably. The term
competence has been used to describe the complete inventory of skill and knowledge; for example, Chomsky (1976) used it in relation to linguistic competence – the system of language potential of the speaker. However, more commonly it is used to describe the accepted level of skills and knowledge. The Mental Capacity Act (Department for Constitutional Affairs, 2007) has provided a clear framework for the involvement of vulnerable adults in the decision making process in areas related to health, residency, research etc. It has clarified and strengthened issues of capacity and consent, and is clear that no adult can give consent on behalf of another; this includes a parent consenting on behalf of their adult-child. If a person does not have the capacity to consent to a particular situation or procedure, than a best-interest decision is made, taking into account the opinions of a range of individuals who know them well; this may include professionals, paid carers and family members. The Mental Capacity Act (2005) also provides for the appointment of independent advocacy for an individual who lacks capacity where there is conflict between these individuals.

Cognition and intelligence are central to our perception of humanity (Klotz, 2004); and competence is central to definitions of learning difficulty. Valuing People (Department of Health, 2001b) states that an assessment of social functioning and communication skills should be taken into account when determining need. The Fair Access to Care criteria for the provision of social care, include the inability to carry out vital personal care or domestic routines (Department of Health, 2003). A great deal of professional effort is expended on measuring and assessing competence and capacity (Tyrer, McGrother, Thorp, Bhaumik and Cicchetti, 2008). Although, as stated earlier, there has been a general espousal of more social models of disability, medical and deficit models still influence practice in both health and social care settings, with the need to fulfil criteria based on assessment of incapacity, in order to qualify for care and support.

Notions of competence and incompetence create and are created by asymmetrical power relationships. It seems that people with learning difficulties are continually judged as incompetent and often have to demonstrate their incompetence in order to access services, for example, scoring under 70 in an IQ test in order to qualify for support from health and social care services (Whitaker, 2008). Osburn (2006) argues that competence and self-image form a feedback loop that can be either positive or negative.
Yates et al. (2008) highlight the social impact and consequences of competency and self-image:

“Social conditions determine the scope of individual’s self-concept, personal competencies and behaviour, and the displayed competencies, presentation and behaviour of the individual in turn determine social responses.”

(p.250)

Competence is a relative concept that is socially constructed and actively negotiated. It is a socially judged phenomenon against the criteria of ‘appropriate behaviour’ within the context (Wiemann and Backlund, 1980); this includes the verbal context, the relationship context and the environmental context.

**Communicative competence**

The concept of ‘communicative competence’ was developed by Hymes (1962) to include all aspects of communication (Saville-Troike, 2003) and was used to describe communicative performance rather than purely potential. Other terminology is also used, including ‘capacity’ in relation to the law, ‘proficiency’ – within second and foreign language teaching, and ‘literacy’ within education. Communicative competence not only includes the skills and abilities of the individual but is also influenced by the social and cultural context in which the communication takes place and is a collaborative enterprise between at least two speakers.

Booth and Booth (1998) emphasised this social nature of competence and proposed the notion of ‘distributed competence’. The success of the conversation is a shared responsibility, with both partners adjusting to the needs of the other.

Communicative competence is a shared phenomenon that is reciprocal, giving and responding to feedback and requires the ability to integrate a range of perceptual and symbolic cues including speech, gesture and context. The term communicative competence has generally been used in relation to oral communication, but it is important to recognise the wide range of contexts that are important in the twenty-first century. Increasingly we need to have the skills and flexibility to communicate face to face and over distance, communicate simultaneously, or with a delay; through writing, texting and email and to be able to function in a range of contexts including dyads, small groups and communication to an audience (Wiemann and Backlund, 1980).
Traditionally communicative competence has focussed on the ability to successfully give and receive information and to satisfy needs and wants. However, communication is also essential in allowing us to express emotions, develop and sustain relationships and establish and maintaining social identity and self-image (Eggins and Slade, 1997).

Self-image, competence and capacity are all influenced by perceptions of communicative ability. Capacity for verbal communication has been viewed as a condition of personhood (Dennett 1978 in Barresi, 1999) and Bayliss and Thoma (2008) suggest that Personhood “is determined and judged by the concept of competence; by one’s ability to demonstrate capacity.” (p. 8).

The Mental Capacity Act assessment of capacity relies on understanding and expression of views (Department of Health, 2007a), and difficulty with communication is often seen as an indication of learning difficulties (Kernan and Sabsay, 1997). Lay conceptions of intellectual ability rely on perceptions of verbal ability as well as everyday competence (Giraudeau, Chasseigne, Apter and Mullet, 2007). Biklen and Kliewer (2006) describe cases where the individual has been deemed incompetent because of their lack of verbal communication, but have been able to demonstrate competent communication through writing.

Competence is frequently evaluated through our everyday interactions and these evaluations have an impact on the identity and self-identity of the speakers (Carbaugh, 1996). Goffman (1968 in Lermert and Branaman, 1997) was concerned with impression management and the way actors “work the system for the enhancement of self” in order to appear competent (Goffman 1959 cited in Chriss, 1995 p.553). His concepts of framing, footing, alignment and face have provided a useful scaffold for examining social roles and how people position themselves in interaction (Wine, 2008). Alignment is any form of synchronisation between participants in the interaction. Speakers will strive to preserve alignment and protect ‘face’ to avoid conflict or embarrassment. Goffman describes the socially ‘felicitous’ condition that results in competent linguistic performance where:

“Whatever else, our activity must be addressed to the other’s mind, that is, to the other’s capacity to read our words and actions for evidence of our feelings, thoughts and intent”

(Goffman 1968 in Lermert and Branaman, 1997 p.50).
Hatton (1998) identified that people with learning difficulties frequently took a submissive role in conversation with more able communicators, often requesting permission, seeking information and opinions from others. Diamond (1996 cited in Brewster, 2007) suggests that topic control can be used to exercise power, but Brewster found that her participants with learning difficulties did not use topic to control the conversation but as a strategy to maintain the interaction (p.131).

**Communication and Conversation**

Dascal (1999) suggests that efficient communication is bound by two duties – to make oneself understood and the duty to understand. To comply with the duty to understand the addressee must presume that the speaker has complied with the duty to make themselves understood. This attitude allows them to ignore mispronunciations, ambiguities and misunderstandings to allow the flow of conversation.

**Communication Breakdown**

Communication breakdown is usually associated with some difficulties of understanding. Understanding is continuously confirmed or negotiated within the turn by turn organisation of speech ‘each next turn displays to its recipient how a prior turn has been received and understood’ (Tarplee, 2010 p.19). Bazzanella and Damiano (1999) describe a continuum of misunderstanding rather than absence versus presence of understanding.

*Weigland (1999) differentiated between:

- **Not understanding** – one or both partners may be aware of this, and trigger a repair or may work to conceal their misunderstanding to preserve face

- **Misunderstanding** - that is detected by either partner and may be repaired during the course of the conversation. This involves greater inferential complexity as the partners interpretation follows a different path from that intended by the speaker (Bosco, Bucciarella and Bara, 2003). Blum-Kulka and Weizman (1988) suggest that “during the process of interpersonal communication, the participants tolerate a rather high degree of non-acknowledged, unresolved potential misunderstanding (p.220)
- **Miscommunication** – that is not detected by either speaker and may or may not eventually be resolved. Verdonik (2010) describes this as borderline mis/understanding where it is not clear whether misunderstanding has taken place and the participants do not try to negotiate an understanding. Common understanding may be reduced but it does not impact on the success of the conversation. Speakers may have slightly different representations of a concept but their knowledge is sufficient to enable successful communication.

**Conversation**

“Conversation may be taken to be the familiar predominant kind of talk in which two or more participants freely alternate in speaking, which generally occurs outside specific institutional settings”  
(Levinson, 1983 p.284).

This definition excludes formalised linguistic rituals such as religious services, civil ceremonies and the court room. However many conversations take place in institutional settings for example interactions between patient and doctor, student and teacher and solicitor and plaintiff. Eggins and Slade (1997) define casual conversation as “talk which is NOT motivated by any clear pragmatic purpose” p.19. Casual conversations are generally thought to be based on "equality of speaker rights" (Gaudio, 2003 p.670). But in fact, conversational power may not be evenly distributed in informal conversation which can often be marked by disagreement and difference (Kress, 1985).

Casual, informal or ordinary conversation is structured differently from what could be called “institutional” conversations (Wang, 2006). These conversations follow a task-related standard shape and may comprise locally managed routines (Zimmerman, 1998). In general there is an imbalance of power within institutional conversations where the “professional” controls and constrains the contributions of the other participant (Fairclough, 1989).

In institutional talk the asymmetry of speaking rights may be detected in the form of the interaction, in particular the organisation of turn taking (Benwell and Stokoe, 2006). The institutional representative normally has the right to ask questions and there may be pre-allocated turn sequences such as the Question: Response: Evaluation or Feedback sequences common in therapeutic and educational settings.
(Leahy, 2004; Jones, 2007). Power can also be marked through the semantic choices, for example by the use of evaluative language or humour (Eggins and Slade, 1997).

**How conversations are structured**

Eggins and Slade (1997) looked at the internal composition of casual conversations. They distinguished between generically structured talk and non-generically structured segments: ‘chat’. Chat composed approximately 50% of the conversations they analysed. Hollander and Gordon (2006) describe three types of ‘linking devices’ used in the social construction of talk. These are Explanations – why a particular event or behaviour occurred and are pervasive in everyday conversations. Storytelling - which relays a sequence of past events, and Forecasting – constructs possible futures. Eggins and Slade (1997) describe storytelling as forming much of the generically structured casual conversations.

According to Norrick (2007) conversational story telling is always interactive and negotiated and can fulfil multiple simultaneous functions including sharing news, entertaining, revealing attitudes and contributing to the construction of identity. Life story narrative is a device that humans use to make sense of their experiences (Engel and Munger, 2007) they help us to assimilate our remembered past and help to explain who we are. These stories are always co-authored and may involve scaffolding by the conversation partner to elicit information and maintain narrative flow (Grove, 2006). Life story narratives provide a sense of shared identity as well as a vehicle to explore difference (Rabinow and Rose, 2006). They are important in creating identity and defining where we belong in relation to others (Engel and Munger, 2007). They also contribute to how we are perceived by others and can influence public perception (Goodley, 1997). They are seen as a vehicle to depathologise and a way for impairment to be represented as a living condition, it has both an individual and a collective function and have contributed to positive change in attitudes towards disabled people (Rose, 2008). Personal narratives has been shown to shape identity and help people cope with changes in their circumstances (McLean and Fournier, 2008).

People who are unable to share stories may be at greater risk of social isolation and have difficulties building relationships (Bercow, 2008). Conversations with people with learning difficulties are frequently dominated by requests and needs (McHutchison 2006 in Grove, 2011), and those with more severe difficulties may be
reliant on others to tell their stories. It is easy for these stories to be lost when these “story guardians” are no longer around (Prior, Black, Waller and Kroll, 2011).

**Communication and learning difficulties**

Competency is often judged on the basis of assessments of linguistic capacity and adaptive behaviour; and language problems are axiomatic in the diagnosis of learning difficulty (Rapley, 2004). The Valuing People (Department of Health, 2001b) definition of learning difficulty includes “a significantly reduced ability to understand new or complex information”.

People with mild learning difficulties may have reasonably good language skills but have particular problems with social interaction. Kernan and Sabsay (1997) found that they used language inappropriate to the setting, had limited and repetitive topics of conversation and showed little reciprocal interest in their partner. They tended to blame problems with miscommunication on their partner, ask questions to which they already knew the answer and had particular difficulty with conversation in groups. Although they were aware of their limitations, they also used strategies to preserve self-esteem and “pass” as non-disabled. Edgerton (1967) who described ‘the cloak of competence’ used by ex-patients of a sub-normality hospital, suggested, that they feigned understanding, gave the response that they thought their partner wanted and borrowed other expertise by repeating what they had heard as their own idea. He viewed this behaviour as problematic, but in fact it could be seen as a useful protective mechanism.

Leudar (1997) suggested that their problems with communication could be identified and analysed at the level of:

- **Language skills** – restricted grammar, limited vocabulary and poor speech intelligibility
- **Pragmatic design** - difficulty making utterances appropriate to the communication partner and managing discourse
- **Socio-emotional function** - problems with self-presentation and the use of communication to develop and maintain relationships

He concluded that there was little qualitative difference between the conversational style of the people with learning difficulty he studied and the rest of the population. The differences were quantitative in that they violated the maxims of conversations more frequently. There was:
“….the tendency to be just a bit ‘more so’, just a bit more often and in more ways than the rest of us.”  

(Kernan and Sabsay, 1997 p.251)

Communication presents additional challenges for those with more severe learning difficulties who are non-verbal. Brady et al (1995) demonstrated that individuals with very restricted expressive communication could recognise breakdown and would try to repair this, although their attempts often went unnoticed by their communicative partners.

**Communication Partners:**

It is accepted that individuals in a communication dyad design their language and behaviour in response to the needs of their communication partner (Saville-Troike, 2003). This had been documented in relation to adults’ communication with children (Walker and Armstrong, 1995), speakers of different languages (Saville-Troike, 2003), teachers in the classroom (Tough, 1977) and young people talking to older people (Maxim, Bryan, Axelrod, Jordan and Bell, 2001).

There is frequently an asymmetry in conversation between an individual with communication difficulties and their "unimpaired" partner who may need to take greater responsibility for the success of the conversation. The unimpaired speaker tends to take the lead role and may allocate or withhold “speakership” (McConkey, Morris and Purcell, 1999).

It appears that the communication partners are mostly unaware of their own communicative style and use of techniques, and that they struggle to adapt their interactive style (Chadwick and Jolliffe, 2009). There has been little focus on what signals are available to both partners in the conversation that indicate communication mis-match and breakdown and therefore, how they may be able to manage repair.

**Family carers**

The family has always been seen as responsible for the care of their children with disabilities – even as they become adults themselves. Even with the expansion of residential services in the early part of the twentieth century the bulk of care was still provided by the family (Slater, 2005).

The era of de-institutionalisation in the 1970s and 1980s with the closure of long stay hospitals resulted in better housing opportunities for people with learning
difficulties, but did not result in a significant reduction in the numbers of adults being cared for in the family home. This is still the case. Valuing People 2001 estimated that 60% of adults with learning difficulties lived with their family. In 2006, McConkey, Mulvany and Barron found that half of the adults with a learning difficulty that they sampled, still lived with their parents (McConkey, Mulvany and Barron, 2006). In addition, the caring role of parents still often exists even if the adult-child with learning difficulties has left home (Rapley et al., 1998; Chappell and Mitchell, 2006). This has both practical and emotional consequences for the individual, their parents and family. Many mothers have been unable to engage in full time employment and the caring role has been shown to influence career development for both parents (Einam and Cuskelley, 2002).

Adolescence and early adulthood is usually a period of change and developing independence or “individuation” (Buhl, 2008). This is marked by an independence from parental authority, reduced connectedness, increased autonomy and a developing symmetry of power between the adult-child and their parents. These changes may not occur for the individual with a learning difficulty, or may happen at a much later stage. This is particularly the case for those with more complex difficulties and high support needs. There is a parental (and societal) expectation that this caring role is for life (Jokinen and Brown, 2005). Even for those with a mild learning difficulty there may be a struggle to gain autonomy and assert independence. There is often a mismatch of identity, with a tension between what parents perceive as “an adult body and the mind of a child” (Todd and Shearn, 1997). The relationship may be dominated by the maintenance of this parent:child relationship, which will impact on communication style and symmetry as well as influencing access to other relationships and interactions.

The introduction of Direct Payments³ (1996) has been slow to have an impact on the lives of those with learning difficulties, although this is gradually bringing about change despite fears by professionals that this could increase the power and control by parents. Research has shown that it can lead to greater independence and a sharing of responsibility and power (Williams et al., 2003): but this is not always the case:

³ Direct Payments scheme is a system that gives users money directly to pay for their own care
“Services, I think are designed to maintain protection and restriction, which parents and carers want so that they have peace of mind and, therefore, lessen the guilt if anything goes wrong.”

(Aspis, 2000 p.85)

The National Association for the Parents of Backward Children (now Mencap) was founded in 1946 to secure education for children with learning difficulties. This remained a parental lobby group until the early 1970s when the society came under pressure to better represent the needs of individuals with learning difficulties as well as their parents (Tilley, 2006). However, tension remains between advocacy groups and parents in some local Mencap groups and parents are still influential in gaining and shaping provision. Older carers see themselves as ‘pioneers’ who had helped to develop the current system of services (Jokinen and Brown, 2005).

The National Carer Strategy (1999) and the Carer and Disabled Children’s Act 2000 has increased the attention on the needs of carers, and a right to an assessment of their own needs. This can sometimes be in conflict with the needs of the person that they care for, and may assign individuals to the roles of ‘disabled person’ or ‘carer’. In reality there may be a symbiotic partnership, where these roles are interchangeable or blurred (Williams and Holman, 2007).

Although the Mental Capacity Act (Department of Health, 2007a) has gone some way toward clarifying issues of consent, parents still remain in a very important and powerful position. Genetic screening can allow the mother to decide on whether to continue a pregnancy when there is a detected abnormality in the foetus; and in spite of the legislation parents may continue to control life decisions for their child well into adulthood (Aspis, 2000).

There has been little written about communication styles within families of people with learning difficulties or on peer to peer conversation, but considerable research has focussed on communication with support and professional staff.

**Professional staff**

“Often I feel professionals have lower expectations of people with Down’s syndrome than parents and even the general public: there’s still a lot of trying to make people fit in.”

(Mother, Catherine Slater quoted in Henley, 2007)

Since the creation of institutional care in the eleventh century there has been the development of a professionalism of care, with debate over appropriate
educational or medical solutions to the problem of mental retardation. Foucault highlighted the medicalisation and professionalization of social life in the eighteenth century, and questioned the power and surveillance of these professionals (Erevelles, 2005).

People with a learning difficulty have been managed within medical, educational and social frameworks. In the seventeenth century educational solutions were considered. Seguin (1866) advocated ‘treatment by the physiological method’ and sought to improve their situation through training; this included detailed examination and measurement from the ‘cradle to the slab’. He saw this as an ‘honest return’ to society, for their support of the establishments of care that were increasing in number. However medical management of people with a learning difficulty prevailed (Hughes and Paterson, 1997) and remained the dominant discourse (Fulcher, 1990). Towards the end of the nineteenth century there was a waning in interest in education and doctors focused on detailed examination and description of their subjects and became gate keepers and superintendents of institutional care. The measurement and labelling of those with a mental handicap began to take on greater importance. This medicalisation resulted in greater internment of individuals who could be seen as unproductive or polluting society and led to the consideration of eugenic solutions (British Council of Disabled People, 2004). There was a preoccupation with the detailed description and measurement of signs and symptoms and a search for explanation, training and cure (Slater, 2005).

With the introduction of the NHS (1945) medical power became even more central to the development of services for those with a learning difficulty. The NHS was heavily influenced by the eugenics movement with an underlying custodial and social hygiene agenda (Goble, 1998). At this stage “mental handicap psychiatry” emerged as a legitimate speciality within medicine with a resulting increase in status and power.

Even when abuse was exposed in this system, it was often met with lethargy and resistance by staff and administrators and resulted in little change (Ryan and Thomas, 1980). Research revealed the persistence of physical, psychological and material degradation into the 1970s. This period saw an increasing power gained by the medical profession across all areas of health, exercising their autonomy by authority over social policy and regulation, and subordinating other workers within the health care system (Elston, 1991); although during the next twenty years other health
related professions began to gain recognition and political influence. Health policy introduced in the late 1980s was aimed at breaking this monopolistic professional hold and a move to greater patient and public involvement. The influence of the media, a rise in consumerism, globalisation of knowledge and the new information era began to change consumer expectations, with the need to consider the ‘patient’ voice and to work with consumer groups who began to question these dominant power relationships (Thomas and Bracken, 2004).

However, the concept of “normalisation” and the move to community care in the 1982 was still dominated by professional decision making. “Supported living” frequently resulted in the establishment of mini-institutions often managed by a nurse within a medical hierarchy. Cambridge (1999) identified that residents still remained powerless to report and challenge poor or abusive practice, and recent reports have shown the continued misuse of professional power and physical, sexual and material abuse by staff.

The Commission for Social Care Inspection that was carried out in Cornwall in 2006 revealed several areas of poor practice and triggered a number of national reforms (Commission for Social Care Inspection, 2006) but this has not eradicated abuse and the misuse of power (Department of Health, 2004; Rosenbach, 2011).

The promotion of the social model of disability has gone some way to de-medicalising disability. However, the issue of impairment has by and large been seen as a health or medical issue (Goodley, 2001). For people with a learning difficulty their “impairment” may have no health implications but access to support service may still be governed by health professionals; and power and authority may remain with these professionals. Certification and compulsory admission to hospital may be the responsibility of the psychiatrist and in many cases they will be the gateway to other services. Access to benefits will require assessment and management by a doctor or a social worker.

Even self-advocacy groups can be dominated by professional control and observers have noted the ‘undeniable paradox’ in professionally led self-advocacy (Goodley, 1997). Even when employed staff work within an emancipatory framework there may well be a conflict of interest and boundaries imposed by their employing body.
Valuing People Now (Department of Health, 2007b) has emphasized the social aspect of learning difficulty and sees social care as the lead organisation in terms of commissioning of services. This may have lessened domination of services by the medical profession, but still places professionals in control. Increasingly Social work has lost much of its previous scope for individual discretion and judgement and is now dominated by assessment targets and accountability (Fisher and Byrne, 2012)

Within learning difficulty services professional attitudes are changing and many welcome the move to a social or emancipatory model of disability and the empowerment of the individual (Fisher and Byrne, 2012). However, restrictions may still be imposed by the commissioning and employing structures. Within the health service evidenced based practice relies on detailed individual assessment to demonstrate ‘outcomes’; and commissioning of services has an individualised agenda measuring ‘through-put’ of clients. This can limit opportunities for staff to engage in wider community projects.

Ensuring professional competence has become a dominant pre-occupation within professional care groups. There are a range of occupational standards projects such as the Knowledge and Skills Framework in the NHS (Department of Health, 2004) and the Skills for Care (Skills for Care, 2010b) and the Qualifications and Credit Framework (The Office of the Qualifications and Examinations Regulator, 2008). It seems that we must be judged competent in order to be allowed to judge others as incompetent!

Ferguson and Armstrong (2004) highlight the double disempowerment of ‘patients with communication difficulties’ (p.471) because of their limited access to a common language. Cortazzi and Jin (2004) identify a number of inherent asymmetries within these relationships. Firstly, the health professional does not have communication difficulties; secondly there is an imbalance of power because of the professional technical knowledge and social status and finally healthcare professionals are acculturated into a particular type of professional communication through their education, training and clinical practice. Research by Gravel and La Pointe (1983) demonstrated that health professionals reduced their length of utterance but did not slow their rate of speech when talking to patients with auditory comprehension difficulties.
Professional conversations tend to have a disorder or pathology focus (Pillay, 2001) with a tendency to use specialist jargon (Ferrara, 1999). There also tends to be a focus on ensuring compliance. This can be particularly problematic for individuals with communication difficulties. Barton (1999) found that patients who were unable to display their understanding and comply with the doctor's instructions received less of his or her time and underwent more radical treatment.

People with learning difficulties can come into contact with a wide variety of professionals, particularly those working in social and health care. Murphy (2006) found that they reported experiencing difficulty communicating with primary care staff. They felt that their General Practitioner (GP) did not understand the nature of their communication difficulties and there was a reliance on carers to act as mediators and ‘interpreters’ (Markova and Murphy, 2004). The responses of clients with learning difficulties were sometimes ignored (Jingree, Finlay and Antaki, 2006) or checked several times, leading to a change of response (Antaki et al., 2008). Professionals did not always assume that the individual with a learning difficulty was a reliable source of information (Leudar, 1997) and used ‘test’ questions to which they already knew the answer and at other times there were minimal attempts to check for understanding (Antaki, Walton and Finlay, 2007c). Interviewers often felt a need to ‘triangulate’ information provided by checking with others, to ensure its authenticity (Lesseliers, Van Hove and Vandeveld, 2009).

**Speech and language therapists**

“While current theoretical paradigms challenge us to move to an understanding of language use and development as a co-constructed, situated achievement, the therapeutic methods remain rooted in an expert, medical model.”

(Ferguson and Armstrong, 2004 p.471)

The traditional therapeutic model is an institutionalised routine between the competent expert (therapist) and incompetent patient and the interactive and discourse competencies of the patient can be ignored at the expense of the focus on linguistic competence (Simmons-Mackie and Damico, 1999). Most adults who have acquired communication difficulties will have a well-developed repertoire of interactional strategies and competencies that they bring to bear in conversation but they may be ignored by the therapist whose focus may be on their specific linguistic impairment. Strategies to support communication were found to consolidate the
exclusion of people with aphasia who were issued strings of instructions, made to perform and were chastised and patronised. In residential settings with no relatives to give background information, memories, history and experiences were lost if the individual was unable to communicate these themselves. There was a loss of the macro-social community and shared history (Parr, 2004). In some rehabilitation settings therapists were found to have very limited background information about their clients so interventions were limited in how they ‘accounted for the Lifeworld of those receiving therapy’ (Kovarsky, Kimbarow and Kastner, 1999 p.296). They also found that some therapeutic activities that involved strict adherence to the ‘rules of the game’ could be viewed as competency-lowering communicative practice.

The voluntary organisation ‘Connect’ have developed supportive strategies that value and galvanise the existing competencies of people with aphasia in order to overcome some of these linguistic difficulties. However these approaches have not been universally accepted within the speech and language therapy (SLT) profession (personal communication).

Individuals with developmental disabilities, unlike those with acquired communication impairment, may have had little opportunity to develop communicative competencies and may have has distorted social experiences as a result of their difficulties with language development (Bishop, 1997). The assessment and therapy process may further undermine competence and self-esteem as the individual may be subject to assessment to identify their deficits and then subject to intervention programmes that further emphasize their difficulties. Therapy tasks to remediate identified deficits are selected and controlled by the adult. Leahy (2004) questions whether this:

“asymmetrical relationship is the most conducive means of facilitating change, especially when, ultimately, communication competence is the goal of the interaction.”

(p.71)

She invited speech and language therapists to use their knowledge of language to move beyond their existing role and to look at conversational interaction in the clinic. Interestingly going into real-life environmental settings seemed a step too far!

Speech and language therapy assessment traditionally involves the use of case history interviews, standardised language tests and analysis of linguistic data. The interviews can be situated within this expert clinician-incompetent client dyad that will
influence the responses given and can serve to reinforce the incompetencies of the client. The evidence about the diagnostic and predicative properties of tests to measure speech language and voice disorders was found to be weak (Biddle, Watson, Hooper, Lohr and Sutton, 2002) and norm-referenced assessments have not been found to be culturally sensitive and can lead to under or over diagnosis of difficulties (Laing and Kamhi, 2003). Research has also shown that these types of assessments can serve to underline the incompetence of the client as they tend to have a deficit focus. Research by Maynard and Marlaire (1999) demonstrated the incompetence of both the child and the tester, and even with experienced testers the tasks were distorted and not necessarily carried out in the prescribed way.

Report writing has also been found to be a mechanism for constructing competence or incompetence. Assessment reports tend to emphasise the individuals deficits and are therefore a justification for the need for intervention. Progress reports tend to include more positive statements to demonstrate the success of the intervention, but may also contain negative evaluations to justify the continuation of the intervention (Duchan, 1999).

Therapeutic discourse reflects the power dynamics common within teaching interactions, with the therapist taking the leading role and engaging in Request-Response-Evaluation sequences. Other common interactions include questions where the therapist already knows the answer and prompts the ‘patient’ to give a ‘candidate answer’, and the use of ‘postilion sentences’ that do not relate to everyday communication needs (Crystal, 1995).

**Paid carers**

Purcell et al (2000) found that paid carers tended to focus on task completion and behavioural control and the culture in care organisations is influenced by registration and inspection compliance (Goble, 1999) which can disempower the individuals that they support. Staff may be directed to focus on issues of safety and cleanliness and may not value less measurable factors such as opportunities for choice and interaction (Finlay, Walton and Antaki, 2008d). Research has shown that care staff interact less with individuals with communication difficulties (McGarry and West, 1975), and make less demands, have lower expectations and provide fewer
conversational opportunities (Mittler and Berry, 1977). Residents may receive very little direct assistance from staff, with well under 10% of their time involved in interaction with their carers (Mansell, Beadle-Brown, Whelton, Beckett and Hutchinson, 2008).

Research by Prior, Minnes, Coyne et al. (1979) showed that staff interactions were dominated by instructions and residents initiations were frequently ignored. In some cases support staff ‘infantise’ clients by the style of their communication and the words they use (Goble, 1999; Bigby et al., 2009). Rapley (2004) noted similarities to child directed language including the use of specific language forms, simplified grammar, slower speed, high pitch “sing song” prosody and a high proportion of directives. Similar language patterns have been observed in conversations between elderly people and their carers where there is an asymmetry of power (Stilwell Peccei, 1999). The uneven power dynamic strongly impacts on interaction, with staff taking control and often acting in a didactic manner (Antaki, 2006; Finlay et al., 2008d; Jingree et al., 2006) and choosing and developing the topic of conversation (Purcell et al., 2000).

McConkey et al. (1999) found that staff used twice as many verbal acts than the residents they supported, they were four times as likely to initiate the conversation, used directive language and did not vary the quantity or style of their communication in response to the needs of those they were supporting.

Individuals with high support needs in staffed settings, spend long periods alone (Finlay et al., 2008d; Bradshaw, 2001). Here staff can be seen as knowledgeable and in charge, and the resident as incompetent and dependent (Antaki, Finlay and Walton, 2007b; Goble, 1999). Finlay et al. (2008c) acknowledged that it is difficult to rely on the usual forms of interaction and passing time together when the communication partner is non-verbal, however staff were still observed to use verbal conversation, ask questions and make statements to which their partner was unable to respond. Brewster (2007) highlighted a tension for staff between ‘talking with’ the client and talking ‘about the client’ with other staff members. They will use a change of pronoun to switch between client as subject and client as addressee. Staff were sometimes unaware of the communication strengths and weaknesses of those they supported (Chadwick and Jolliffe, 2009), and have been observed to over-estimate the
understanding of their learning disabled communicative partner (Bradshaw, 2001) and at other times under-estimate their abilities (Leudar, 1997).

Staff often did not adjust their communication style and quantity to the level required by their learning disabled partners (McConkey et al., 1999; Finlay et al., 2008d); and rarely used additional non-verbal strategies (Finlay et al., 2008d). Bradshaw (2001) found that staff’s perception of their communication style and the adjustments they were making did not match the reality of actual interaction. Staff have been observed to use a number of strategies in order to achieve a particular response and ‘shepherd’ their partner to a desired reply (Jingree et al., 2006; Rodgers, 1999). This included:

- the use of incomplete sentence with an elongated pause (What do you always say, she is my ……..) (Antaki et al., 2007b),
- questions with a confirmatory tag (You’d like to go swimming, wouldn’t you?) (Antaki et al., 2008),
- Questions with multi-option alternative (Would you like tea, coffee, chocolate….?)
- The provision of a ‘candidate’ answer (Where does your money from work go? It goes in the bank.) (Antaki, Young and Finlay, 2002).

Although staff can be criticised for their lack of responsiveness to the clients that they support, it has been noted that their behaviour is often driven by organisational and institutional issues (Jingree et al., 2006). They see their role in terms of completing tasks, behavioural control and the provision of physical care (Purcell et al., 2000; Mansell et al., 2008). Staff can be caught between organisational priorities for increasing community participation and their clients’ opportunities to express choice (Finlay et al., 2008d). The pervasive ‘care’ climate fosters disempowerment and control that is reinforced by organisational policies and inspection priorities (Finlay et al., 2008d). Overall organisational policies (Mansell et al., 2008) and the physical design of care environments (Bigby et al., 2009) will influence the pressures, dynamics and power relationships that will also impact on attitude and interactive style. Goodley (2001) suggests that different discursive frameworks will influence how support workers structure their intervention. Those operating within a ‘deficit’ model will assume incompetence and will take on a helping and caring role which increases their
power and control over the situation. Those operating within a ‘capacity’ model will see their role as one of facilitating positive development. The current neo-liberal climate that values free market competition and quantitative measurement of performance may further value control of resources over choice and empowerment (Dowse, 2009).

Although there has been an increased understanding of the power wielded by staff through their interactive style; there has been less emphasis on changing core values and attitudes (Bigby et al., 2009; Embregts, 2002) or consideration of how to address this fundamental power imbalance (Leudar, 1997). Yates, Dyson and Hiles (2008) remind us that:

“It should be recognised that care staff also work within relationships of power, subjectivity and self-government, and an understanding of the forces that shape their identities and actions might also be helpful.”

(p.256)

There has been considerable investment in the training and development of the learning difficulty work force (Bradley, 2003; Department of Health, 2007b); but this has not necessarily influenced attitudes within the workplace (Bigby et al., 2009). This training has had limited impact on the communication styles used by direct care staff (Mansell et al., 2008; Bigby et al., 2009; Money, 1997) or other professionals (Murphy, 2006). Training has focussed on increasing knowledge and teaching communication strategies (Jones, Pring and Grove, 2002; Chadwick and Jolliffe, 2009; Bell and Cameron, 2007) without the support to develop these skills in the workplace (Money, 1997; Dobson, Upadhyaya and Stanley, 2002; Graves, 2007). There has been some successful training of people with communication difficulties as a result of aphasia who have been trained to give constructive feedback to their communication partner (Young, Pearl, Lee and Bowen, 2007); this may be a useful model for training for people with learning difficulties.

Conclusions

Legislation has resulted in some significant positive changes in the positioning of people with learning difficulties within society. There has been an increase in the opportunities for self-advocacy; and personalisation has allowed greater control of some aspects of their lives. However those with significant communication difficulties remain the most marginalised. They do not enjoy equal status and asymmetries of
power still exist in their relationships with family and with professional and support staff. These disparities often go unchallenged.

This research examines a number of conversations between research partners with learning difficulties, their family members and paid staff. It analyses these in detail to see what happens in these interactions and how these asymmetries are played out within day-to-day interaction. It also makes suggestions about how these findings could be used to improve practice.
Chapter 3: Planning the Research

Introduction

This chapter will begin by reviewing a range of disciplines that study communication in order to identify methodologies that may be used in research. This will provide a background to the selection of the particular methods used in this study. This will be followed by consideration of the ethical issues relevant to this study and the processes of ethical approval that were required. There will be detailed consideration of the methods employed and how the data were collected, transcribed and analysed. The chapter will conclude with consideration of what aspects were identified for closer analysis following initial scrutiny and transcription of the video data.

This research predominantly uses a qualitative approach, however where appropriate the data have been subjected to quantitative analysis. This ‘mixed methods’ approach has been fiercely debated with the argument of the superiority of one methodology over the other and the belief by some that the two approaches are incompatible (Tashakkori and Teddlie, 1998). More recently mixed methods have become more widely accepted as complementary and may support triangulation and validation of findings (Jick, 1989). A range of qualitative approaches was used in order to gain as diverse a picture as possible. This use of ‘Bricolage’ draws on techniques from a range of disciplines to add richness to the process (Kincheloe and Berry, 2004).

Along with the acceptance of mixed methodologies there has been considerable change and a move away from a positivist stance of “objective” and quantifiable facts (Robson, 2002). There has been consideration of the role and position of the researcher and recognition of the importance of ethical values within social science research (Mertens, 2003). Lincoln and Guba (2000) summarise the evolution of research paradigms as the social sciences have embraced more interpretative and critical post-modern theories. They promote the more recent emergence of a more participatory or cooperative paradigm which places the researcher in a more equal relationship with their research subjects. This was heavily influenced by feminist research which was premised on gender imbalance and female oppression (Wadsworth, 2001). The British Disability movement criticised research on disabled people carried out by non-disabled researchers as it was felt to be oppressive
and demeaning. This has led to the promotion of more participatory and emancipatory research (Shakespeare, 2006). This research has taken an inclusive approach to the collection of data but the research partners with learning difficulties were not involved with data analysis. This limitation is discussed in Chapter 5 page 181.

**Studying Communication and Conversation**

Communication has been studied within a range of academic disciplines which has generated an abundance of complementary and contradictory theories. Recently there has been the establishment of an overarching discipline of ‘communication studies’, which brings together the traditional fields of semiotics and linguistics, psychology, sociology and anthropology. Figure 3 illustrates the focus and relationship between the different disciplines.

![Figure 3: Studying Communication](image)

The influences and relationships between these disciplines are illustrated in Figure 4 and shows where the methods used in this study are positioned. These have very different historical and theoretical bases and subsequently favour different research paradigms. These fields have also come together to form what are now established sub-disciplines for example psycholinguistics, sociolinguistics and linguistic anthropology. Traditionally speech and language therapy has been grounded within
the fields of linguistics and psychology with limited consideration of the wider social and cultural context. It was therefore important to explore a range of disciplines to identify how they might inform the research process.

**Semiotics, linguistics and socio-linguistics**

Semiotics is the study of signs. Saussure (in Chandler, 2002) and Pierce (1966) are credited as the co-founders of semiotics. Saussure’s distinction between ‘*langue*’ – the study of rules and conventions and ‘*parole*’ – its use in particular instances, has influenced the subsequent development of the fields of structural linguistics and sociolinguistics.

Historically, linguistics perhaps understandably has focussed on Langue or ‘linguistic competence’ and has often failed to view language in a wider communicative context. Chomsky (1959) used the term linguistic competence to describe the individual’s complete inventory of language knowledge, in contrast to ‘linguistic performance’ – the use of language in written and oral contexts (Swaffar, 2006). His perspective was concerned with the cognitive structures and mental processes underlying communication. This traditional model of linguistics has been criticised for its preoccupation with written language and the analysis of whole sentences (Linell, 2005). The focus has been on the form and function of language rather than its actual manifestation. This computational or generative approach to linguistics has dominated approaches to linguistic analysis within speech and language therapy.
More recently there has been an interest in the pragmatics of language, or the study of the factors that influence a person’s choice of language structures. This stresses the importance of conversational coherence, and has been shaped by the work of Grice (1975) who introduced the cooperative principle - the listener is helped to uncover what the speaker intends by assuming the cooperativeness of their conversational partner. Grice defined a number of ‘maxims’ that conversational partners use to ensure coherent conversation:

- **Quantity** – the speaker will provide the right amount of information, not too much, not too little
- **Quality** – the contribution should be truthful
- **Relevancy** – comments must be pertinent to the discussion
- **Manner** - contribution is orderly and avoids ambiguities

The study of conversational implicatures has been used to explain why maxims are violated in many circumstances such as indirect speech, metaphors and politeness.

Speech act theory was developed by Searle (1971), he placed great importance on communicative intention and distinguished a number of purposes behind speech acts which perform one or more social function. Speech acts are seen to assert something about the world (propositional), indicate the speaker’s intention (illocutionary) and signal what response the speaker wants from the listener (perlocutionary). Speech act theory has played a significant role in the field of discourse analysis.

A more radical development of Integrational linguistics has been pioneered by Roy Harris (2007). He criticises the telementation or speech chain model of language (see Figure 5) originally described by John Locke (1690) where a private message is transferred from the brain of the speaker to that of the listener (Denes and Pinson, 1993). This emphasises the auditory-vocal channel of communication and takes no account of the environmental or interpersonal context.

Three parameters to communication were identified by Harris (2005). These are the biomechanical (the physical and mental capacities of the individual), the macro social (the established practices of the local community) and the circumstantial (the particular conditions in the communicative context). Harris (2005) proposes the term ‘communicational proficiency’ to describe the individual’s ability to cope with the
demands and opportunities that the communication situations present. He rejects the possibility of establishing “a merely definitional set of speech act rules that could adequately distinguish communicative competence from incompetence.” (p. 41).

Gumperz (in Hymes, 1972) and Trudgill (2000 in Gretsch, 2009) introduced a more socio-linguistic approach to studying language in interaction, and recognised the importance of context and the search to identify the “rules about the way in which language should be used in interaction” (Trudgill 2000 cited in Gretsch, 2009 p.335). Michael Halliday broadened the scope of linguistic enquiry with a functional-semantic approach to language and linguistic analysis. His Systemic Functional Linguistics is based on four theoretical principles. Language use is functional and its function is to make meanings. These meanings are influenced by the goals and cultural context in which they occur, finally the process of using language is semiotic, making meaning by the choices that are made (Egginss, 2004). This approach has also been expanded to include the semiotic analysis of visual media (O’Halloran, 2011) and multi-modal methods of communication (Dreyfus, 2007).

Sociology, Anthropology and Ethnography

Sociology is the study of human society and considers social structures, systems and issues. August Comte is seen as the ‘Father of Sociology.’ He believed that society should be understood and studied as it was, rather than what it ought to be. Marx, Spencer, Durkheim, and Weber further helped define and develop sociology as a science and discipline, each contributing important theories and concepts.
Anthropology is concerned with the study of social relationships. The ethnographic focus criticised the linguistic approach to competence and Hymes (1962) developed a theory of communicative competence.

“Communicative competence involves knowing not only the language code but also what to say to whom, and how to say it appropriately in any given situation. Further, it involves the social and cultural knowledge speakers are presumed to have which enables them to use and interpret linguistic forms.” (Saville-Troike, 2003 p.18)

Saville-Troike (2003) distinguishes between receptive competence and expressive competence. Only shared receptive communication is needed for successful communication. In multi-lingual communities receptive competence may be shared, without corresponding expressive competence. This may also be the case for individuals with impaired communication, but sometimes this receptive competence is assumed, as the non-verbal partner is unable to signal misunderstanding.

**Psychology, Social Constructivism and Psycho-linguistics**

Psychology focuses on the study of behaviour and the mental processes that influence this. Piaget (in Hayes, 1994) argued that knowledge precedes language, and saw language as a tool that emerges as cognitive development progresses. The child achieves logical competence when they reach the formal operation stage of development and can then use abstract skills and hypothetical deductive reasoning. On the other hand Vygotsky (cited in Reddy, 1999) took a social constructivist approach that emphasised the importance of culture and context. He argued that language had totally different roots from thinking. He saw language as a social phenomenon and stressed the importance of culture and the role of others into the development of language. Children’s competence in communication develops through scaffolding by others in the zone of proximal development.

Reed (cited in Hodges, 2005) developed the field of ecological psychology and studied the way that the infant’s environment is actively structured to promote learning and development – central to this environment are other people. The theory of distributed cognition grew from the work of Vygotsky and emphasises the social aspects of cognition. Cognitive processes may be distributed across members of a social group, may incorporate external or environmental structures and may be distributed over time – earlier events transforming subsequent interactions (Clarke
and Chalmers cited in Wheeler, 2004). Its proponents argue for the concept of the ‘extended mind’ emphasising the important ways that external resources and artefacts are ‘coupled’ with and extend our mental powers, and are therefore important to competence. If these external artefacts are uncoupled competence is likely to fall (Cowley and Kravchenko, 2005). From this has developed the school of Distributed Language which resonates with Integrational linguistics discussed above.

**Ethnomethodology, Discourse Analysis and Conversation Analysis**

Erving Goffman, a sociologist focussed on the study of face-to-face interactions in the 1960s (Goffman, 1968). Harold Garfinkel (in ten Have, 2007) developed the field of ethnomethodology – the close observation of micro-behaviours in real situations and his work was extended by Harvey Sacks (1992) who focussed on how conversations were sequenced, the forerunner of Discourse and Conversation Analysis.

There are many definitions of Discourse Analysis. There appears to be common agreement that it is concerned with

“Language use beyond the boundaries of a sentence/utterance, the interrelationships between language and society and ... with the interactive or dialogic properties of everyday communication”

(Stubbs cited in Slembrouck, 2004 p.1)

Schiffrin et al. (2001) suggests that it can also include non-linguistic and non-specific instances of language.

Conversation Analysis is seen as a branch of Discourse Analysis which focuses on naturally occurring talk-in-interaction. It drew inspiration from the sociologists Erving Goffman and Harold Garfinkel who studied the ordinary ways that people interact in the course of their everyday life. It emerged as an instrument for study in the 1960s and 70s from the works of Harvey Sacks and his colleagues. In contrast to traditional linguistics Conversation Analysis is interested in the detail of actual practices of talk-in-interaction, in particular its sequential organisation. This has been made possible by technology that allows for audio and video recording that can be closely scrutinised. According to Antaki (2011) “Conversation Analysis provided a new and more microscopic way of thinking about social exchange.” (p.2). It is distinguished from other approaches as it focuses on participants own understanding as revealed in talk itself.
Conversation Analysis has been applied in a range of contexts and has encompassed institutional talk (Heritage and Robinson, 2011) as well as everyday conversations. It has also been used for the analysis of ‘disordered’ talk (Goodwin, 2002), including the study of people who have problems with communication following a stroke (Bloch and Beeke, 2008), communication with people with learning difficulties (Finlay, Antaki and Walton, 2008b) and with children with hearing or specific language difficulties (Gardner and Forrester, 2010).

Similarly Systemic Functional Linguistics (SFL) can be seen as an approach to Discourse Analysis. This was developed by Michael Halliday a social semiotic linguist. It focuses on how people use language and how language is structured for use. According to Eggins (2004):

“It seeks to develop both a theory about language as a social process and an analytical methodology which permits the detailed and systematic description of language patterns.”

(p.21)

It is based on four theoretical principles: That language use is functional and its function is to make meanings. These meanings are influenced by the goals and cultural context in which they occur; and finally, the process of using language is semiotic, making meaning by the choices that are made.

In SFL language is seen as a resource for conveying simultaneous strands of meaning. These are meanings about the world (ideational meaning - expressed through Field), meaning about roles and relationships (interpersonal meaning - expressed through Tenor) and meaning about the message (textual meaning - expressed through Mode).

Within discourse analysis, SFL has helped to:

“extend our understanding of the relationship between language, the meaning we can express, the context in which those meanings occur, and the effects of factors such as social distance, power and authority”

(Togher, 2001 p.133)

Halliday (1996) discussed the relevance of using SFL to explore other semiotic systems other than language; and more recently it has been used to study non-verbal aspects of communication in a child with intellectual disability (Dreyfus, 2006).
This study utilises Conversation Analysis. It has also used some aspects of Systemic Functional Linguistics to achieve greater understanding of the evaluative use of language. Hammersley (2003) calls for combining Conversation Analysis with other qualitative and quantitative methods in order to gain a greater understanding of social phenomena.

**Disability research**

People with disabilities have frequently been marginalised within research (Shakespeare and Watson, 2002), and have been subjects rather than participants within the research process. This has particularly been the case for individuals with learning difficulties, especially those with limited communication (Atkinson, 2004).

In disability studies there has been a move towards models of participatory research, and this is encouraged in health and social Care (Department of Health, 2000), and may be actively stipulated by funding bodies and ethics committees. This stresses the importance of the involvement of those being studied as active contributors to the research process; but there is criticism of the role of non-disabled researchers who may still remain in control of the research process. Emancipatory research goes further and seeks the representation of oppressed groups and stimulates social change. This approach was pioneered by Freire (1970) in relation to education and social oppression. This was embraced by feminist researchers as a challenge to traditional approaches which emphasised objectivity, distance from participants and hierarchies between the researcher and the researched (Marten, 2003). More recently emancipatory approaches to research involving other marginalised groups have been promoted. According to Robson (2002) emancipatory research should focus on marginalised groups, analyse how and why there is an asymmetry in relationships, link to political and social action and be based on emancipatory theory and methodology.

In addition Gilbert (2004) highlights the importance of a commitment to changing the relationship between the researched and the researcher, the promotion of social change and a commitment to the research process being controlled by people with disabilities. In essence the research should be “with rather than for or on disabled people” (Goodley, 1999 p.27).
Some emancipatory protagonists also call for the identification of the research questions and the management of the research process by the oppressed group. Zarb (1992) suggests that increased involvement:

“Will never by itself constitute emancipatory research unless and until it is disabled people themselves who are controlling the research and deciding who should be involved and how?” (Zarb 1992 cited in Walmsley, 2001 p.196).

The use of participatory or emancipatory approaches is still uncommon in the study of communication difficulties. Traditionally within the medical and health fields psychological, neurological and linguistic paradigms have dominated thinking and led to a positivist approach to research that has favoured deductive and empirical methods and has focused on the problems of the individual. More recently there have been examples of methodologies drawn from the social sciences and semiotics and the use of more qualitative approaches such as conversational analysis, grounded theory and the ethnography of communication. These approaches have more commonly been used for service evaluation (Skeat and Perry, 2008) but have also been used in relation to stuttering (Hayhow and Stewart, 2006) and adults with aphasia (Horton and Byng, 2000) and people with learning difficulties (Antaki et al., 2007a; Brewster, 2004).

Emancipatory approaches can be particularly challenging where the individuals have restricted cognitive and communication skills, and research with people with learning difficulties can be constrained by a medical view of disability, with research academics hosted by departments of medicine, health or psychiatry (Gilbert, 2004) and research participants selected because of their membership of what is seen as homogenous diagnostic groups (Law and Bishop, 2004).

However, there has been considerable progress in the meaningful involvement of individuals with a learning difficulty in aspects of decision making and policy development, and the promotion of participatory, emancipatory and affirmative models of research to address the imbalance of power between them and those that have traditionally ‘researched them’ (Williams, 2011). The promotion of self-advocacy groups such as ‘People First’ has begun to change public perception of those individuals with learning difficulties who are able to advocate for themselves, and there has been increased inclusion within research projects (Walmsley, 2003). There is evidence of increasing use of empowering research methods with this group, for
example, increasing use of ‘life story methods’ but these have usually focused on aspects of improving understanding of the general life experience and improving the quality of life (Walmsley, 2003).

However, individuals, with more severe cognitive or physical difficulties and little or no speech have remained marginalised and still tend to be viewed within an ‘impairment’ or medical framework. There is a danger of this group being excluded from research because of issues of vulnerability and consent (Kellett and Nind, 2001). There is also concern that these individuals may be influenced by those around them and may have a tendency to acquiesce to the suggestions of others (Whitehurst, 2006).

Walmsley (2001) adopts the term ‘inclusive’ research, as she sees this as a more accessible term when engaging with individuals with learning difficulties who may struggle with more abstract and unfamiliar terminology. Rodgers (1999) advocates a team approach with the researcher and the research group working together to ensure active participation, accurate representation of their views and concerns, and positive gain from the research process. This ‘inclusive’ approach is the model adopted for this research.

The co-researchers with learning difficulties recruited for this project will be referred to as ‘research partners’; the people who they video in conversation will be referred to as ‘conversation partners’.

**The Research Process**

The process involved in developing the proposal, gaining ethical approval, recruitment and data collection is outlined in Figure 6 below. The data analysis and synthesis stages are outlined in Figure 7 on page 64.

This research looked at communication between people with learning difficulties and their conversational partners. It included people with learning difficulties as co-researchers. The co-researchers were actively involved by

- Participation and representation through advisory conversations during the project
Ethical approval and data collection

Figure 6: Method: Proposal to Data Collection
• Active involvement as researchers in choosing interaction partners and collecting their own data
• Involvement with data through review, editorial decision and power of veto
• Access to results published and shared in a range of accessible formats and co-presentation to appropriate audiences and used to improve practice and policy

It was hoped that this would be a first step towards developing research awareness skills so that more equal and directed research may be possible in the future.

The original focus of this research was to look at communication breakdown but during the transcription phase a number of other themes began to emerge:
• Turn construction, recipient design, topic control and the use of questions
• Pause, overlap and intonation
• Use of non-verbal aspects including eye contact, gesture, and the use of artefacts
• The use of evaluation

As discussed in the introduction, this resulted in a shift in the relative emphasis of the research questions:

**Research questions:**

1. What happens in informal conversations between people with learning difficulties and their communication partners?
2. How can the research findings be used to improve professional practice?
3. How can people with learning difficulties be involved in research and how can their skills as researchers be developed?

It was planned to recruit up to four research partners who would be loaned a video camera and asked to record 10 minute conversations with whomever they chose. It was hoped to gain four recordings from each individual. They would have full control over which parts of the video could be used within in the research. The researcher would study the videos in depth and transcribe and analyse these data.

**Ethical Consideration:**

Ethical research is influenced by principles from a range of sources including legislation, professional standards and academic research guidance.
Legislation

The ethical framework for those working with people with learning difficulties is defined within the principles of Valuing People (Department of Health, 2001b), and is based on a range of legislation including the Human Rights Act 1998, the Disability Discrimination Act 2005 and the Mental Capacity Act 2005 (Department of Health, 2007a).

The core values enshrined in Valuing People are legal and civil rights, independence, choice (changed to ‘control’ in Valuing People Now (Department of Health, 2007b)) and inclusion. The importance of inclusion and control in the research process is particularly relevant. In 2006 the Department of Health published a report into the involvement of people with learning difficulties in research (The Learning Difficulties Research Team, 2006). This highlighted a number of issues and made a number of recommendations. They stressed that people with learning difficulties need to be involved from the beginning of the research, and they should be appropriately funded by being given proper jobs with proper pay. Researchers need to get better at providing accessible information and must be prepared to change plans and be creative and flexible. There is often a need to ‘think outside the box’ so that people with learning difficulties are appropriately included.

Ethics within the NHS:

Ethical principles within the health professions are based on:

- **Non-maleficence** to avoid harm “first do no harm”
- **Beneficence** - some benefit to the individual, the practitioner acts in the best interest of the patient
- **Respect for autonomy** – self-determination able to make reasoned and informed choices
- **Distributive justice** those in similar position should be treated in the same way, and health resources are distributed fairly

(Summarised from Beauchamp and Childress, 2001)

Within the health professions there is a strong emphasis on issues of consent and confidentiality, and it is essential that no harm is caused to individuals involved in the research process and where possible positive benefit should be gained. Much
health research also needs to consider the complex ethical issues relating to medical and drug trials. As a consequence of this, all ethical approval within the NHS has to undergo the same rigorous scrutiny as potentially life threatening medical research even though there may be no health risk involved in the research process.

**Gaining Ethics Approval**

This project required ethical approval from the host university and the NHS as the researcher’s employing body. Ethical approval within the NHS has to comply with stringent ethical standards and must be agreed by a suitable NHS Ethic committee. Ethical approval is gained through the completion and submission of an extensive electronic form through the Integrated Research Application System (IRAS) process. Much of the information required on the form had little relevance to this project. Once this 25-page form was completed, this together with any paperwork that was to be used throughout the project was submitted for ethical approval by a Regional centre. The constraints of the IRAS process meant that researchers with learning difficulties could not be recruited until full ethical approval had been granted. This significantly limited the inclusive and emancipatory nature of the research and also restricted the opportunities to change elements of the project as it progressed.

<table>
<thead>
<tr>
<th>February 2010</th>
<th>Submission for University Ethical research approval</th>
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<tbody>
<tr>
<td>February 2010</td>
<td>Approval from university Ethics Committee</td>
</tr>
<tr>
<td>March 2010</td>
<td>Deadline for submission of IRAS form</td>
</tr>
<tr>
<td>April 2010</td>
<td>Meeting of regional NHS Ethics Committee</td>
</tr>
<tr>
<td>April 2010</td>
<td>Provisional Approval from Regional NHS Ethics Committee</td>
</tr>
<tr>
<td>April 2010</td>
<td>Resubmission of revised paperwork</td>
</tr>
<tr>
<td>April 2010</td>
<td>Final Approval by Chair of Regional NHS Ethics Committee</td>
</tr>
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<td>April 2010</td>
<td>Enquiry to local Research and Development Department regarding local process</td>
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<tr>
<td>May 2010</td>
<td>Submission to local Research and Development Department</td>
</tr>
<tr>
<td>July 2010</td>
<td>Local approval received</td>
</tr>
<tr>
<td>August 2010</td>
<td>Recruitment of research partners began</td>
</tr>
</tbody>
</table>

*Table 1: Timescale for gaining Ethical approval*

This original submission wished to focus on people with learning difficulty with complex communication difficulties; this was likely to include those who were deemed
unable to consent to their involvement as well as those who were able to give consent. The Regional Ethics Committee gave provisional approval, but insisted that the research could only continue with one or other group, or needed to be re-submitted as two separate parallel projects. The Committee’s justification for their decision was from the Mental Capacity Act 2005:

“There must be reasonable grounds for believing that research of comparable effectiveness cannot be carried out if the project has to be confined to, or relate only to, persons who have capacity to consent to taking part in it.”

(Department of Health, 2007a (31.4) p.18).

The time scale of this project and the protracted ethical approval process made a full re-submission untenable, so it was decided to progress recruiting only those who were clearly able to give consent to their involvement. This by definition resulted in a group who were able to understand, retain and weigh up relatively complex verbal information (Department for Constitutional Affairs, 2007) This also meant that some aspects of the original research proposal had to be modified. Communication breakdown and repair was originally a primary focus of the research proposal but in fact breakdown as a result of understanding difficulty was not a common occurrence in these data.

Once regional approval was given, local approval had to be gained from the local NHS community Research and Development Department. Lack of familiarity and understanding of qualitative research methods by the review panel, meant that there was a delay of a further three months. No recruitment of research partners could commence until full ethical approval was granted. The delay in receiving ethical approval also resulted in less opportunity to reflect on the data collected with the research partners than had originally been planned.

**Consent**

Informed consent is a key issue in research. This is important for all participants in the research process – family carers, paid carers and the individuals with learning difficulties; it is this later group where these issues were most challenging.

Cameron and Murphy (2006) provided a pictorial method of providing information about their research (Talking Mats™) and attempted to correlate level of comprehension with the ability to give consent. However, even with these adaptations
they found that there was a degree of coercion by care givers to “encourage” the individual to take part and staff commented that ‘some gentle persuasion is often all that is needed!’ (p.116).

The Mental Capacity Act 2005 (Department for Constitutional Affairs, 2007) provides some protection and a clear framework for seeking consent. This act states that “a person must be assumed to have capacity unless it is established that he lacks capacity” (p.20). They identify a number of processes that people need to make decisions. They need to be able to understand the information relevant to the situation, retain the information long enough to make the decision, weigh up the pros and cons and finally communicate their decision. All of these may be problematic for people with learning difficulties. The Act gives clear guidance in relation to consent to involvement in research. Where a person (P) is unable to consent for themselves, the researcher must consult with an advocate who is engaged in caring for (P) or is interested in their welfare, and who has no connection with the research project. In general decision making for those who are unable to consent would follow a best interest process (Coggon, 2008), where a number of people who know the individual well would be involved in the process. It seems untenable that the research participants are the last to be consulted in this process.

However, consent does not only need to be gained from the individuals directly involved with the research. Stalker (1998) discusses the range of people who need to be consulted to give consent. Formal agreement is needed from funding bodies, academic institutions and ethics committees. Then consent is required from the management where the clients are living in supported settings or where access will be gained through day or educational facilities. Stalker also found that she needed the ‘professional blessing’ of individual staff members to gain access to the research participants, finally she ensured that she gained consent from the individual themselves or a psychiatrist for those judged incapable of consenting on their own behalf. The importance and challenges of including individuals with severe learning difficulties and complex communication needs in research has already been highlighted. These individuals have frequently been excluded from research because of the problems of consent (PMLD Network; Lesseliers et al., 2009; Rodgers, 1999; Abell and Ashmore, 2007). This is particularly problematic when we recognise how powerful staff and family can be at gaining acquiescence and using persuasion (Cameron and
Murphy, 2006; Finlay et al., 2008b). It was hoped to include this group within this research. However, the stringent NHS Ethics process (IRAS) has precluded the inclusion of people who are unable to consent to their involvement in research alongside individuals who are able to give their consent.

Informed consent to participate in this project was gained during the training session using specially designed materials that were easier to read and understand (see Appendix 5). This is discussed further on page 66.

Confidentiality and security of data

The issue of confidentiality of data was particularly challenging in this study where the use of video was a key tool. The Profound and Multiple Learning Difficulty (PMLD) Network along with Mencap have produced guidance around consent to using visual images and recognises that this is a powerful medium for this group. They promote the use of visual images as a way of changing attitudes towards this marginalised group. The PhotoVoice guide to ethical practice also informed the video capture phase of the project. Information was coded to ensure anonymity; and all potentially identifiable data such as quotes from conversations have been anonymised and pseudonyms used. The inclusion of video stills within the data analysis was considered, but it was felt that anonymity could not be guaranteed. All video material was transferred and stored on a computer with recognised virus and password protection, and was only accessed by the researcher. The video data will be stored securely once the project is complete and the anonymised transcripts will be saved for possible further analysis. Paper based data such as consent forms, questionnaires and meeting records are stored securely on NHS premises, and will be destroyed on completion of the project.

The role of the researcher

The choice of an inclusive/emancipatory approach to research has implications for the role of the researcher and their relationship with the researched. It is accepted that the researcher presence will have an influence on the interactive process, but there are risks in establishing relationships because of the prolonged contact that may be involved and the expectations that may be raised. Researchers have been criticised for developing these relationships in order to further their career (Walmsley, 2003).
and can become just another of the “succession of different faces drifting in and out of people’s lives.” (Stalker, 1998 p.10)

As well as responsibility to the research participants, the researcher must also consider their responsibility to the wider group of stakeholders, and the research community. The researcher needs to ensure that their work is of a high standard, with results accurately reported. The transcription and analysis of the data was done in a systematic and thorough manner, with constant re-visiting of the original video data to check observations. Data sessions where extracts of data are shared and discussed with others carrying out Conversation Analysis is considered good practice (Sidnell, 2010a). Unfortunately permission for sharing data in this way was not included in the original proposal. However the researcher attended data sessions where others presented their work and reflected on this and used this within her own analysis. This limitation is discussed further in chapter 5 page 181.

**Recruitment of Research partners:**

The research process from recruitment of participants to final analysis is illustrated in Figure 7. The Research partners were recruited through the local Learning Disability health team. The SLT team were asked to suggest people with learning difficulties known to them who would be able to consent to their involvement and might be interested in helping with research. A letter was sent out to nine people with information about the research in an easier to read format along with a more detailed information sheet that could be shared with carers and staff (Appendices 2 and 3). Seven people expressed an interest and were invited to attend an initial training day. It was recognised that travel to meetings can be difficult for individuals with disabilities (Disability Rights Commission, 2007). This is particularly the case in a rural county such as Cornwall where there is limited public transport. Therefore transport was provided and personal contact was made with all the volunteers during the week preceding the training. Six volunteers attended the training and all wished to participate in the research.
Figure 7: Research Process- Recruitment and analysis
Research partner training

The training session was conducted by the researcher in a Learning Difficulty Health Team Resource Centre, with the help of two SLT assistants and a volunteer. Staff at the Resource Centre also volunteered to be conversation partners so that the research partners could practise gaining consent, using the video camera and ensuring that a brief feedback questionnaire was completed.

At the beginning of the day the participants were provided with an A4 manual containing all the necessary information, consent forms, and the programme for the day (See Appendices 2, 3 4 and 5).

Topics covered during the day were:

What are research, consent and confidentiality? This brief session outlined the purpose of research to ensure that all participants understood the concepts of confidentiality and informed consent. This session culminated with completing ‘consent to being videoed forms’ so that the rest of the training could be recorded.

What makes communication difficult, what helps and what is communication breakdown? This comprised a brainstorming session that was captured in words and pictures on a flip chart. This aimed to help the participants to understand the overall purpose of the research

Social Networks – were used to identify potential communication partners. The concept of social networks was adapted from Blackstone and Hunt Berg (2002). This provides visual representation using concentric circles to map social contacts. See Figure 8 below.

The individual places himself in the centre and maps the closeness of social contacts on five levels from family member (1st Circle) to unfamiliar partners (5th circle).

Circle 1: The individual
Circle 2: Family members
Circle 3: Close friends
Circle 4: Acquaintances/ paid staff
Circle 5: Unfamiliar partners

The participants identified at least two people in their circles, but interestingly two people had only paid support staff in their first circle, and paid staff were present
in the second circle for all participants (for example, community nurse, physiotherapist). Following the mapping of the circles all partners were able to readily identify four people that they felt that they could approach to ask if they would participate in the research.

Figure 8: Example of the researcher's Social Network used in training

(Photos used with permission of friends and family)

**Gaining Consent:**

The process of providing information and gaining consent from potential conversation partners was discussed during the training; and all course participants signed a specially designed ‘easier to read’ consent to being videoed form (Appendix 4). The rest of the training session was then recorded for later reflection and analysis. During the trial interviews the research partners were supported to ask their conversation partners to consent to being videoed and to complete a consent form. At the end of their session all participants were asked if they would like to help with the
research and all six were keen to be involved and completed consent forms (Appendix 5 - Saying Yes to Research).

**Using the camera and tripod:**

This was an experiential session setting up the tripods and operating the Flip video cameras. These cameras were selected because of their ease of use, although they do not give high quality visual representation it was felt to be a sufficient record for the purposes of this research. Each participant had the opportunity to carry out a trial videoed session with volunteer members of the Resource centre staff during the training. Two members of the group were able to use the cameras independently by the end of this session. One member was unable to operate the camera herself due to physical difficulties and one struggled because of limited vision and dexterity. The final two members of the group required additional support to operate the cameras.

At the end of this session four members of the group were loaned tripods and video cameras. It was hoped that two members of the group would be able to collect their videos with no additional support; two would be supported by staff within their residential setting and the volunteer and speech and language therapy technicians agreed to support the two final members with collecting their video material.

**Gathering the data:**

There are three important stages for Conversation Analysis (ten Have, 2007; Sidnell, 2010a). Acquiring the data, transcription and finally, observation and theorising. It is important that data are actual, mechanically recorded examples of talk-in interaction. In the past linguistic study has tended to focus on invented theoretical examples of competent language (Chomsky, 1976). Sociologists and ethnographers usually work with observational and recollected data which cannot be revisited (Hymes, 1962). Recorded data allows for detailed transcription and constant re-examination to tease out the levels of complexity contained within the interaction. Originally Conversation Analysis used audio data including recorded telephone conversations. However the increasing availability of video recording has given the opportunity to examine visual aspects of the interaction, as well as providing information about the physical setting and the use of artefacts. There are now a
number of shared data banks and data are sometimes used from the public domain, for example, clips from YouTube the video sharing website.

This research focuses on detailed analysis of interaction between the research partners and their chosen conversational partners. As both the verbal and visual elements were important, videoing was used. Visual research is a growing field, and the development of technology has made the capture, selection and editing much simpler. The video material has been integrated with information from field notes, interviews and discussion with the research partners (Holm, 2008).

PhotoVoice was originally developed by Wang and Burris (1997) and has been used by Booth and Booth (2003) with people with learning difficulties. Their research participants took a range of photographs which were used to represent their experiences of motherhood. PhotoVoice now has a clearly defined procedure and structure, and incorporates participation and policy influence throughout the process (Wang, Yi, Tao and Carovano, 1998) and have also developed a clear statement of Ethical Practice. Susinos (2007) also used picture analysis whereby photographs chosen by the participants were used to guide the conversation. Video-autoethnography is described as a method where people are trained to video aspects of their life (Plummer, 2001). Video-diaries or ‘participant-generated video accounts’ have been used to provide a more direct understanding of the experience than researcher controlled videoing (Gibson, 2005). However, the popular conception of ‘video diary’ as self-talking to camera needs to be avoided as the focus of this study was on conversational interaction. The term ‘VideoVoice’ was used because its meaning is more transparent than video-autoethnography and incorporates many of the principles of PhotoVoice.

Originally six volunteers attended the research training workshop and all were keen to be involved, for personal reasons two dropped out before collecting any data and one was only able to do a limited amount of data collection. The video and audio quality of recordings from one research partner meant that it could not be transcribed and analysed. The three research partners selected the interactions they wished to record; and where possible, they recorded their own conversations through the use of a video camera – so that both verbal interaction and non-verbal (visual) elements were captured. A summary of the recordings made is provided in Table 2 below. The

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4 The research partners will be described more fully in chapter 3.
research partners collected their data without the help of the researcher. Connor was given additional assistance from a member of health staff and recorded three conversations with health staff. Cate was physically reliant on her support staff to set up and control the camera; she videoed interaction with a mixture of her family and paid carers. Alan independently recorded one conversation with a member of health staff and a conversation with his sister. Further adaptation, training and experience would be needed to enable all the research partners to use the camera independently. It would also be useful to explore ways to enable Cate to have greater control over the process. The increased use of the video camera facility on the iPad might make this process simpler and give greater control. This is being actively explored with Cate.

<table>
<thead>
<tr>
<th></th>
<th>Conversation 1</th>
<th>Conversation 2</th>
<th>Conversation 3</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connor</td>
<td>Member of health team</td>
<td>Team physiotherapist</td>
<td>Hospital chaplain</td>
<td>28.13</td>
</tr>
<tr>
<td></td>
<td>6.22 minutes</td>
<td>12.18 minutes</td>
<td>9.33 minutes</td>
<td></td>
</tr>
<tr>
<td>Cate</td>
<td>Paid carers and family</td>
<td>Family and paid carers</td>
<td>Paid carers</td>
<td>45.52</td>
</tr>
<tr>
<td></td>
<td>16.30 minutes</td>
<td>14.21 minutes</td>
<td>15.01 minutes</td>
<td></td>
</tr>
<tr>
<td>Alan</td>
<td>Member of health team</td>
<td>Sister and her children</td>
<td></td>
<td>16.25</td>
</tr>
<tr>
<td></td>
<td>4.55 minutes</td>
<td>11.30 minutes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Conversations recorded

The recordings from the cameras were downloaded by the researcher on to a password protected laptop. At this stage the research partners were asked if there were any parts of the videos that they did not want to be used, but it was not possible to review all the data with them on these occasions. In fact they stated that they were happy for the recordings to be used in their entirety and no editing was required.

Although it was originally hoped that more research partners would be recruited; the resulting limitations in the amount of data collected allowed for more in-depth analysis then first planned. This included the examination of intonation patterns and the contribution of eye gaze. The richness of this data allowed for identification of clear themes and there were definable patterns across conversations.
Meetings with research partners:

After the training session, the researcher contacted all partners on a regular basis by phone to check how they were getting on, and arranged visits to download and review the videos collected. During the project two members of the group dropped out for personal reasons. Varying amounts of video footage were obtained from four members of the group. The quality of the data from one partner was poor so was excluded. Thus data from three research partners was transcribed and analysed.

Data Analysis:

As previously discussed (see page 46) conversation can be analysed from a wide range of perspectives, including linguistic, philosophical, sociological and semiotic approaches (Eggins and Slade, 1997). See Chapter 2 for discussion of the range of methods identified. An Applied Conversation Analysis approach that took the stance of ‘unmotivated looking’ (Psathas 1995 cited in ten Have, 2007 p.120) was initially used to examine the data. This was combined with quantitative analysis of various conversational aspects which helped to identify key points of interest. This analysis was then further enhanced by the use of frameworks from Systemic Functional Linguistics in relation to the use of prosody and evaluation (Eggins, 2004).

Transcribing the data:

A detailed and accurate transcript of the recorded material is a time consuming but essential part of Conversation Analysis and needs to be carried out by the researcher (ten Have, 2007). The playing and replaying of sections of recording is part of the analytic process, and the listener has to learn to hear what can be very subtle nuances of pause, intonation and pacing. All of these may have consequences to the way the talk is heard by the co-participants in the conversation. The detailed process of transcription allows for ‘close looking’ at the data through repeated replaying, and results in different noticings (Sacks, 1985). Psathas 1995 (in ten Have, 2007) describes this early stage of analysis as ‘unmotivated looking’ from which noticings for further inspection emerge. It is important to look ‘at’ the data rather than look ‘for’ particular phenomena; and to avoid apophenia (seeing patterns that do not exist). Sidnell
(2010a) suggests that close observation places Conversation Analysis closer to the natural sciences such as biology, than to social science which commonly starts with some kind of hypothesis and seeks data to support it.

The data were originally transcribed in traditional orthography using the Nvivo 8 programme. This is qualitative data analysis software designed for working with rich multi-media information. This allowed for frequently playing and replaying of short segments of the video so that details could be carefully checked. The data was annotated using Conversation Analysis transcription conventions based on the work of Gail Jefferson (2004) and adapted by ten Have (2007). More recently there has been consideration of ways to transcribe elements of non-verbal communication such as body alignment, eye gaze (Goodwin, 2000b) and hand gestures (Schegloff, 1984) (from Rendle-Short 2002 in Liddicoat, 2007). As the data was examined interesting ‘noticings’ came to the attention of the researcher and description of non-verbal behaviour and notation to describe eye gaze and intonation were also included. It was also decided that for Cate a more in-depth transcription of her speech would be useful. This was transcribed phonemically (see Appendix 6) using the International Phonetic Alphabet in Microsoft Word using a Unicode Phonetic Keyboard.

**Quantitative Analysis**

The transcribed data was coded using Nvivo 8 and analysed quantitatively to measure a number of parameters. These included percentage of turns, number of communication breakdowns, use of questions and topic control. This helped to identify some of the key points of interest that were considered in more detail. There was an iterative process of analysis where once an important feature had been noticed in one data set, previously analysed data was revisited.

**Conversation Analysis**

The data were then analysed using Conversation Analysis to investigate these points of interest in more detail (Eggins and Slade, 1997). Conversation Analysis can be described as a functional approach to discourse analysis that focuses on ‘talk-in-interaction’ (Schegloff, 1987 p. 207). It is characterised by close examination of sequences of conversation in an attempt to establish ‘rules’ of message design and
interaction, as well as examining rule violation and conversational repair. It has a particular concern with turn taking and how sequences of dialogue are negotiated and how the internal design of conversation achieves a certain social function (Antaki et al., 2008). Intersubjectivity is central to Conversation Analysis and is seen as a shared understanding by the co-participants of the import or upshot of an utterance” Schegloff (1991 p.168). It describes the way that conversation partners strive to establish shared meaning based on observable behaviour in interaction. According to Schegloff (1992):

“[.. it] is interactional and sequential, coordinating the parties’ activities in achieving a joint understanding ... and the procedural infrastructure of interaction, and in particular the practices of talking in conversation.”

Antaki (2011) describes a number of applications of Conversation Analysis the most common being the study of interaction in institutional settings and how it can be used to shed light on the functioning of the institution or can be used for service improvement. He also describes two other applied approaches that are relevant to this study. ‘Communicational Conversation Analysis’ which offers “complementary or alternative analyses of communication problems” (Antaki, 2011 p.1). These problems may be a consequence of second language learning or communication disorder, for example as a result of aphasia, dementia or learning difficulties; and finally, ‘Interventionist Conversation Analysis’ which seeks solutions to interactional problems through the analysis of the organisation of the interaction. Conversation Analysis has been used extensively to study conversation between people with learning difficulties and their support staff (Antaki et al., 2007b; Antaki et al., 2007c; Finlay et al., 2008b; Finlay et al., 2008c).

The key verbal aspects identified and discussed are summarised in Table 3 on page 74. More detailed consideration of these concepts is provided in Appendix 7. Conversation Analysis has increasingly recognised the importance of non-verbal and non-vocal aspects of communication, especially since the greater availability of video rather than audio data. This account will focus on six aspects of non-vocal behaviour: positioning and posture, eye gaze, facial expression, nodding and head shaking, gesture and the use of artefacts. It will also consider the importance of prosody (intonation, volume and pitch). These features are also summarised in Table 3 and considered in more depth in Appendix 7.
### VERBAL ASPECTS

<table>
<thead>
<tr>
<th>Topic Management</th>
<th>How topic is initiated and maintained. How topic shifts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turn Construction</td>
<td>How turns are built. Turn construction units (TCU) and Transition Relevance Place (TRP) for change of speaker</td>
</tr>
<tr>
<td>Co-construction</td>
<td>How turns and meaning is built collaboratively</td>
</tr>
<tr>
<td>Pause</td>
<td>Intra-turn and inter-turn pausing and the role it plays</td>
</tr>
<tr>
<td>Overlap</td>
<td>When and where this occurs, how it is resolved</td>
</tr>
<tr>
<td>Recipient Design</td>
<td>How speakers take into account the needs of the listener</td>
</tr>
<tr>
<td>Use of Questions</td>
<td>Types of questions used, who asks them, how they are marked for a preferred response</td>
</tr>
<tr>
<td>Repetition</td>
<td>The function of repetition particularly in relation to repair</td>
</tr>
<tr>
<td>Repair</td>
<td>Self-Initiated Repair and Other-Initiated Repair and how these are negotiated</td>
</tr>
</tbody>
</table>

### NON-VERBAL ASPECTS

<table>
<thead>
<tr>
<th>Positioning and posture</th>
<th>How speakers position themselves or are positioned during the interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye gaze</td>
<td>Where they are looking and how this affects the communication</td>
</tr>
<tr>
<td>Facial Expression</td>
<td>Role of smiling, frowning etc.</td>
</tr>
<tr>
<td>Nodding and head shaking</td>
<td>Head nodding for attunement, confirmation and encouragement</td>
</tr>
<tr>
<td>Gesture</td>
<td>The use of hand gestures and manual signs</td>
</tr>
<tr>
<td>Use of artefacts</td>
<td>Use of objects in the environment and communication tools such as boards and SGDs</td>
</tr>
<tr>
<td>Prosody - intonation</td>
<td>The contribution of tone variation</td>
</tr>
<tr>
<td>Prosody –Pitch and volume</td>
<td>Contribution to overall impression</td>
</tr>
</tbody>
</table>

### EVALUATION

<table>
<thead>
<tr>
<th>Discourse structure</th>
<th>How this can be signalled through the overall construction of the conversation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lexical choice</td>
<td>How it is signalled through the choice of words</td>
</tr>
<tr>
<td>Intonation</td>
<td>How evaluation can be signalled through variation in tone, pitch and volume</td>
</tr>
</tbody>
</table>

Table 3: Aspects for analysis

**Systemic Functional Linguistics**

This analysis has been augmented by the consideration of frameworks from Systemic Functional Linguistics (SFL). According to Muntigl (2004), this combining of methods of analysis allows for greater consideration of the grammatical aspects of language. In this study SFL has been used to examine the use of evaluative language and the analysis of prosody.

Hollander and Gordon (2006) describe evaluation as one of the finishing (as in varnish or paint) devices in conversation, that adds shades of meaning. Recipients of
evaluation may upgrade or downgrade an evaluation through their response. Evaluation can be achieved through lexical choices, the use of grammatical and discourse resources and through non-verbal elements such as timing, repetition, intonation and movement. Eggins and Slade (1997) suggest that the language of appraisal or attitudinal colouring of talk is one of the least researched areas in linguistics. The exception to this has been the work of Martin and White (2005) who have worked within the field of **Systemic Functional Linguistics (SFL)**.

Martin and White (2005) have particularly focussed on evaluation or appraisal in written text but their framework has been applied to casual conversations by Eggins and Slade (1997). Martin and White (2005) define three main categories of appraisal:

**Appreciation:** aesthetic evaluation of process, objects etc.

**Affect:** concerned with registering positive or negative feelings

**Judgement:** deals with attitudes towards behaviour

These categories have been further subdivided (see Appendix 8- Appraisal in SFL) but only these first order categorisations will be used in this research. Martin and White (2005) also consider how these terms can be graded or **amplified**.

Prosody is the supra-segmental aspect of language, and includes intonation (the variation in pitch), volume, rhythm and stress. Intonation is signalled by tonic prominence – a salient syllable that stands out because of a combination of increased volume, duration and change in pitch (Halliday and Greaves, 2008) along with tonicity – the direction of pitch change.

The meaning expressed by intonation has been extensively studied within Systemic Functional Linguistics (Halliday and Greaves, 2008). In English we recognise five simple tones, these are described in Table 4:

<table>
<thead>
<tr>
<th>Tone</th>
<th>Description</th>
<th>Usage/meaning</th>
<th>Notation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tone 1</td>
<td>fall</td>
<td>Declarative</td>
<td>↓</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wh5- Interrogative</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Imperative</td>
<td></td>
</tr>
<tr>
<td>Tone 2</td>
<td>rise</td>
<td>Yes/no interrogative</td>
<td>↑</td>
</tr>
<tr>
<td>Tone 3</td>
<td>Level rising</td>
<td>imperative</td>
<td>→↑</td>
</tr>
<tr>
<td>Tone 4</td>
<td>Fall rising</td>
<td>‘reservation’</td>
<td>↓↑</td>
</tr>
<tr>
<td>Tone 5</td>
<td>Rise fall</td>
<td>‘surprise’</td>
<td>↑↓</td>
</tr>
</tbody>
</table>

Table 4: Tones of English

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5 Wh- questions are those that begin with what, who, where, when, why and ‘how’.
Although pitch and volume are important in intonation, there may also be an overall variation in these which can signal meaning. Shute and Whezldall (1995) noted an overall increase in pitch when mothers were talking to their children, and Ryan et al. (1991) noted a similar change in conversations with the elderly.

**Identification of themes**

As the analysis progressed points of interest began to emerge and these were noted. On completion of the analysis it was possible to cluster these points of interest around key themes. These are summarised in Table 5. Themes can be seen as a broader range of features that may be represented across a variety of interactional practices (Drew and Heritage, 1995). Barton (1999) suggests that the concept of themes “provides a bridge between the macro-analysis of ethnographic description and the microanalysis of conversational analysis.” (p. 263).

<table>
<thead>
<tr>
<th>Roles, relationships and identity</th>
<th>Staff roles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Self-identity</td>
</tr>
<tr>
<td></td>
<td>Group identity</td>
</tr>
<tr>
<td></td>
<td>Perceptions by others</td>
</tr>
<tr>
<td></td>
<td>Relationship with staff and family</td>
</tr>
<tr>
<td>Competence and evaluation</td>
<td>Discourse style</td>
</tr>
<tr>
<td></td>
<td>Teacher:pupil relationship</td>
</tr>
<tr>
<td></td>
<td>Parent:child roles</td>
</tr>
<tr>
<td></td>
<td>Use of evaluative language</td>
</tr>
<tr>
<td>Power and control</td>
<td>Topic control</td>
</tr>
<tr>
<td></td>
<td>Use of questions</td>
</tr>
<tr>
<td></td>
<td>Selection of lexical items</td>
</tr>
<tr>
<td>Recipient design</td>
<td>Use of patronising language and style</td>
</tr>
<tr>
<td></td>
<td>Reasonable adjustments</td>
</tr>
</tbody>
</table>

Table 5: Key themes
Quality of the data

The presence of the camera obviously had an impact on the resulting data. Connor enjoyed using the camera and often wanted to replay the video to see what this looked like:

Connor Conversation 1: with Diane
There are also occasions in Cate’s conversation where the partners make reference to the recording process and the fact that it was going to be viewed by the researcher.

Cate Conversation 1: with Daisy, Nina, Jake and mother

Videoing may result in subjects being more reactive and affect participants’ behaviour Penner, Orom, Albrecht, Franks, Foster and Ruckdeschel (2007) but is necessary where non-verbal behaviour is likely to be important. Penner et al. (2007), found that video oriented behaviour was minimal in their sample of medical dialogues. In this research visual data was essential but it must be recognised that these conversations may not have been representative of casual or institutional conversations. However, the findings do give some insight into the interactive style of conversation between the people involved.

Presentation of the data:

The analysis is presented in Chapter 4. Quantitative data are provided in tables and graphs. The qualitative analysis is illustrated by extracts from the transcripts. Following the detailed analysis of all the conversations with the three research partners, the data were then examined and similarities and differences were identified.

The overarching themes are presented in Chapter 5 and discussed in relation to the research questions, their theoretical relevance and practical implications.

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6 Transcription Conventions are given on page 10
Summary

This chapter has considered a range of methodologies commonly used to study language and communication; and described the methods used in this research. It has highlighted the restriction and limitations of these approaches. It has provided an overview of Conversation Analysis and Systemic Functional Linguistics as a background to the detailed analysis presented in the following chapter.
Chapter 4: Examining the data

Introduction

The first part of this chapter will consider the data from each of the research partners in turn. As the data were transcribed particular features were noticed. These provided categories for more systematic exploration. If new ‘noticings’ emerged in later conversations, the previously analysed data were revisited. For example the data from Connor was examined first. When the data from Cate was then examined eye contact was identified as an important aspect of the conversation. Connor’s conversations were then revisited to look at eye contact as a feature.

Each research partner is discussed in turn. This begins with background biographical information and details of the conversations that they recorded. This is followed by the presentation of descriptive statistics which helped to identify areas of interest and discussion of the relevant individual findings from the detailed qualitative analysis. Examples of the transcribed data have been included and a full transcription of Connor’s first conversation is included in Appendix 9. For further explanation of the key concepts discussed see Appendix 7.

Each individual section concludes with a summary of the key areas of interest identified and the chapter closes with a comparison of the similarities and differences between the findings from the three research partners.

Connor

Connor was aged 36 at the time of the conversations. He lives with his grandmother and attends a local day centre four days a week. He has recently begun to receive direct payments and employs a personal assistant one day a week to support him to explore new activities. He is an enthusiastic member of the local self-advocacy group. He was extremely keen to be involved in the study and was particularly interested in the technology of videoing although required support to set this up and operate the camera. This help was provided by a member of health staff.
that Connor knew well. She set up the video and then left the room so that she did
not influence the interaction.

When Connor discussed his social network at the training session the
numbers of people he identified were very few. In fact his close friendship circle only
included paid staff. However, during one conversation he described himself as
having a lot of friends. The lack of friends described in his social circle may have been
because the communication partner who supported him with the writing had
problems understanding the names that he gave. This difficulty was also noted in the
extract from Conversation 1 below. (See page 9 for Transcription Conventions).

| 21 | D: Ah↑ who’s your mate↑ {€→C} |
| 21 | C: (..) re i cor (??)↓{€→D} ((smiling)) |
| 21 | D: Right yeh↑ OK↓ ((nodding head slowly, does not understand)) {€→C} |
| 21 | C: (..) Yeh↓ {€} I got lot of mates↓ {€→D} ((sitting back in chair)) |
| 22 | D: Have you↑↓ {€→C} |

Connor (C) recorded the following conversations in a Learning Difficulty Team
resource centre.

1. Diane (D) – an unfamiliar member of the local health team – this was
recorded during the training sessions (Duration 6.22 minutes). This consisted of non-
generic chat and explanations relating to Connor’s holidays.

2. Tina (T) – a member of health staff who supports the self-advocacy group that
Connor has known for many years. Unfortunately the camera was set up so that
Connor’s face was out of shot for most of this recording. (Duration 12.18 minutes).
This comprised narration of a recent cycle ride, and forecasting about future exercise
possibilities

3. Eric (E) – a hospital chaplain who supports the advocacy group that Connor
has known for about three years (Duration 9.33 minutes). This included explanations
relating to Eric’s role as a chaplain, and watching TV and Connor’s narration of a
cycle ride.
Quantitative analysis

Following transcription using Nvivo 8 software the data was coded under a range of categories that emerged as the video was viewed and re-viewed. This quantitative analysis is summarised in Table 6. The predominant use of questions and evaluative language by his conversation partners was particularly noticeable. This quantitative analysis provided a useful foundation for further in-depth qualitative analysis.

<table>
<thead>
<tr>
<th></th>
<th>Conversation 1</th>
<th>Conversation 2</th>
<th>Conversation 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Connor</td>
<td>Diane</td>
<td>Connor</td>
</tr>
<tr>
<td>Topic choice</td>
<td>10</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Overlap</td>
<td>17</td>
<td>1</td>
<td>18</td>
</tr>
<tr>
<td>yes/no Interrogatives</td>
<td>8</td>
<td>47</td>
<td>4</td>
</tr>
<tr>
<td>TAG Q</td>
<td>0</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Wh-Interrogatives</td>
<td>1</td>
<td>21</td>
<td>2</td>
</tr>
<tr>
<td>Total number of questions</td>
<td>9</td>
<td>73</td>
<td>13</td>
</tr>
<tr>
<td>Un intelligible</td>
<td>9</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>Problems with understanding</td>
<td>1</td>
<td>6**</td>
<td>0</td>
</tr>
<tr>
<td>Self-Repair</td>
<td>9</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>Repetition or partial repetition</td>
<td>14</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>Use of gesture</td>
<td>10</td>
<td>13</td>
<td>3</td>
</tr>
<tr>
<td>Evaluation</td>
<td>5</td>
<td>35</td>
<td>10</td>
</tr>
<tr>
<td>Amplification</td>
<td>3</td>
<td>14</td>
<td>2</td>
</tr>
</tbody>
</table>

** Partner misunderstanding of Connor

Table 6: Connor - Quantitative Analysis

Qualitative analysis

The range of features discussed are outlined in Table 3 on page 74, and considered in greater detail in Appendix 7.

Discourse Structure:

**Topic management:**

In his conversation with Eric, Connor took the major responsibility for topic choice. In the other two conversations topic management was more balanced. On some occasions his partner used a topic elicitor to prompt Connor to choose a topic:
3. D: What do you fancy talking about ↓ what’s a good subject for you
Connor ↓ (..) {€ → C}

4. C: Holidays ↑ ((off camera))

**Connor Conversation 1: with Diane**

However on the majority of occasions Connor introduced new topics for himself. He frequently introduced a new topic abruptly, with a topic nomination requesting information from his partner:

| 113. | C: Where that to ↑ Where how far’s that ↑ Denmark ↓ {€ → E} |
| 114. | E: Is, Denmark ↑ ↓ Its near ↑ eer, its just across the :: ocean from London ↓ ((nod)) {€ → C} |
| 115. | C: Do you watch TV ↑ {€ → E} |
| 116. | E: I watch TV ↓ ((nod)) ye ↓ I like C [SI ↓] {€ → C} |

**Connor Conversation 3: with Eric**

There were no occasions when Connor used pre-shift tokens or assessments, instead new topics were occasionally offered when there was a pause in the conversation. Then Connor would select a new topic by asking his conversation partner a question about a subject from the prompt sheet which had been provided by the researcher to help him to structure the conversation.

| 229. | E And go to the pub ↓ ((smile)) {€ → C} |
| 230. | C: Last Tuesday right ↑ last Tuesday ↓ ((turning towards E,)) {€ → E} |
| 231. | E Last Tuesday ↑ ((eye brows raised, nod)) {€ → C} |
| 232. | C: You know what I did ↑ ((smile)) {€ → E} |
| 233. | E: What did you do ↑ ((smile, nod)) |
| 234. | C: I went on my bike ↓ ((pointing over right shoulder, smiling)) from Duckbridge ↓ {€ → E} |

**Turn construction**

Most of Connor’s turns comprised only one Turn Construction Unit (TCU) (Sacks et al., 1974). The majority being yes responses to questions from his partner. Generally when Connor contributed turns with multiple TCUs these were marked with pauses, repetitions and self-repairs:

| 28. | C: {€ → D} and do p, and I do a paper round o::n ↓, (..) every ↑ (..) {€ ↑} every month ↓ {€ → D} do paper round ↑ ((smiling)) |

**Connor Conversation 1: with Diane**

| 60. | C: I was tre..ing [you know my], you know my things ↑ ((pointing with finger)) I took it all off ↓ right ↑ |
Connor Conversation 2: with Tina

| 31. | C: [Do] you wear it all↑ do you wear↑ do you wear↑, do,(..) if you, if you visit people↓, do you wear it then↑ {€→E} |

Connor Conversation 3: with Eric

His conversation with Tina was marked by progressively longer turns by Tina, comprising multiple TCUs (between 3 and 8 per turn) with Connor responding with minimal single word responses. Towards the end of the conversation there were several occasions of long unfilled pauses. Tina maintained eye contact with Connor during these pauses but because of the positioning of the camera it was unclear where Connor was looking. The balance of TCUs was much more symmetrical in Connor’s conversation with Eric.

Co-construction

Much of the conversations were question and answer sequences about personal preferences and activities. However, in all three conversations Connor and his partners worked hard to construct narratives of past events. These narratives sometimes resulted in Connor struggling to provide information and he would give up and change the topic:

| 97. | C: [I won , I won a] {€} I won a trophy once↓,((rubbing finger on nose)) {€→D} mm (..) |
| 98. | D: Oh ((eye brows raised, pull back)) Blimey↑↓ {€→C} |
| 99. | C: I won ↑ trophy on pool↓ (..) competition↓ {€→D} |
| 100. | D: Yeh↓ ((nod)) {€→C} |
| 101. | C: and a Juday↓ {judo? Two day?} (..) once↑{€→D} |
| 102. | D: Crickey↑, ((pull back, eyebrows raised)) [you’re a bit↓] ((nodding, movement of hand, smile)) a bit good then↑ {€→C} |
| 103. | C: {€→D} Yeh↓ [You know] ((pointing on thig, smile)) |
| 104. | D: ye↑ ((nod)) ooer↑↓ ((pull back, laugh)) |
| 105. | C: Bit ?? something↓ ((shaking flat hand, smile)) {€→D} |
| 106. | D: ((LAUGH, lean forward) {€→C} |
| 107. | C: ((leaning back)) Right↓ what we {€→prompt CArd} {€→D} |

Connor Conversation 1: with Diane

These narratives were most successful with Tina who knew Connor well and was able to use her background knowledge of Connor to shape her questions and comments:
Pause:

There were many inter-turn pauses in these conversations. Connor paused frequently within TCU, whereas his partner’s pauses were usually at the end of a TCU at a Transition Relevant Place (TRP), providing an opportunity space (Mondada, 2006) for Connor to take a turn. On some occasions these opportunities were not taken up and the partner then continued speaking.

These spaces were sometimes significantly longer than one second, but this appeared to be tolerated without a difficulty. There were also longer noticeable pauses when Connor was asked a question which he struggled to answer and appeared to indicate a search for information. Connor seemed to benefit from being allowed this time to formulate his response without interruption from his partner. However, these pauses also occurred when Connor finally gave a dispreferred answer:

Connor Conversation 2: with Tina

| 83. | T: (0.8) *(mouth opening)* **wow**↑↓ and **that**’s quite a **hil**↓ *(indicating up hill)* {€→C} |
| 84. | C: and it’s a shi↓ **right**↑ |
| 85. | T:Yes↑ *(nod)* |
| 86. | C: and I walk on it ↑ |
| 87. | T: and you do that once a **week**↑ *(pointing slope action)* {€→C} |
| 88. | C: ye↓ |

Connor Conversation 2: with Tina

| 227. | T: Yes you can get those ever so **cheaply**↑↓ *(.) you can see how many **steps** you’ve done↓ *(.)yes↓ *(nodding)* {€→C} |
| 228. | (0.4) |
| 229. | T: Perhaps mum could get you one off the **internet**↑ *(0.5) I don’t know whether {€→φ} we’ve got any here↓↑ (0.3) I don’t know↓ {€↓φ} |

Connor Conversation 2: with Tina

| 178. | E: *(LAUGH)* and it’ll be on there {€→ camera} won’t it↑ *(nod of head)* {€→C} Shall I sing↑ *(eye brows raised)* {€→C} |
| 179. | (2.2) *(C:slight shake head)* |
| 180. | E *(leaning back)* No↓ you **sure**↑ sure you *(s slight shake of head)* don’t [want me] |
| 181. | C: [Go on then↓] *(smile)* {€→E} |

Connor Conversation 3: with Eric
A turn initial pause by his partner seemed to indicate some problem with understanding what Connor had said, either because of reduced intelligibility or because of a sudden topic change.

| 91. C: := and I tchu↑, and I o, {€↑} and I like pool↓ ((nod)) {€→D} |
| 92. D: (...) (smile, (thinking expression)) Pool↑ ((slight nod)) {€→C} |

**Overlap:**

Most overlaps occurred when Connor anticipated that his speaker was coming to a possible end of a TCU and began speaking. Schegloff (2000a) describes this as ‘terminal overlap’ where the recipient predicts what is being said and that there is a possible TRP, and begins their turn early. Most frequently he added a ‘yes’ as an agreement and continuer and so demonstrated his attention and understanding of what was being said.

| 143. T: Football↑ ((nod)) You like foot[ball] do you↑ right↓ ((pull head back and nod, laugh)) {€→C} |
| 144. C: [Ye↓] |
| 145. T: Ye↓ ((nod)) (...) football ud be probably easier than (.) ((nod)) cross country↓↑ {€→C} |

On some occasions he appeared to predict the possible turn completion point and overlapped to gain the floor and shift the topic.

| 96. D: Are you a good shot with your {€→C} |
| 97. C: [I won , I won a] {€φ} I won a trophy once↓, ((rubbing finger on nose)) {€→D} mm (..) |

This was generally successful, but it was sometimes ignored in his conversation with Eric.

| 116. E: I watch TV↓ ((nod)) ye↓ I like C[SI↓] {€→C} |
| 117. C: [I like] {€→C} |
| 118. E: You know CSI programmes↑ {€→C} |

In this conversation there were also more overlaps by Eric when Connor was speaking than in the other conversations.
Recipient design

Recipient design is a resource that the listener can use in interpreting talk (Liddicoat, 2007). There were several occasions when Connor did not provide sufficient information for his partner to follow the thread of the conversation. In these instances his partner used repetition to initiate repair.

Tina and Diane accompanied their speech with gesture and sign language. There were also occasions in all three conversations when Connor’s conversation partner used vocabulary which appeared simplified and idiosyncratic, this may have been done to aid his understanding. For example:

<table>
<thead>
<tr>
<th>159. T:</th>
<th>Cos your knees ((slapping own knee)) might start com[plaining↓]</th>
<th>{€→C}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connor Conversation 2:</td>
<td>with Tina</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>56. E</th>
<th>But er, well we have a special eng↓, I have a special blessing↓ ((touching C on hand))</th>
<th>{€}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connor Conversation 3:</td>
<td>with Eric</td>
<td></td>
</tr>
</tbody>
</table>

On one occasion Eric uses Connor’s name rather than the appropriate personal pronoun:

| 103. C: | and London with me↓ ((indicating on fingers, smile)) | {€→E} |
| 104. E: | we’ve been to London ((nod of head)) with Connor↓↑ with you↓ and with the Regard Group↓ [ye↓] ((lip smack)) | {€→C} |
| Connor Conversation 3: | with Eric |

Asking questions

Quirk et al (1985) define three classes of questions: yes/no or polar questions that expect affirmation or negation; Wh- questions that expect a reply from an open range of possible responses; and alternative questions where the reply is constrained to a small range of given options. (See Appendix 7 for further discussion).

In general most questions used during the conversations were of a yes/no interrogative or polar type – i.e. requiring a yes or no answer. The majority of questions elicited a preferred yes response; and as already mentioned non-preferred responses by Connor were accompanied by a noticeable pause. In two of the
conversations his partner asked the majority of the questions; sometimes resulting in extended question/answer sequences:

| 202. | D: I don’t either ↓ ((pull face)) {€→camera} so what about cameras↑ {€→C} Are you any good with cameras↑ |
| 203. | C: Yeh ↓ ((nod of head)) {€→D} |
| 204. | D: Photography↑ {€→C} |
| 205. | C: Yeh ↓ ((nod of head, smile )) {€→D} |
| 206. | D: ((pull head up)) Are you↑ ↓{€→C} |

Connor Conversation 1: with Diana

However in the conversation with Eric both partners asked a similar number of questions and Connor asked more wh- questions during this conversation than in the other two. Eric sometimes had difficulty understanding what information Connor was requesting, but Connor usually persevered to get the information he was seeking.

| 19. | C: How many, how many you got then↑ {€→E} |
| 20. | E: How many Churches↑ {€→C} |
| 21. | C: No↓ how many vicars↑ {€→E} |
| 22. | E: How many vicars↑ {€→C} |
| 23. | C: Yes↓ {€→E} |
| 24. | E: How many vicars↓ have I been↑ {€→C} |

Connor Conversation 3: with Eric

Although these conversations were with individuals chosen by Connor they were all with people with whom he had some sort of institutional relationship. Diana and Tina come from a health background where this dominance of professional questioning is well recognised (Heritage and Robinson, 2011). In contrast Eric is a hospital chaplain and is likely to have developed a very different conversational style within the course of his work.

**Breakdown and Repair**

There were two occasions when Connor seemed to have difficulty understanding his partner, but 21 instances when his partner had problems understanding what he was saying.
**Self-repair:**

There were a number of occasions when Connor provided self-repairs, but in two of the three conversations (with Tina and Eric) there were as many self-repairs by the conversation partner.

Sometimes Connor appeared to struggle to formulate his ideas when this incorporated multiple elements. Here his speech was marked by strings of pauses, restarts and self-repairs:

| 28. | C: \{€→D\} and do p, and I do a paper round o::n↓, (..) every↑ (..) \{€↑\} every month↓ \{€→D\} do paper round↑ ((smiling)) |
| 48. | C: [I like↓ ((smiling)) I like singing↓, I like singing well ↓ ((leaning down to shoe)) I like Elvis↑ one↓ ((nod)) Elvis↑↓ \{€→D\}] |

**Connor Conversation 1: with Diana**

| 60. | C: I was try..ing [you know my], you know my things↑ ((pointing with finger)) I took it all off↓ right↑ |
| 80. | C: and walk up↑ and walk up↑ ((pointing up)) uum ↓ ((slapping leg)) uum↓ woke(..) *,* * * and modelling↓ |

**Connor Conversation 2: with Tina**

| 75. | C: Have you↑ have you↑ you know that fr(.) card we did last week↑\{ €ϕ→E\} ((nod)) |
| 119. | C: ye, I watch→ er, I watch↓ Gonk↓ I watch that \{C € bob\} programme↓ Gonk↑ () \{C€→E\} I watch that↓ ((smile)) \{€→E\} |

**Connor Conversation 3: with Eric**

**Other Initiated Repair (OIR):**

Other initiated repair may occur when the communication partner indicates the breakdown but the repair is carried out by the speaker (Other Initiated Self Repair (OISR)), or the communication partner may both initiate and provide the repair (Other Initiated Other Repair (OIOR)).

In all three conversations there were examples of repetition of what Connor said to clarify the message:
4. C: Holidays↑ ((off camera))  
5. D: holidays (nod, putting flat hand up) nice choice↑↓ ((nodding head)) (...) Handsome↑↓ OK then↑, going on holiday↓ {€→C}

Connor Conversation 1: with Diana

30. C: one of these, one of these Bike chu↓ er three wheeler one↑  
31. T: ((mouth open)) three wheeler↓ OK ↑↑ ((smile)) right↓ ((nod)) {€→C}

Connor Conversation 2: with Tina

1. C: How many, right↓ How many viCARS have you got↑ ((Sitting back)) {€→Camer→E}  
2. E: (0.5) How many↑ ((leaning towards C, raised eyebrows)) {€ →C}  
3. C: vicars↓ {€ →E}  
4. E: figures↑{€ →E}  
5. C: (...) Right↓ You know, you know Church↑ {€ →E}  
6. E: Church↑ ((Nod of head)) {€ →E} Ye↓

Connor Conversation 3: with Eric

On this occasion Connor responded to the OIR that demonstrated misunderstanding of what he had said, and provided additional information to ‘tune’ Eric into the topic.

Frequently the conversation partners repeated all or part of Connor’s contribution, this was sometimes a direct repetition:

227. C: No good ((shaking head, smiling)) {€→C}  
228. D: No good↓ {€}((shake of head)) Fair enough mate↓ ((nod)) Fair enough↓↑ ((nodding))

Connor Conversation 1: with Diane

Most commonly it was turned into a question by repeating with a rising intonation pattern:

106. E: and I’ve been to France↓ ((dip of head)) {€→C}  
107. C: France↓ {€→E}

Connor Conversation 3: with Eric

This pattern of repetition seemed to indicate when the conversational partner was having difficulty understanding what Connor was saying because of reduced intelligibility, lack of necessary information or difficulties linking it to the previous TCU. This is at the strong end of the continuum proposed by Sidnell (2010) where a candidate answer is being provided.
Open class → Wh-word → Repeat+Wh-word → Repeat → Understanding check

Figure 9: Sidnell’s Continuum of Other Initiated Repair (p.118)

However on some occasions this repeat clarification did not occur and the partner did not initiate repair. For example, Diane gave no indication that she had not understood what was said, but utilised fillers to keep the conversation going:

| 28. | C: {€→D} and do p, and I do a paper round o::n↓, (..) every↑ (..) {€↑} every month↓ {€→D} do paper round↑ ((smiling)) |
| 29. | D: Right↑ {€→C} ((nodding head)) |
| 30. | C: Advertisers↓ {€→D} |
| 31. | D: oh e↓↑ {€→C} ((pulling face, chin tuck back)) |
| 32. | C: Get paid for it well↓, get paid for it↓ ((smile)) {€→D} |
| 33. | D: Excellent↑↓ ((emphatic nod)) right↓ ((nod)) so you’re getting a bit of money behind[ you ((signing money)) as well] ye↑ ((nod, smile)) |

Connor Conversation 1: with Diana

She finally demonstrated understanding with “getting a bit of money behind you” after Connor has said that he got paid for what he had been doing.

A similar strategy was used by Tina; although on this occasion it is unclear whether she had followed what Connor was trying to say:

| 60. | C: I was tre..ing [you know my], you know my things↑ ((pointing with finger)) I took it all off↓ right↑ |
| 61. | T: mumm ↓↑ ((nod)) {€→C} |
| 62. | C: had it in my basket↓ I took it off↓ (..) but off↓ int it↑ |
| 63. | T: ye↓ ((nodding)) arh↑↓ So do you think you might do it again↑{€→C} |
| 64. | C: Ye↓ |

Connor Conversation 2: with Tina

Non-verbal aspects:

**Positioning and posture**

Positioning of speakers helps to establish the interactive ground (Goodwin, 2000a). During all the conversations Connor usually sat with his body slightly side on to his partner. In the conversation with Tina the positioning of the camera meant that much of his facial expression, and eye gaze was not observable.
**Eye Gaze**

Connor’s conversation partners maintained eye contact with him both while he was talking and when they took a turn, only looking away when he drew their attention to an object in the environment such as the camera or his bag. Goodwin (1981) suggests that the recipient gazing at the speaker is more important than the speaker gazing at the recipient. Connor’s eye contact was less constant and he frequently did not look at the speaker when they were talking or when he was addressing them. It was most noticeable that when he was trying to formulate what he was saying he would look away or look up, looking back to his listener towards the end of his turn:

<table>
<thead>
<tr>
<th>143.</th>
<th>C: You know your° your {€}') um you know your friend↓(.) been living with you↑{€↓∅}</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Connor Conversation 3: with Eric</td>
</tr>
</tbody>
</table>

**Facial expression**

Ekman (1997) argues that although facial expression transmits information, this is not its function and represents automatic and innate behavioural patterns. However, the research literature does not support this and has shown that it is influenced by the social context (Blair, 2003).

Connor’s facial expression mostly consisted of smiling. This was most evident in his conversation with Diane. His conversation partners used a greater range of facial expressions to augment their verbal communication.

| 102. | D: Crickey↑, ((pull back, eyebrows raised)) [you’re a bit.] ((nodding, movement of hand, smile)) a bit good then↑ {€→C} |
|      |                                                                                                               |
| 103. | C: {€↓→D} Yeh↓                                                                                              |
|      | [You know] ((pointing on thigh, smile))                                                                        |
|      | Connor Conversation 1: with Diane                                                                            |

| 31.  | T: ((mouth open)) three wheeler↓ OK ↑ ((smile)) right↓ ((nod))                                                |
|      | {€→C}                                                                                                         |
| 173. | T: LAUGH ((biting fist, Fear on face))                                                                         |
|      | Connor Conversation 2: with Tina                                                                              |
Nodding:

According to Schabracq (1987 in Caris-Verhallen, Kerkstra and Bensing, 1999) there are three functions of head nodding. To regulate the interaction and change turns, to support spoken language and to comment and maintain rapport. Nodding was used extensively by all three conversation partners, but less frequently by Connor. This nodding was used to signify agreement and was often exaggerated when accompanying evaluative comments, for example:

Connor Conversation 1: with Diane

Nodding was also prevalent when there appeared to be some query about the content of what Connor was saying. On one occasion Diane nodded her head slowly but it was obvious from the context that she had not understood what Connor had said:

Connor Conversation 2: with Tina

This also occurred with Tina:

and Eric:

Connor Conversation 3: with Eric
This displayed affiliation and attunement to what he was saying (Aoki, 2008) but also implied that they understood what was being said.

**Use of gesture:**

Gesture and speech are systematically organised in relation to each other (Berry, 2009), and may mutually elaborate each other (Goodwin, 2000a). Connor and his conversational partners used gesture throughout the conversations, but there was much more use of gesture by Diane and Tina who accompanied this with the use of mime and some recognisable keyword signs (taken from British Sign Language) to support what they were saying. Both these speakers also used a large number of non-specific emphatic gestures throughout the conversations.

Use of artefacts and icons:

The importance of objects in interaction is often overlooked (Cowley and Kravchenko, 2005). Mondada (2006) demonstrated not only the importance of artefacts in interaction, but how the manipulation of them provided additional
meaning. Connor appeared to make slightly more use of artefacts within the environment to support his message than the other speakers.

Prosody

It was noticeable that all three of Connor’s partners used more variation in stress (loudness) and tone than Connor.

Intonation

All the participants in Connor’s conversations used fall/rise tone (Tone 4) when their answer was tentative, although Connor occasionally used this pattern it was used much more frequently by his partners:

<table>
<thead>
<tr>
<th>49.</th>
<th>D: You don't ((slight shake of head)) do the old Karaoke do [you↑] ((smiling)) {€→C}</th>
</tr>
</thead>
<tbody>
<tr>
<td>50.</td>
<td>C: ((pulling back, smile, nod)) {€→D} [Yes↓↑]</td>
</tr>
<tr>
<td>190.</td>
<td>D: No↓ I'm alright↑ ((nodding)) I'm alright↓↑((Shrugging shoulders)) I can get by↓ ((spread hand movement, nodding)) {€→C}</td>
</tr>
</tbody>
</table>

Connor Conversation 1: with Diane

| 66. | C: and on↑ (...) on Wenday night↓ on Wenday↑ |
| 192. | T: you know↓ and you probably find ((nod, flat hand movement)) that↓ you know↓ when you did your bike ride↑ you were quite↓ PUFF PUFF But you if you know↓ ((movement of hands, nod)) you do it (..) every couple ((shake of head)) of weeks or so↑↓ you probably find that gets better↓ ((nodding)) \{€→C\} |

Connor Conversation 2: with Tina

| 234. | C: I went on my bike↓ ((pointing over right shoulder, smiling)) from Duckbridge↑ \{€→\} \{E\} |
| 52. | E: We bless↓ bless people's engagement rings when they get (...) engaged↑ ((scratching knee)) \{€→ C\} |

Connor Conversation 3: with Eric

His partners also used this when they were unsure of what Connor was trying to say:

| 30. | C: Advertisers↓ \{€→D\} |
| 31. | D: oh e↓↑ \{€→C\} ((pulling face, chin tuck back)) |

Connor Conversation 1: with Diane
Connor Conversation 2: with Tina

37. T: umum ↑↓ ((nod)) {€→C}; Cor↓ and what did you do ((indicating with finger)) when you got to Padden↑ {€→C}
38. C: Had a rest↓↓
39. T: yees↑ ((emphatic nod)) ((nodding)) {€→C}

A rise fall pattern (Tone 5) is associated with surprise and is common in conversations with children and pets, and can be perceived as patronising, particularly when it relates to relatively mundane conversation. This pattern was evident with all the research partners, but was most noticeable in the conversations with Connor. This was frequently accompanied by increased stress, changes of facial expression or increased pitch:

97. C: [I won , I won a] {€} I won a trophy once↓↓((rubbing finger on nose)) {€→D} mm (..)
98. D: Oh ((eye brows raised, pull back)) Blimey↑↓ {€→C}

Connor Conversation 3: with Eric

Pitch and volume

Increased loudness and changes in pitch can be used to indicate evaluation. All conversation partners used exaggerated stress but this was particularly true for Eric.
Evaluation

As previously discussed evaluation can be signalled in various ways (Duchan et al., 1999).

*Through discourse structure:*

Frequently the conversational partners repeated Connor’s answer to a question that they had asked; this seemed to be a form of validation or evaluation and may be perceived as undermining his contribution.

This use of repetition is less prevalent in the conversation with Eric, where Connor asks more of the questions. However, it does occur on three occasions when Eric has questioned what Connor has said by using repetition, and then follows up Connor’s response with an evaluative statement:

*Through lexical choice:*

Using Martin and White’s taxonomy of evaluation (Martin and White, 2005) it can be seen that Connor uses very little evaluative language compared to all his
conversational partners, with very little amplification of these terms. However amplification is prevalent in all the language used by the conversation partners and at times adds to the perceived patronising quality of the interaction. The evaluative terms used by Connor are mostly judgments relating to esteem; whereas the language used by his communication partners contain a majority of appreciative terms relating to evaluation.

At times Connor appeared to actively seek approval or evaluation from his conversation partner:

```
249. E: That’s very↓ that’s very very good↑↓ ((nodding, raising eyebrows)) (..), yes↓ ((nod)) that’s very good↓ I'm very pleased↓ (..) So you
```

```
232. C: You know what I did↑ ((smile)) {€→E}
```

```
233. E: What did you do↑↓ ((smile, nod))
```

```
234. C: I went on my bike↓ ((pointing over right shoulder, smiling)) from Duckbridge↑ ((pointing over right shoulder)) {€→E}
```

**Through Intonation:**

Increased loudness and changes in pitch can be used to indicate evaluation. All Connor’s conversation partners used exaggerated stress but this was particularly true for Tina.

```
149. T: a bit of (.) swimming↓ ((nod)) (:) a bit of cycling↓, the other thing is you could do different things ((nod)) at different times of the year↓↑ {€→C}
```

The use of evaluative questioning or terminology was frequently accompanied by rise/fall intonation.

```
15. T: Cor that was good↑ ((smiling)) arh, ↑↓ is that the first ((nod)) time you’ve done it↑ {€→C}
```
Summary of Connor

Similar patterns were observed in all three conversations. Connor had very little difficulty following the conversation and often took control of conversation topics, although topic change often happened abruptly. However, the conversations still tended to be dominated by the conversation partners who talked more, with frequent multiple TCUs, asked more questions, ‘won’ overlaps in the conversation and sometimes ignored what Connor was trying to say.

Connor sometimes appeared to struggle to formulate answers particularly if they comprised several related elements or TCUs; this was marked by pausing, repetition and restarts. His ‘side on’ body posture and inconsistent use of eye contact added to an impression of discomfort. He was able to talk about past events but struggled to formulate a comprehensive narrative, this was must successful when he was talking to Tina who had sufficient prior knowledge to support the co-construction of his stories. There were many more occasions when the partners had difficulty understanding Connor. This was sometimes related to the clarity of his speech and at other times they were problems following the drift of his conversation.

The conversation partners designed their speech to support Connor’s understanding by the use of increased facial expression, longer pauses, more varied intonation, the use of emphatic head nodding and the use of gesture. They also maintained almost constant eye contact with Connor. These adjustments may have been supportive to Connor but combined with the increased use of amplified evaluation tended to result in a ‘patronizing’ quality to the conversations.

Cate

Cate was 23 years old at the time of the conversations. She has severe spastic cerebral palsy with very restricted movement; she used a wheelchair and is dependent on others for all her personal care. She had attended residential special school where she was provided with a Dynavox Speech Generating Device (SGD). On leaving school at 19 years old, Cate had moved to a local residential care home, but was unhappy there so moved back to live with her parents. At the time of the videoing she had just moved to her own flat with 24-hour staff support, but still had
regular contact with her mother and father, and younger brother Jake. He was studying for an information technology degree and was the main programmer of her communication aid. Cate had recently upgraded her Dynavox SGD to a DV4 (more up-to-date version with environmental control and internet access). This had an extensive vocabulary that could be accessed through a symbol based dynamic grid system, as well as a predictive text to speech facility, a digital photograph album, internet access and environmental control. However, her preferred method of communication was through speech which she would augment with facial expression and gesture. She had been reluctant to use her SGD and it was mostly used for internet access. Cate was an extremely sociable young lady, she attended a local day centre for two sessions a week and she had recently acquired a dog, Molly, who featured extensively in her conversations.

Cate’s social network consisted of her close family, paid carers and friends of her parents. It did not include any friends of her own age.

Cate (C) recorded the following conversations:

1. With Daisy (D) and Nina (N)- her main carers who has worked with Cate since the move into her own accommodation; her mother (M), father (F) and brother Jake (J) are also present (duration 16.03 minutes). This conversation comprised some non-generic chat but mostly consisted of explanations relating to Cate’s dog.

2. With her mother - her father, brother-Jake and paid carers Daisy and Nina were also present (duration 14.21 minutes). This conversation included an extended narration of Cate’s recent holiday, and ‘forecasting’ about a planned hospital admission.

3. With Lisa (L) a relatively new member of support staff, and with Daisy present (duration 15.01 minutes). This consisted of forecasting about planned events and explanations relating to Cate’s mobility.

The first two recordings took place at her parent’s house and the third was in her own flat. Her DV4 SGD was available for all three recordings.

Quantitative analysis

The quantitative analysis of Cate’s video data is summarised in Table 7. As these were multi-party conversations the number of turns was also calculated, this
was not dissimilar between Cate and her partners. However the extensive use of questions and repetition by her conversation partners was particularly apparent.

<table>
<thead>
<tr>
<th></th>
<th>Conversation 1</th>
<th>Conversation 2</th>
<th>Conversation 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cate</td>
<td>Partners</td>
<td>Cate</td>
</tr>
<tr>
<td><strong>Topic choice</strong></td>
<td>2</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td><strong>Turns</strong></td>
<td>39%</td>
<td>61%</td>
<td>41%</td>
</tr>
<tr>
<td><strong>Overlap</strong></td>
<td>11</td>
<td>6(19)*</td>
<td>8</td>
</tr>
<tr>
<td>Yes/no Interrogatives</td>
<td>2</td>
<td>44</td>
<td>0</td>
</tr>
<tr>
<td>Nos which were TAGs</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Wh-Interrogatives</td>
<td>0</td>
<td>32</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total number of questions</strong></td>
<td>2</td>
<td>80</td>
<td>0</td>
</tr>
<tr>
<td>Unintelligible</td>
<td>38</td>
<td>3</td>
<td>29</td>
</tr>
<tr>
<td>Problems with understanding</td>
<td>0</td>
<td>24**</td>
<td>0</td>
</tr>
<tr>
<td>Self-Repair</td>
<td>6</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>Repetition or partial repetition</td>
<td>0</td>
<td>34</td>
<td>0</td>
</tr>
<tr>
<td>Use of gesture</td>
<td>15</td>
<td>27</td>
<td>21</td>
</tr>
<tr>
<td>Evaluation</td>
<td>9</td>
<td>39</td>
<td>3</td>
</tr>
<tr>
<td>Amplification</td>
<td>0</td>
<td>11</td>
<td>0</td>
</tr>
</tbody>
</table>

*indicates overlap between partners not involving Cate
** Partner misunderstanding of Cate

Table 7: Cate - Quantitative Analysis

**Qualitative analysis:**

**Discourse Structure**

**Topic management:**

These were multi-participant conversations. There were brief sequences when Cate appeared to be excluded from the conversation, but these were rare. Cate was responsible for approximately 40% of all turns. Topic initiation and topic shift was generally controlled by Cate’s conversational partners. It was very difficult for Cate to introduce new information because of the poor intelligibility of her speech, and in these conversations she did not see her SGD as a tool for this. Using the SGD was very effortful for Cate and would require disengaging from the flow in the conversation to formulate her message. She occasionally used objects and events to attempt to shift the topic but the conversational partners brought the
conversation back to the original topic after a few turns. For example in conversation 1 Cate looked at the camera and asked if there has been sufficient recording:

| 391. | C: /ɜː↓/ ((smile)) {€→J} (2.2) /ɪ mʌmə æ ʌː↑ {€→N} |
| 392. | N: What↑ |
| 393. | C: /eɪ maʊ.↑/ {Do we need more?} |
| 394. | J: Does she need to do anymore↑↓ {€→N} |
| 395. | N: Loads more↓ |
| 396. | M: Do↑ (..) talk to Jake↑↓ about the little programme that he wrote for your Dynavox↓ |

Cate Conversation 1: with Daisy, Nina, Jake and mother

In conversation 2 Molly, the dog, walked into view and Cate initiated interaction with and about the dog:

| 255. | M: You don't know what else↓↑ {€→C} |
| 256. | C: /ɪr æ↑↓/ ((Dog comes into shot) {€→molly} |
| 257. | M: LAUGH{€→molly} |
| 258. | C: /ɔɪ jæ↑↓/ {€→molly} |
| 259. | M: Soppy old Molly↓ {€→molly} |
| 260. | C: LAUGH |
| 261. | M: Don't like to be left out↓ here you are Molly↑↓ ((Lifting up dog towards camera)) {€→C→molly→C} |

However, her mother quickly returned the conversation to the original topic:

| 262. | M: Good girl↓ (1.5) ((smile)) Right, and what else did you do↓After you went to the aquarium↓↑ where else did you go↑ {€→C} |

Cate Conversation 2: with her father, mother and Nina

There are occasions in all three conversations where Cate said something that was not understood or followed up by her partner. These may have been attempts to introduce a new topic but this is impossible to know.

| 378. | C: /jæː↓/ ((wide smile)) {€→DN} |
| 379. | DN: LAUGH We can't watch zoo programmes can we at your house↓ {€→C} |
| 380. | C: /nɒ↓/ {€→DN} (shake of head) {€→DN} |
| 381. | DN: [Soon as] the Zoo comes on↓ that's it↓↑ Not all the time↓↑ {€→C} |

Cate Conversation 1: with Daisy, Nina, Jake and mother

| 308. | C: (2.3) /ɔ eɪ in əʊ↓/ {€→M} |
| 309. | M: You don't know↓↑ {€→C} |
| 310. | C: /əʊ↓/ {€}↓to lap→{M} |
| 311. | N: You bought some new clothes↓↑ and where did you wear your |
new clothes out↑
Cate Conversation 2: with her father, mother and Nina

435. C: [/ɪ eː mʊ/] (..)  
436. D: Very good in′it↑  
437. C: /ɜː rə uː [nɪ:] {its annoying}((indicating top bar with pointer))  
438. L: [Brilli]ant↓ and is that your favorite film at the moment↑↓
Cate Conversation 3: with Lisa and Daisy

In conversation 3 she used Daisy’s introduction of Jake into the conversation to attempt to shift the topic to talk about him, after two attempts in lines 349 and 354 that were ignored, she was finally successful at directing the conversation in line 357 and introduced discussion of his holiday:

349. D: Uh↑↑, we'll have to get Jake to sort it out then↓  
350. C: /ɪ nʌ[ ɪə↓/] {€→L→D}  
351. L: [yeh↓↑] {€→DV}  
352. D: [Good] thing we can read↓  
353. L: Yeh {€→DV→C}  
354. D: It's a good thing we can read↑ we're not blind↓ if we ever get stuck with you↑  
355. C: /ɪ nɒ ɪə↓/ {he's not here} ((indicating with right arm, smile)) {€→L→D}  
356. L: Yes↓ {€→C→DV}  
357. C: /iː m↓/ {€→D}  
358. D: He's what↑  
359. C: (0.7)  
360. L: He's in.. Where is he↑ ((Smiling)) {€→C}  
361. C: (0.6) /ɪ næ dæ↓/ {in Canada} ((smile)) {€→D}  
Cate Conversation 3: with Lisa and Daisy

Lisa then brought the conversation back to the original topic:

388. L: Ah↑↑ (1.4) so anyway how do you s↑ how do you um, what's this film that you want to see↑ Are you going to continue to write it↓ {€→C→C}  
Cate Conversation 3: with Lisa and Daisy

**Turn Construction:**

Virtually all Cate’s turns consisted of only one TCU. Many of these were yes/no or single word responses to questions from her conversation partner or to confirm that they had understood her correctly. Occasionally she used a turn
comprising two TCUs but these were usually a yes/no confirmation combined with additional information:

<p>| | | |</p>
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<tbody>
<tr>
<td>36.</td>
<td>C: /e/ (.) /ɪn eɪjɪ/↓ {a lady} {€→M}(1.2)</td>
<td>Cate Conversation 1: with Daisy, Nina, Jake and mother</td>
</tr>
<tr>
<td>290.</td>
<td>C: /[je/]↓ {yes} (.) /mə ɪ o↓/ (indicating her top) {€→M</td>
<td>to top→M}</td>
</tr>
<tr>
<td>281.</td>
<td>C: /nəʊ/↓ /muː ɪ↑↓/ (no help me) ((smiling)) {€↓DV→D}</td>
<td>Cate Conversation 3: with Lisa and Daisy</td>
</tr>
</tbody>
</table>

Although the majority of Cate’s conversational partner’s turns also comprised only one TCU there were also frequent examples of turns consisting of two or more TCUs. A particular pattern was with questioning, where strings of two or more questions were asked with minimal pause in between. This happened in all three conversations but was particularly common in conversation 3.

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<tbody>
<tr>
<td>3.</td>
<td>D: No she’s not, she’s here↑ ((smile, indicate Molly)) {€↓dog}How did you get Molly↑ when did you start (..) looking for her↓ {€→C}</td>
<td>Cate Conversation 1: with Daisy, Nina, Jake and mother</td>
</tr>
<tr>
<td>44.</td>
<td>M: [where] was it↓ Do you know where it was↑↓ ((nod)) {€→C}</td>
<td></td>
</tr>
<tr>
<td>45.</td>
<td>C: /[eː/↑] {€→N}</td>
<td></td>
</tr>
<tr>
<td>46.</td>
<td>N: [Can] you remember where it was↑↓ can you remember the name of it↓</td>
<td></td>
</tr>
<tr>
<td>47.</td>
<td>C: /nəʊ æ↓/ {€→N}</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>142.</td>
<td>L: yeh (..) So what are you going to do next week↑ Are you going to go to Kirkton↑ {€→C}</td>
<td>Cate Conversation 3: with Lisa and Daisy</td>
</tr>
</tbody>
</table>

The majority of occurrences of these question strings in conversation 3 consisted of an open (Wh-) question followed by a yes/no interrogative and may have been a strategy to ensure that the speaker understood Cate’s response:

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<tbody>
<tr>
<td>142.</td>
<td>L: yeh (..) So what are you going to do next week↑ Are you going to go to Kirkton↑ {€→C}</td>
<td>Cate Conversation 3: with Lisa and Daisy</td>
</tr>
</tbody>
</table>
access her SGD but Daisy continued to ask additional questions. Cate eventually interrupted and overlapped with Daisy to take a turn:

<p>| | |</p>
<table>
<thead>
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</thead>
<tbody>
<tr>
<td>282.</td>
<td>D: Help you talk ↑</td>
</tr>
<tr>
<td>283.</td>
<td>C: ((head back, slight nod, smile)) {€→D}</td>
</tr>
<tr>
<td>284.</td>
<td>D: Can I have a look ↑ can you show me something ↓, Can you make a sentence for me ↓ ↑: Make something [like ↓ I like]</td>
</tr>
<tr>
<td>285.</td>
<td>C: ((goes to access DV )) working} {€→DV→D} {it's not [I no: 3 I /]</td>
</tr>
</tbody>
</table>

Cate Conversation 3: with Lisa and Daisy

**Co-construction**

Co-construction of conversation is common when one partner has communication impairment (Schegloff, 2003) or is an Augmentative and Alternative Communication (AAC) user (Bloch, 2005). There are multiple examples of this in all three conversations. The conversation partner usually took the lead with Cate agreeing, disagreeing or providing additional content.

<p>| | |</p>
<table>
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</thead>
<tbody>
<tr>
<td>135.</td>
<td>C: /ʌ ɑː ɪn/ ↑ ↓ {she was crying} {€→D↑}</td>
</tr>
<tr>
<td>136.</td>
<td>D: She was crying ↓ {€→C}</td>
</tr>
<tr>
<td>137.</td>
<td>C: /ə əm/ ↓ {All the time} {€→J}</td>
</tr>
<tr>
<td>138.</td>
<td>J: all the time ↓ {€→C}</td>
</tr>
<tr>
<td>139.</td>
<td>D: Did she sleep with you in your room ↑ {€→C}</td>
</tr>
<tr>
<td>140.</td>
<td>C: ((shake of head)) /nəʊ (.) ɪ ɪːɪn/ ↓ { no, in kitchen} {€→D↑→D}</td>
</tr>
</tbody>
</table>

Cate Conversation 1: with Daisy, Nina, Jake and mother

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>297.</td>
<td>M: What about your jacket ↑ ↓ What top did your jacket come from ↑ {€→C}</td>
</tr>
<tr>
<td>298.</td>
<td>C: /æ nuː↓/ {Animal} ((smile)) {€→M}</td>
</tr>
<tr>
<td>299.</td>
<td>M: Animal ↑ ↓ LAUGH ((leaning back, smile)) Is that your favourite shop Cate ↑ {€→C}</td>
</tr>
<tr>
<td>300.</td>
<td>C: /e↓/ ((smile)) {€→M}</td>
</tr>
<tr>
<td>301.</td>
<td>M: [LAUGH,] if it's got the name Animal on it you love it ↑ ↓ ((smile)) don't you ↓ {€→C}</td>
</tr>
<tr>
<td>302.</td>
<td>C: [LAUGH] /je↓/ {€→M}</td>
</tr>
</tbody>
</table>

Cate Conversation 2: with her father, mother and Nina

The success of this was dependent on one of the partners having knowledge about Cate’s background and activities. Ochs, Keenan and Schieffelin (1983b) suggest that:

---

7 Augmentative and Alternative Communication (AAC): is an umbrella term used to describe methods used by those with severe communication impairment to supplement or replace speech or writing
“If the speaker wants collaboration, he must select a discourse topic that takes account of the listener’s knowledge.”

(p.68).

Where this shared knowledge does not exist the interaction can be problematic. In conversation 3 there was an extended discussion of horse riding. This was a new topic for both Lisa and Tina and they struggled to understand what Cate was trying to say, and in fact seemed to misunderstand her no as a yes:

| 105. | L: =Was it your own horse↑↓ {€→C} |
| 106. | C: [(nod of head, smile)] {€→D} |
| 107. | L: [Or did you just go to a centre↑↑] {€→C} |
| 108. | C: /nəu/ (shake of head) {€→D} |
| 109. | L: It was your own↑↓ {€→C} |
| 110. | C: /eː / (nod of head) {€→L} |
| 111. | L: Was it↑↑ I didn’t know that↑↓ {€→C→D} |
| 112. | D: Neither did I↑↑ |
| 113. | C: (smile) {€→D} |
| 114. | L: Oh↑↓ {€→C→D} |
| 115. | C: /[əiə]/ (smile) {€→D} |
| 116. | L: [and was it] like a shared horse↑ or something or↓ {€→C} |
| 117. | C: /neː/ /no/ (shake of head) {€→D} |
| 118. | L: Ye↑↑ (nod of head) {€→C} |

Cate Conversation 3: with Lisa and Daisy

Pause:

According to Jefferson (1998) listeners have a tolerance of approximately one second of silence; longer pauses are seen as problematic. However, longer pauses are common where the conversation includes a communication aid user (Clarke and Wilkinson, 2010). During these conversations pauses of two+ seconds were common and seemed to be tolerated without obvious discomfort. Pauses were common when Cate said something which was not easily intelligible; there was often a delay before the communication partner offered a gloss of what they thought she had said or they initiated repair:

| 268. | C: /jeː\_/ (.) / I ø bo\_/ {leave the ball} {€→DN} |
| 269. | (1.6) |
| 270. | J: {€→C} Like the ball↑ {€→C↑} |

Cate Conversation 1: with Daisy, Nina, Jake and mother

| 65. | M: baby what↑ (slight shake of head) {€→C} |
| 66. | C: (1.5) /eɪ iː\_/ {€→M} |
| 67. | M: Baby ↓↑ (Dipping head to question) {€→C} |
Cate Conversation 2: with her father, mother and Nina

125. C: [/ɪ:/] /jə mʌ mæ↓/ ((Raising right hand to indicate own back then L’s back)) {€→DV→L}
126. D: (..) Before you had your back operation↑

Cate Conversation 3: with Lisa and Daisy

There were also noticeable pauses when Cate was asked a question which did not require a simple yes/no or single word response. On some occasions she did not know the answer, but at other times it appeared that she needed time to initiate or organise her response:

244. D: Not to France anymore↑↓ Where do you want to go↑
245. C: (1.7) /ɪ ə nəʊ↓/ {I don’t know} ((slight shake of head)) {€→D}
246. D: You don’t [know↑↑]

Cate Conversation 3: with Lisa and Daisy

Overlap:

Overlap occurred as frequently between conversational partners as it did with Cate. Most of Cate’s overlaps were ‘turn-terminal’ when she anticipated turn completion of a yes/no interrogative by her partner and responded with a yes (and occasional no):

79. D: It had to be a girl↓ {€→M}
80. M: it had to be a girl↓ and (.) we went on the internet did[ν’t we↓]
Cate Conversation 1: with Daisy, Nina, Jake and mother

189. N: Went to two places on [Friday↑↓]
190. C: {€→M} (/je/) ((nod, smile))

Cate Conversation 2: with her father, mother and Nina

151. L: Yeh↓ ah↑↓ you’ve got to find things to entertain yourself↓ when you’re there then↑↑ You should tell them↓ I’m bored with this↑ give me something else [to do↓] {€→C}
152. C: {[nau↓] /æ ɪə↓/} ((slight shake of head, smile)) {€→L →L}

Cate Conversation 3: with Lisa and Daisy

Occasionally when her conversational partner overlapped with Cate, there was a noticeable TRP marked by falling intonation and Cate selected as next speaker; but this was followed by a significant pause. When Cate did not appear to be responding this was filled by the original speaker resulting in overlap:

143. M: what other signs do you know↓ ((tapping are of C’s chair)) For animals↑ {€→C}
144. C: (3.7) [(en)] {€→M}
145. M: [What’s] a snake↑ Did you see snakes↓↑ {€→C}

Cate Conversation 2: with her father, mother and Nina

At other times Cate contributed at a TRP but this was not acknowledged by the speaker:

379. DN: LAUGH We can't watch zoo programmes can we at your house↓ {€→C}
380. C: /no↓/ {€→DN} ((shake of head)) [ /ʌːm ɔ aɪː↓/] ((smile)) {€→DN}
381. DN: that’s it↑↑ Not all the time↓↑ {€→C}

Cate Conversation 1: with Daisy, Nina, Jake and mother

114. L: Oh↑↑ {€→C→D}
115. C: /æɪə↓/ ((smile)) {€→D}
116. L: [and was it] like a shared horse↑ or something or↓ {€→C}

Cate Conversation 3: with Lisa and Daisy

Recipient design

In all three conversations there were examples where Cate was prompted to ‘perform’ or demonstrate her knowledge and skills:

32. J: Aren't you supposed to [be using that↓] ((pointing to DV)) {€→ C}

106
DN: when we are out walking↓ when Molly's not listening to me↑
please do your scream that you [do↓] {€→C}

Cate Conversation 1: with Daisy, Nina, Jake and mother

For example her mother prompted the use of sign language even when Cate has been understood.

M: Oh↑ monkey↑↓ What's the sign for monkey then↑ {€→C}

Cate Conversation 2: with her father, mother and Nina

D: Can I have a look↑ Can you show me something↓↑, Can you make a sentence for me↓↑:
Make something [like↓ I like]

L: Type it in↑ and then↓ type in something that {€→C }

Cate Conversation 3: with Lisa and Daisy

It may be that this was partly as a result of being videoed or for the benefit of the researcher, but this does seem to be relatively common practice.

In the first conversation her mother also prompted staff to ask Cate questions, this involved referring to Cate in the third person:

M: Ask her who the lady was↑ ((off camera))

Cate Conversation 1: with Daisy, Nina, Jake and mother

There were also times when both her mother and Lisa asked rather child-like questions:

M: What colours were these fish↑ {€→C}

C: /eː inə/ {€→M}

Cate Conversation 2: with her father, mother and Nina

L: What colours↓ do you use↓ mainly↑ {€→C}

Cate Conversation 2: with Lisa and Daisy
Asking questions

There was a sharp contrast between the number of questions used by Cate’s communication partners and the questions she asked. She only asked two questions throughout the conversations. This is perhaps not surprising as the conversations were generally controlled and topics selected by the conversation partners and Cate had limited tools to direct the conversation. In general, asking questions is a common strategy used when a partner has difficulty understanding what their partner is saying (Light, 1988). There was a large number of clarifying questions where the conversation partner repeated what they thought Cate had said with a questioning tone:

| 139.  | D: Did she sleep with you in your room↑ {€→C} |
| 140.  | C: ((shake of head)) /nəʊ (.) ɪ ɪːɪɪn/↓ { no, in kitchen} {€→D↑→D} |
| 141.  | J: In the kitchen↑ {€→C} |

* Cate Conversation 1: with Daisy, Nina, Jake and mother

| 284.  | C: /ə əʊː↓/ {a coat} {€→M} |
| 285.  | M: (..) coat↑ ((nod)) {€→C} |
| 286.  | C: /e↓/ {€→M} |

* Cate Conversation 2: with her father, mother and Nina

| 191.  | C: /mu eː↓/ {computer} {€→D} |
| 192.  | D: The computer↑ |
| 193.  | L: ((nodding head)) {€→C} |
| 194.  | C: /je↓ ɑː↓/ {yes, art} {€→D} |
| 195.  | D: and art↑ |
| 196.  | C: /ən↓↓/ ((nod)) {€→D} |

* Cate Conversation 3: with Lisa and Daisy

There were also several strings of yes/no question sequences to co-construct the message or to clarify understanding:

| 86.   | D: LAUGH, oh so you had to sit there↓ (.) and say all these names↑ ((sitting forward)) {€→M→C} |
| 87.   | C: [ye] /eː↓↓/ ((smile)) {€→D} |
| 88.   | D:[like lots] of times↑ loads of time (.) before you found Molly↓ {€→C} |
| 89.   | C: Ye /eə↑↑↓/ ((big smile)) {€→M} |
| 90.   | D: arr↑ and you found her in a newspaper↓↑↓ {€→C} |
| 91.   | C: Mo {both} /məʊ/↓ {€→D→M} |
| 92.   | D: (..) Both↓↓ {€→C} |
| 93.   | C: Ye /je↓↓\ ↓↓ {€→M} |
| 94.   | J: what↓ on line↑ {€→C} |
Cate Conversation 1: with Daisy, Nina, Jake and mother

61. C: /ɪ ɜ næ leʔ/ {It hurt my legs} ((smile)) {€→D}
62. L: (.) It hurt your legs a bit↓ {€→C}
63. C: /eː/ ((slight nod, smile)) {€→D→L}
64. L: yeh↑ so this is why you want to get moving↑ in the pool↑ {€→C}
65. C: /je↓/ ((smile)) {€→L}
66. L: Get you a bit more↑ (..) flexible↓ {€→C}
67. C: /je↓/ ((slight nod, smile)) {€→D}
68. L: Yeh↑ ((smile)) {€→C}
69. D: What was your horse like↑ when you were younger↑
70. C: /mɔːə↓/ ((height with right hand above her shoulder height)) {€→D}
71. D: About that high↑
72. C: /æː↓/ (making hand higher) /ə bɪə noː↓ {€→D}
73. D: A bit smaller than mine↓↑
74. C: ((nod of head, smile)) {€→D}
75. D: yeh↑ Cos you CAme to see my horse↓ didn't you↑
76. C: ((nod of head)) {€→D}

Cate Conversation 3: with Lisa and Daisy

As already discussed (p.91) when more open Wh- questions were used, they were frequently followed by a closed yes/no question within the same turn.

Breakdown and Repair:

There were no occasions where Cate showed that she had not understood her conversation partner, but it may be difficult for her to express this in a way that would be understood. However there were many examples when the conversation partner misunderstood what Cate had said. Often these attempts by Cate were ignored and the conversation continued without any attempt at repair:

322. C: {€→DN} /eə↓/ ((wide smile)) {€→DN}
323. DN: I'm going to be in trouble in a minute↓ {€→C}
324. C: /je↓/ ((wide smile)) {€→M} ((turning to M))
325. M: LAUGH
326. C: /ɪ je↓/ (..) {€→M}
327. DN: And then when she shakes next to you↓ {€→C}

Cate Conversation 1: with Daisy, Nina, Jake and mother

Although to the researcher viewing the video much of Cate's speech was unintelligible, her conversation partners usually understood her message, although
as already discussed they frequently needed to check back with Cate that they had comprehended her correctly. In the first conversation Cate was talking to Daisy about her dog, when Daisy did not understand Cate would look to her mother to request her to clarify what she was trying to say or to answer on her behalf. Her mother appeared to use familiarity with Cate’s speech combined with her prior knowledge of the information being discussed to provide a whispered interpretation of what Cate has said:

| 103. | C: /e ɜmũːmiː↓/ {missed her mum} (smile) {€→M} |
| 104. | M: °missed her mum↓° ((Whispered)) |
| 105. | D: missed her mum↓{€→M→C} |

Cate Conversation 1: with Daisy, Nina, Jake and mother

In the second conversation Cate told her mother about a recent day out with support staff so her mother did not have this background information. Cate then looked to Nina who was part of the trip to ‘fill in’ in a similar way:

| 44. | M: [where] was it↓ Do you know where it was↑↓ ((nod)) {€→C} |
| 45. | C: /eː↑/ {€→N} |
| 46. | N: [Can] you remember where it was↑↓ Can you remember the name of it↓ |
| 47. | C: /nəʊ æ↓/ |
| 48. | N: Paignton↓↑ |
| 49. | C: /beɪ ə vu↓/ {€→N→M} {Paignton Zoo} |
| 50. | M: Paignton Zoo ↑↓ ((Mobile in background)) {€→C→N} |
| 51. | C: {€→N} |

Cate Conversation 2: with her father, mother and Nina

This also happened occasionally in the third conversation where Cate harnessed the knowledge of the more familiar member of staff:

| 177. | L: Have you been on a boat before↑↓ {€→C} |
| 178. | C: /eː↓/ ((nod of head, smile)) {€→D} |
| 179. | D: but with your mum and dad↓ and Jake↓ |
| 272. | D: Do you not like the warm↑↑ |
| 273. | C: /sræn↑↑/ ((Stretching arm towards L, smile)) {€→D} |
| 274. | L: It won’t be too hot↑↑ ((shaking head)) {€→C} |
| 275. | D: You go all floppy don’t you↑ ye↑↓ |

Cate Conversation 3: with Lisa and Daisy
**Self-repair:**

There appeared to be no examples of self-initiated self-repair by Cate but it was difficult to be sure because of the limited intelligibility. The most common pattern was for other initiated self-repair where the conversation partner repeated what they thought Cate has said as an understanding check or where they did not respond. Cate then attempted repair. She would often reduce the content by focusing on a small part of the message:

<table>
<thead>
<tr>
<th>Line</th>
<th>Cate's Utterance</th>
<th>Conversation 1: with Daisy, Nina, Jake and mother</th>
</tr>
</thead>
<tbody>
<tr>
<td>20.</td>
<td>C: /ɪ m/↓ {mum}</td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>D: At home↓ {€→M}</td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>C: /ɪ m/↓ {mum} /ɪ m/↓ {€→M}</td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td>D: Mum↓ Mum bought her ↑ ((leaning forward)) {€→C}</td>
<td></td>
</tr>
</tbody>
</table>

but also used gesture to provide additional information:

<table>
<thead>
<tr>
<th>Line</th>
<th>Cate's Utterance</th>
<th>Conversation 2: with her father, mother and Nina</th>
</tr>
</thead>
<tbody>
<tr>
<td>150.</td>
<td>C: /ɪn æ↓/ {big fat} ((indicating length between both hands)) {€→M}</td>
<td></td>
</tr>
<tr>
<td>151.</td>
<td>M: (){€→C}</td>
<td></td>
</tr>
<tr>
<td>152.</td>
<td>C: /æ↓/ {€→M}</td>
<td></td>
</tr>
<tr>
<td>153.</td>
<td>M: Black↓↑ {€→C}</td>
<td></td>
</tr>
<tr>
<td>154.</td>
<td>C: /æ↓/ ((indicating length between both hands)) {€→M}</td>
<td></td>
</tr>
<tr>
<td>155.</td>
<td>M: fat↑ {€→C}</td>
<td></td>
</tr>
</tbody>
</table>

In this example from the third conversation Cate had tried earlier to explain that her SGD was not working correctly. She attempted this again in line 343, and repeated this in line 347 and 349 but both these attempts at repair were ignored:

<table>
<thead>
<tr>
<th>Line</th>
<th>Cate's Utterance</th>
<th>Conversation 3: with Lisa and Daisy</th>
</tr>
</thead>
<tbody>
<tr>
<td>344.</td>
<td>C: /nəʊ↓/ ((shake of head, Trying to hit top bar)) /ɜ æ ə↓/ {€→DV→D}</td>
<td></td>
</tr>
<tr>
<td>345.</td>
<td>L: You’ve just deleted it↓↑ {€→DV}</td>
<td></td>
</tr>
<tr>
<td>346.</td>
<td>D: Well that’s no↓ good↓ specially for this↑ LAUGH</td>
<td></td>
</tr>
<tr>
<td>347.</td>
<td>L: You’ve just deleted it↓↑ oh no you haven’t↓ {€→DV→C}</td>
<td></td>
</tr>
<tr>
<td>348.</td>
<td>C: ((Activating DV)) /i: æ: ə↑/ {€→D→DV→D}</td>
<td></td>
</tr>
<tr>
<td>349.</td>
<td>D: Uh↑↑, we’ll have to get Jake to sort it out then↓</td>
<td></td>
</tr>
<tr>
<td>350.</td>
<td>C: /i nə[ ɪə↓/ ((slight shake of head)) {€→L→D}</td>
<td></td>
</tr>
<tr>
<td>351.</td>
<td>L: [yeh↑↑] {€→DV}</td>
<td></td>
</tr>
<tr>
<td>352.</td>
<td>D: [Good] thing we CAn read↓</td>
<td></td>
</tr>
</tbody>
</table>

**Other initiated repair:**

On many occasions Cate’s conversation partners used repetition as an understanding check of what they thought she had said which provided a prompt for
Cate to repair. This is seen as a stronger type of other-initiated repair in terms of its power to locate the source of trouble (Schegloff et al., 1977). This was sometimes done by repeating part of her utterance with a questioning tone which helped to clearly target the source of trouble:

113. C: (2.2) /ə bɪ jʌn↓/ ((turning to M)) {€→N↑→M}
114. M: A big↑ {€→C}
115. C: (.) /eɪ eɪn rɪ n↓/ {€→M}
116. M: (2.1) ((Turning head to query)) {€→C}
117. C: /meɪr. r.↓/ {€→M}

On other occasions they were unable to provide a candidate response and initiated a weaker form of repair:

398. C: (.) /ə əʊː aʊ↓/ {gall stone out} {€→M}
399. M: (..) What↑↓ ((Raised head)) (..) {€→C}
400. C: /ə əʊn aʊ↓/ {gall stone out} {€→M}
401. M: Gall stones out↓↑ ((slow nod of head)) {€→C}

Cate Conversation 3: with Lisa and Daisy

or requested a direct repeat:

36. C: ye (.) u eyee {a lady} /e (. )ɪn eɪjɪ↓ {€→M}
37. J: [Where↑] {€→C}
38. D: [say again↑] {€→C}
39. C: /eɪjɪ↓ (lady) ((sign index finger down left cheek)) {€→M}

Cate Conversation 1: with Daisy, Nina, Jake and mother

In the second conversation there was an extended sequence of repair when Cate was asked what foods she would like to eat following a forthcoming gall stone
operation (lines 427-487). Here Cate and her partner used a number of strategies to try to clarify her message. Cate used association with the speaker and characteristics of the food (1), gesture (2), head nodding and shaking (3) – and after prompting from her mother (4) used her SGD to begin to spell it (5). The conversation partners used: prior knowledge of Cate’s likes and dislikes (6), requests for spelling (7) questioning (8) and guess work (9):

<table>
<thead>
<tr>
<th>Line</th>
<th>Transcript</th>
</tr>
</thead>
<tbody>
<tr>
<td>426.</td>
<td>C: /ʌ/ (.) /bæ æ↓/ {pasty} ((smile)) {€→M}</td>
</tr>
<tr>
<td>427.</td>
<td>M: Butterfly↑↓ ((smiling, eyes widening)) {€→C}</td>
</tr>
<tr>
<td>428.</td>
<td>C: /næ æ↓/ {pasty} ((smile)) {€→M}</td>
</tr>
<tr>
<td>429.</td>
<td>M: No↑↑ ((shaking head)) {€→C}</td>
</tr>
<tr>
<td>430.</td>
<td>C: /uː juː aɪ æ↓/ ((smile)) {you like it} {€→M→D}</td>
</tr>
<tr>
<td>431.</td>
<td>M: (.) You like that↓ what is it↑ {€→D→C}</td>
</tr>
<tr>
<td>432.</td>
<td>C: /dæ aɪʔ↓/ {dad likes} {€→D→M}</td>
</tr>
<tr>
<td>433.</td>
<td>M: (9) ((shaking head)) (.)Is it on your Dynavox↑= ((Pointing to Dynavox)) {€→C}</td>
</tr>
<tr>
<td>434.</td>
<td>C: =/nəʊ/↓ {€→M}</td>
</tr>
<tr>
<td>435.</td>
<td>M: [Is it↑] {€→C}</td>
</tr>
<tr>
<td>436.</td>
<td>N: (/) [Can you] spell it↑</td>
</tr>
<tr>
<td>437.</td>
<td>M: Ye, (/) what letter does it begin with↑ {€→C}</td>
</tr>
<tr>
<td>438.</td>
<td>C: /nɪː/↓ {€→D→M}</td>
</tr>
<tr>
<td>439.</td>
<td>M: It begins with B↓↑ {€→C}</td>
</tr>
<tr>
<td>440.</td>
<td>C: /e/ / (.) /æ↓/ (5) {A} ((smile)) {€→D}</td>
</tr>
<tr>
<td>441.</td>
<td>M: (3.3) yeh {€→C}</td>
</tr>
<tr>
<td>442.</td>
<td>C: /æ↓/ {€→M}</td>
</tr>
<tr>
<td>443.</td>
<td>M: A↓↑ {€→C}</td>
</tr>
<tr>
<td>444.</td>
<td>C: /æ↓/ {€→D→M}</td>
</tr>
<tr>
<td>445.</td>
<td>M: B A↓↑ {€→C}</td>
</tr>
<tr>
<td>446.</td>
<td>D: ((Activating Dynavox)) {€→D→C→DV}</td>
</tr>
<tr>
<td>447.</td>
<td>M: (3.3) yeh {€→C}</td>
</tr>
<tr>
<td>448.</td>
<td>C: /ææ æ↓/ {pasty} {€→M}</td>
</tr>
<tr>
<td>449.</td>
<td>M: [Batter]↑↑ {€→C}</td>
</tr>
<tr>
<td>450.</td>
<td>N: [batter↓↑]</td>
</tr>
<tr>
<td>451.</td>
<td>C: (/) ((Slight shake of head)) /ææ æ↓/ {pasty} {€→D}</td>
</tr>
<tr>
<td>452.</td>
<td>D: (.) B A yeh↓↑ got B A↓ {€→C→DV→C}</td>
</tr>
<tr>
<td>453.</td>
<td>C: /t o↓/ (.) /o o↓/ /hot?/ ((moving right arm up and down)) {€→M}</td>
</tr>
<tr>
<td>454.</td>
<td>M: Hot↓↑ its hot, (5) curry↑↑ Thats not B↓ ((shake of head, frown)) {€→C}</td>
</tr>
<tr>
<td>455.</td>
<td>C: /bæ æ↓/ {pasty} {€→M}</td>
</tr>
<tr>
<td>456.</td>
<td>(3.3) ((D shakes head)) {€→C}</td>
</tr>
<tr>
<td>457.</td>
<td>M: Again↓ ((shake of head)) {€→C}</td>
</tr>
<tr>
<td>458.</td>
<td>C: /juː æ æ↓/ {you eat it} {€→M→D}</td>
</tr>
<tr>
<td>459.</td>
<td>D: I make it↑↑ I eat it↑ {€→C}</td>
</tr>
<tr>
<td>460.</td>
<td>C: /en/ / (.) /ææ æ↓/ /smile/ ((nod of head, smile)) {€→D→D→DV}</td>
</tr>
<tr>
<td>461.</td>
<td>D: What the heck↑ {€→C→DV}</td>
</tr>
<tr>
<td>462.</td>
<td>C: LAUGH : (1.2) /ææ æ↓/ {pasty} ((smile)) {€→M}</td>
</tr>
</tbody>
</table>
Cate Conversation 2: with her father, mother and Nina

**Non-verbal Communication**

**Positioning and posture:**

Higginbotham (2009) highlights how people position themselves during interaction influences the communication modes and strategies that they use. This can be particularly significant for people who use AAC whose communication partner may need to be positioned where they can look at the screen of a SGD. There can also be asymmetry of position if one person is seated in a wheelchair and unable to move position or gain eye contact from their communication partner.

Cate was reliant on others to position her. In conversation 1 her mother recognised that she was positioned so she could not see Daisy and she was prompted to move to a different position.

| 111. | M: It is difficult for you because **Daisy** round the wrong side↓↑ |
| 112. | C: Ye /je/↓ ((smile))0 {€→M→D} |
| 113. | D: I know↓ I'm round here↑ you (..) can’t see me↑↓ ((leaning round, smiling)) {€→DV} |
Eye gaze:

Positioning was particularly important because Cate used eye contact to bring others into the conversation to help clarify her message or to provide information that had already been discussed.

Clarke and Wilkinson (2010) recognise that eye gaze can be disrupted if one speaker is reliant on AAC where the focus may be on hand gestures or a SGD. It was also obvious that eye contact was disrupted when Cate used her SGD, this may have been a contributory factor to why Cate often seemed reluctant to use it; because of the dynamic nature of the screen it required visual scanning and considerable concentration to locate and activate the cells required:

Facial Expression and Nodding

Throughout all the conversations Cate used smiling often combined with nodding to indicate to her conversation partner that they had correctly understood her or to agree with what has been said:
In fact it was often quite difficult to distinguish between Cate’s verbal yes and no, and because of the angle of her head it was sometimes difficult to see whether she was nodding or shaking it; the accompanying smile was the clearest confirmation of a yes response.

Apart from smiling Cate’s facial expression was quite limited, this is probably a consequence of the spasticity of her facial muscles. However, Daisy who was very familiar with Cate was able to pick up anxiety through a combination of facial expression and sighing:

Use of gesture and artefacts:

Gesture and sign language were used by Cate and her partners throughout the conversations. Gestures are distinguished from sign languages which use hand shapes in a conventional manner and are more consciously monitored by the user (Sweetster, 2009). There was interesting variation between the three conversations. Cate’s partners used considerably more gesture than Cate in the first conversation, the majority of this was mime used by Daisy in her description of Cate’s activity with the dog and while driving:

It also became obvious during the conversation that Daisy had very limited knowledge of conventional sign language which was used by Cate and her family:
The amount of gesture used was similar for Cate and her partners in the second conversation. This was partly influenced by her mother’s specific request to Cate to sign, which resulted in an extended sequence of signing between Cate and her mother and father:

**Cate Conversation 2:** with her father, mother and Nina

168. M: so what's the sign for a snake↑ {€→C}
169. C: (.) ((indicating snake with right arm, smile)) {€→M→D}
170. D: ((indicating "snake" with left arm)) {€→C}

In the third conversation very little gesture was used by her partners. However, Cate used gesture very effectively to provide additional information:

**Cate Conversation 3:** with Lisa and Daisy

97. C: /mʌ eːmjɪ uː ɪ↓/ ((right arm moving away from chair)) {€→D}
98. L: Your mum brushed↑ {€→C}
99. C: ((shake of head)) {€→D}
100. L: Brushed up↓↑ {€}
101. C: /ə wɔːə↓/ ((mimed pouring water, smile)) {€→D}

Cate’s SGD was used in all three conversations but only when prompted to do so by her partners. There was a break in conversation 1 when the first tape ran out. When the new tape began the DV4 had been set up and Cate’s ‘Molly page’ selected. She was prompted to demonstrate how she uses this to give commands to the dog:

**Cate Conversation 1:** with Daisy, Nina, Jake and mother

265. DV: LEAVE
266. C: /liː/ {leave} ((smile)) {€→DV→DN}
267. DN: Tell her to leave↓↑ {€→DV}
268. C: /jeː/↓ (.) / ɪ ə bɔ/↓ {leave the ball} {€→DN}

In the second conversation the SGD was used during the extended repair sequence discussed above (page 102). Here Cate used it after prompting from her mother and Nina. She selected the letters ‘B’ and ‘A’ attempting to spell ‘pasty’. This confusion of voiced (B) and voiceless (P) consonants may have reflected Cate’s own speech pattern as she is unable to mark this contrast.

In the final conversation Daisy prompted her to use her SGD to show Lisa. Again she used the spelling facility to spell the name of a film. Here Cate has some
difficulty distinguishing between ‘i’ and ‘e’ again possibly reflecting her limited phonological repertoire:

<table>
<thead>
<tr>
<th>412.</th>
<th>C: /iːː↓/{&quot;E&quot;}</th>
</tr>
</thead>
<tbody>
<tr>
<td>413.</td>
<td>D: No not quite↑↑ nearly↓↑</td>
</tr>
<tr>
<td>414.</td>
<td>L: ˈtwiː↑↓ (higher pitch, sing song)</td>
</tr>
<tr>
<td>415.</td>
<td>C: /ɑɪː↓/</td>
</tr>
</tbody>
</table>

Cate Conversation 3: with Lisa and Daisy

The DV4’s word prediction facility showed that this is a word that she had spelled before.

Prosody

Intonation:

There are several occasions when Cate’s communication partner used a fall/rise (Tone 4) intonation pattern. This pattern is associated with reservation and on occasions appeared to doubt the accuracy or content of what Cate was saying:

<table>
<thead>
<tr>
<th>157.</th>
<th>M: Fat snakes↑↑ ((nod)) {€→C}</th>
</tr>
</thead>
<tbody>
<tr>
<td>158.</td>
<td>C: /ɜm↓/ ((Indicating with hands)) {I ca∩n do it now} {€→M}</td>
</tr>
<tr>
<td>159.</td>
<td>M: What the snakes were fat↑↓ ((nodding)) were they↑ What do you mean by fat↑ I don’t think you got fat↑ snakes ↑↓ {€→C}</td>
</tr>
</tbody>
</table>

Cate Conversation 2: with her father, mother and Nina

At other times this pattern indicates uncertainty that they have understood Cate correctly:

<table>
<thead>
<tr>
<th>136.</th>
<th>C: /æ duː ɪ noʊ↓/ {I can do it now} {€→D}</th>
</tr>
</thead>
<tbody>
<tr>
<td>137.</td>
<td>D: You can do it now↓↑</td>
</tr>
</tbody>
</table>

Cate Conversation 3: with Lisa and Daisy

A rise fall pattern (Tone 5) is associated with surprise and is common in conversations with children and pets, and can be perceived as patronising, particularly when it relates to relatively mundane conversation. It was also frequently accompanied by increased stress:

<table>
<thead>
<tr>
<th>25.</th>
<th>D: Mum found [Molly]↑↑ ((smile)) {€→C}</th>
</tr>
</thead>
<tbody>
<tr>
<td>26.</td>
<td>J: [Molly’s] mum↓↓ ((smile)) {€→ C}</td>
</tr>
<tr>
<td>27.</td>
<td>C: WEY!! (smile) /weɪ↑↓/</td>
</tr>
<tr>
<td>28.</td>
<td>J: Molly’s mum↑↓ ((smile, laugh)) {€→ C}</td>
</tr>
<tr>
<td>29.</td>
<td>D: Molly’s mum↑↓ ((smile)) {€→ C}</td>
</tr>
</tbody>
</table>

Cate Conversation 1: with Daisy, Nina, Jake and mother
or had raised pitch:

87. C: /uː ʊː iː/ {Lucy} (smile) {€→D}
88. D: Lucy↑↓ very good↑↓ I’m impressed↑↓ LAUGH
89. C: /eʃ/ ((nod, smile)) {€→D}
90. D: You remembered↑↓

There tended to be very little variation in Cate’s speech pattern with most of her turns having a rising (Tone 1) pattern. She sometimes used a rising tone to indicate a question, although this was not always acknowledged:

574. C: /iːn je/ {€↓→N}
575. N: Yeh↑
576. C: /ɪ iːɪ əʊ/ {we finished now} {€→N}
577. M: Have they, have you finished now↑

She occasionally used rise/fall tones when she was particularly definite about an answer. This was often accompanied by a broad smile.

85. M: and then↓ (.) decided on which one Cate could say the easiest↑↓
86. C: /dʒeɪ/↑↓ {€→D}

It was also used when she was speaking to the dog:
Cate Conversation 2: with her father, mother and Nina

She used fall rise intonation when she was denying what was being said:

| 256. | C: /eɪ jæːypsumˈ ((Dog comes into shot)) {€→molly} LAUGH |
| 257. | M: LAUGH {€→molly} |
| 258. | C: /ɜɪ jəːypsumˈ /{€→molly} |

| 259. | Cate Conversation 2: with her father, mother and Nina |

Evaluation

Through discourse structure:

As already discussed, all the conversation partners repeated Cate’s answer to clarify their understanding.

| 413. | D: Are you telling fibs {€→C} |
| 414. | C: /nɜːˈiːransˈ ((shake of head)) {€→D} |

| 415. | Cate Conversation 1: with Daisy, Nina, Jake and mother |

This is also illustrated in the discussion of the visit to the zoo in conversation 2 quoted on page 110.

This pattern of question response evaluation/feedback is common in adult:child interactions where it is seen to place the adult in a powerful relationship over the child and results in constant appraisal and recognition of in/competency.

In the third conversation the partners pursued this didactic style and carried on even when they knew what Cate was trying to say:

| 392. | D: well say it to me / and then I'll help you with the next letter / |
| 393. | C: (0.6) /æˈɑː/ in aɪˈɑː /ˈTwilightˈ (smile) {€→D} |
| 394. | D: Twilight / I thought it might be: the next letters ”W” / |

| 395. | C: /iːːˈi ˈEˈ |
| 396. | D: No not quite / nearly |
| 397. | L: “twiˈyaː /ˈtwiˈyaː /” (higher pitch, sing song) |

| 398. | Cate Conversation 1: with Daisy, Nina, Jake and mother |

120
Through lexical choice:

Cate used very little evaluative language throughout the conversations and there was no amplification. In conversation 1 she was prompted by her brother to demonstrate how she expresses her road rage which resulted in her using a sequence of verbalisation and gestures of abusive terms.

Much of the conversation partner’s evaluation was related to Cate’s speech production or her use of the SGD:

Both these conversations also had a high number of amplified terms; conversation 2 began with an extended exchange between Cate and her mother where Cate’s production of the word ‘crap’ is evaluated and she was asked to practise better production.
In fact analysis of Cate’s speech sound system (See page 124) shows that she does not use any velar plosives and has difficulty marking voiceless or final consonants; so improvement of her production was likely to be impossible.

Through intonation

Cate’s communication partners evaluated the accuracy of what she was saying through fall/rise intonation (see page 118), and also used a rise/fall pattern that at times appeared patronizing.

Other observations

There are examples in all three conversations where Cate is referred to in the third person singular, this is particularly prevalent in the first conversation:
Also on a couple of occasions the truth or accuracy of what Cate is saying is questioned:

| 412. | J: Are you sure↑ ((smile)) {€→C} |
| 413. | D: Are you telling fibs↓ {€→C} |

Cate Conversation 1: with Daisy, Nina, Jake and mother

| 90. | M: it was as small as that↑↓ ((Turning to J and turning back)) (..)It couldn't have been that small↓↑ {€→C→J→C} |

Cate Conversation 2: with her father, mother and Nina

There are also examples of quite child-like questioning by her partner:

| 61. | M: What was↓ what was your favourite animal↑ {€→C} |

| 244. | M: What colours were these fish↑ {€→C} |

Cate Conversation 2: with her father, mother and Nina

| 203. | L: What colours↓ do you use↓ mainly↑{€→C} |
| 204. | C: /ə nuː↓↑/ LAUGH ((smile)) {€→D} |
| 205. | L: Do you have a favourite colour↑ ((smile)) {€→C} |

Cate Conversation 3: with Lisa and Daisy

**Sound system**

Analysis of Cate’s speech sound system (see Table 8 on page 124) revealed a restricted repertoire of consonants all of which were voiced. However she had a full repertoire of consonants which gave the overall structure and rhythm to what she was saying. Much of her speech was also nasalized.

**Summary of Cate**

Cate appeared to have no difficulty understanding her partners but they often had difficulty understanding what she was saying and were reliant on previous knowledge of the topic to interpret what she was saying.

The conversations were often controlled by her partners both through the choice of topic and the use of questions. Even when Cate tried to introduce a new
topic this was sometimes ignored and at other times the partner returned the conversation to the previous topic after one or two turns.

**Cate's Phonemic Inventory**

<table>
<thead>
<tr>
<th></th>
<th>Bilabial</th>
<th>Labiodental</th>
<th>Dental</th>
<th>Alveolar</th>
<th>Post-alveolar</th>
<th>Palatal</th>
<th>Velar</th>
<th>Glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plosive</td>
<td>p b</td>
<td>t d</td>
<td>k g</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nasal</td>
<td>m</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>η</td>
<td></td>
</tr>
<tr>
<td>Fricative</td>
<td></td>
<td>θ δ s z</td>
<td></td>
<td>f ʒ</td>
<td>h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affricate</td>
<td></td>
<td></td>
<td></td>
<td>tʃ dʒ</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glides (approximant)</td>
<td>w</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liquid (Approximant)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 8: Cate’s Phonemic System

Adapted from Edwards, (1992) Sounds marked ŋ were present in Cate’s sound system.

Pausing and overlap were common in all the conversations, and pauses of two seconds or more were common. However, these were not always long enough for Cate to organise her response and therefore resulted in overlap. Her partner began to speak as Cate went to respond to a previous question. Repair was usually achieved by her partner providing a candidate answer or a direct request for repetition. Cate would confirm this with a combination of verbal response, head nodding and smiling.

Cate’s use of eye contact was very important as she would use this to bring partners into the conversation to provide information. This was sometimes restricted because of the positioning of her wheelchair. Her ability to use eye contact was also disrupted if she accessed her SGD which was only used when she was prompted to do so by her partners. She also used facial expression, nodding and gesture/signing to provide additional information to her partner.
Cate’s did not use a wide range of intonation but her partners frequently used exaggerated intonation in particular changes in tone, pitch and stress.

Most of Cate’s speech comprised single word responses to questions or a yes/no plus some additional information, she used very little evaluative language. Her partners used much more evaluative language which was often judgements about her performance – either the accuracy of her speech or the use of the SGD; this also contained a large number of amplified terms.

At time there appeared to be a patronising quality to the partner’s conversation. This was marked by the exaggerated intonation, the use of amplified evaluative language and test questions and reference to Cate in the third person.

**Alan**

Alan was 43 years old at the time of the conversations. He had a diagnosis of learning difficulty and autism. He was living at home with his father and step-mother and worked full-time as a grounds man at a local college; here he had help from a support to work charity and a sympathetic manager who had known him for many years. His father had recently had significant health problems and Alan and his family were exploring options for alternative living arrangements. Alan moved into a South West Adult Placement Scheme placement shortly after the second videoing. He decided to temporarily withdraw from the project at this stage. Alan was a sociable man who was happy to engage in conversation. He had had a wide life experience and also showed interest in other people. He could become anxious if he was unsure of what was happening, and required support and reassurance in new situations.

Alan’s social network included his father, sister and his manager, and a member of staff from his short breaks service. It did not include any friends of his own age.

Alan recorded the following conversations:

1. **With Dora (D), a member of administration staff at the local health resource centre** (Duration 4.55 minutes). This mostly consisted of Dora and Alan sharing experiences about their holidays.
2. **With his elder sister Sally (S), who is a teacher who did not live locally but was visiting Alan and his family during a half-term holiday.** Alan’s nephew Martin (M)
and his niece Sadie (Sd) were also present. (Duration 11.30 minutes). This comprised Sally and Alan discussing their holidays, Alan narrating a recent TV programme, explanations about a recent event, and forecasting about meals and holidays. Alan had two further conversations planned but decided to withdraw from the project during the move to his new placement.

**Quantitative analysis**
A summary of the quantitative analysis of Alan’s data is given in Table 9 below. Again the use of questions is particularly interesting; as is the difference in the use of evaluative language between Dora and Sally.

<table>
<thead>
<tr>
<th></th>
<th>Conversation 1</th>
<th>Conversation 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Alan</td>
<td>Dora</td>
</tr>
<tr>
<td><strong>Overlap</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>yes/no Interrogatives</td>
<td>8</td>
<td>32</td>
</tr>
<tr>
<td>Nos of which were Tags</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Wh-Interrogatives</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total number of questions</strong></td>
<td>10</td>
<td>37</td>
</tr>
<tr>
<td><strong>Unintelligible</strong></td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Problems with understanding</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Self-Repair</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Repetition or partial repetition</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Use of gesture</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Evaluation</td>
<td>15</td>
<td>31</td>
</tr>
<tr>
<td>Amplification</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

**Partner misunderstanding of Alan**

**Table 9: Alan - Quantitative Analysis**

**Qualitative analysis:**
Alan actively participated in both conversations and offered detailed information to his partner demonstrating a wide life experience and a rich vocabulary. He did not appear to have difficulties understanding his partner but on a few occasions his speech was indistinct and his partner was unsure what he had said.

**Discourse Structure**

**Topic management:**
In conversation 1 Dora invited him to select what topic he would like to talk about.
Alan chose to talk about holidays and this is the main topic for the entire conversation. Once he had chosen the topic Dora took the lead and asked a number of questions to elicit information from Alan.

Part way through the conversation Alan began to give further information about a visit to a water park but Dora returned the topic to the previous discussion of Euro-Disney:

In the second conversation Alan initiated the topic by asking Sally about a recent holiday:

Following this however, his sister mostly controlled topic change by asking an open question giving Alan a choice of topic:

or by using the prompt sheet provided by the researcher to specify the topic:

**Turn construction**

Although both conversations consisted mainly of single turn construction units both Alan and his partners also used multiple TCUs.

In conversation 1 Alan and Dora regularly used a pattern of providing a response to a question followed by further information in the form of an evaluation:
or asked a further question:

96. D: Wow↑↓ Did you go on rides↑ {€→A}

100. D: Did you↑ wow↑↓ Excellent↓ (0.7) so, would you go back to **Tunisia**↑ {€→A}

Alan Conversation 1: with Dora

In his conversation with Sally the most frequent two TCU pattern for both speakers was to give a yes or no response with additional information or question.

148. A: No↓ ((shake of head)) not found one yet↓ {€→S}

192. S: ye↓↑ what from a fish and **chip** shop↓{€→A}

Alan Conversation 2: with Sally

They both used strings of multiple TCUs when they were telling as story:

150. A: [The servants always ↓↑(..) oh and last, last time↓ the **servant lady** put salt in the **pudding**↓ instead of what she’s supposed to put in it↑ {€↓→S}

or formulating their ideas:

223. S: [LAUGH] That didn’t **surprise** me↓ though↓ ((smile)) (..) Ah that’s good↑↓ So↓↑ (...) what else “have we got to talk about”↓ **PETS**↑↓ Have you got any **pets**↑ {€→A→book}

289. A: Think so↓ (..) not sure ((nod)) where else I’d like to go↓ “don’t know↓↑” **Italy’s** nice↑ ((nod)) isn’t it↑ I’ve been to Italy↓ {€→S}

Alan Conversation 2: with Sally

**Co-construction**

Both Alan and his partners used questions to incrementally co-construct narratives of past events.

107. A: About five minutes to the **beach** ↓ ((hand gesture arm up pointing down?)) {€Θ→D}

108. D: You walked to the beach↑ = {€→A}

109. A: =Could walk to the beach↑ ((hand on back of head)) {€ϕ}

110. D: Did you go in the **sea**↑ {€→A}

111. A: ye↑, sea was lovely and **warm**↓ ((smile)) {€Θ→D}

165. D: it poured with rain when we came home↑ {€→A}
Alan Conversation 1: with Dora

166. A: Did it↑ {€→D}  
167. D: [it wasn’t] nice when it rains↓ ((nod)) {€→A}  
168. A: When did you go↑ {€→D}  
169. D: I went in August↓ ((nodding)) {€→A}  
170. A: and it rained when you came back↑↑ {€→D}  

Alan Conversation 1: with Dora

304. S: What did you see↓ {€→A}  
305. A: Oh we saw all those stat, all these people standing up like statues↓ we saw that bit↑  
   [***] {€→S}  
306. S: I [don’t know] what that bit is↓ ((frown)) {€→A}  
307. A: Like people ((pointing up with hand)) like people standing up like robots↑ {€→S}  
308. S: Oh what↑ real people↑ {€→A}  

Alan Conversation 2: with Sally

Pause:

Pausing was not frequently noted and there were very few pauses beyond one second in duration. There were a number of times when there was a short pause before Alan provided an answer to a question posed by his partner; his facial expression indicated that he was thinking and formulating his response (Goodwin and Goodwin, 1986). This was particularly noticeable at the beginning of conversation 1 when there was an extended pause of over two seconds following Dora’s request about what he wanted to talk about. This was accompanied by a break in eye contact.

20. D: What would you like to talk about↓ {€→A}  
21. A: (2.3) Holidays↓↑ {€→D}  

Alan Conversation 1: with Dora

In the second conversation there was an extended pause after Alan had replied to Sadie. This was not acknowledged by Sadie or Sally and was followed by a more formally constructed reply which was at significantly reduced volume.

113. Sd: who came after Alan↑  
114. A: Sadie↓↓ {€→Sd} (2.3) *Sadie came after Alan↓ {€→Sd}  

Alan Conversation 2: with Sally, Sadie and Mathew
Overlap:

In conversation 1 overlap usually occurred at a TRP marked by falling intonation where the speaker had anticipated the end of the turn construction unit, this was usually filled with a single confirmation or denial:

65. A: I like it best when you’re’ up there then↓ {don’t you↑} \(\{\epsilon\}'\theta\rightarrow D\)
66. D: [Yeh↓] ((nod)) \(\{\epsilon\rightarrow A\}\)

86. D: I’ve never ((shake of head)) been to France before [Alan↓] \(\{\epsilon\rightarrow A\}\)
87. A: [No↓] \(\{\epsilon\rightarrow D\}\)

Alan Conversation 1: with Dora

There was more overlap noted in conversation 2 where there were a number of interruptions by the children; but there were also several occasions of overlap similar to conversation 1.

165. S: I **definitely** wouldn’t have done [that↓] ((smile)) \(\{\epsilon\_\rightarrow A\}\)
166. A: \(\{\epsilon\_{\downarrow\uparrow}\rightarrow S\}\)

Alan Conversation 2: with Sally, Sadie and Mathew

There was also an extended sequence (line 234-252) where there was a considerable amount of overlap. This seemed to continue for the complete sub-topic of the children’s pets but the coordination of turns got back on track when the topic was changed by Sally asking a question about holidays. A similar sequence of overlap occurred in lines 328 – 350 when Alan and Sally talk about future holiday choices.

Recipient design

In conversation 2 Sally seemed to shepherd Alan to a desired answer by an insistence on whether he was bothered about having other pets:

227. S: [LAUGH] Would you like to have any other pets↑ (.. ) or you not bothered↓ \(\{\epsilon\rightarrow M\rightarrow A\}\)
228. A: °Got someone to look after them for you↓° \(\{\epsilon\rightarrow S\}\)
229. S: (..) mm ((screw up nose, nod)) So↑ \(\{\epsilon\rightarrow A\}\)
230. A: got dogs °got to have someone there really↓↑° ((nod)) \(\{\epsilon\_{\downarrow\uparrow}\rightarrow S\}\)
231. S: so do you think you’d **like** ((shaking head)) to have a **pet**↑ or you not bothered↑ \(\{\epsilon\rightarrow A\}\)
232. A: (..) °Not quite↓↑ not sure really ↓↑° \(\{\epsilon\rightarrow S\}\)

Alan Conversation 2: with Sally, Sadie and Mathew
Asking questions

In both conversations Alan’s conversation partners asked the majority of questions, this was more marked in conversation 1 where most of the questions asked were of a yes/no type. A number of tag questions were used by both Alan and his partner. These all had a rising intonation which indicated that they are seeking further information rather than just underlining a statement.

| 65. | A: I like it best when you’re’ up there then↓ [don’t you↑] {€Θ→D} |
| 151. | D: Its nice going away ((Nod)) [though] °isn’t it↑° {€→A} |

Alan Conversation 1: with Dora

Alan used more questions in conversation 2 with most of these being of a yes/no type. Both Alan and Sally used a number of tag questions:

| 118. | A: [Yes::↓] that’s was fun↓ There had loads of stuff there↓ didn’t they↑ {€→S} |
| 155. | S: That’s not very [good↓] ((shake of head, smile)) is it↑ {€→A} |

Alan Conversation 2: with Sally, Sadie and Mathew

but Sally also used a considerable number of yes/no questions to seek confirmation:

| 84. | A: (.. ) oh↑, I really enjoyed the bowling yesterday↓ ((smile)) {€→S} |
| 85. | S: Did you [like it↑] {€→A} ((smiling)) |

Alan Conversation 2: with Sally, Sadie and Mathew

and wh- interrogatives to elicit information from Alan:

| 27. | S: What did you do on your holiday↓ ((smile)) {€→A} |
| 28. | A: Oh, Went swimming in the pool↓ and the pool was a really nice swimming pool↓ ((circle movement with hand)) {€→S} |
| 29. | S: ye↑ {€→A} |
| 30. | A: That was fun↓ I did Karaoke a couple of times↓ ((nod)) {€→S} |
| 31. | S: What did you sing↑°mm° ((nod, smile)) {€→A} |
| 32. | A: sang↓(.) Robson Green↑↓ ((nod, smile)) {€→S} |
| 33. | S: Which which one↓ {€→A} |
| 34. | A: (0.7) um um Lady Gaga↑ I did that one↓ ((smile)) {€Θ→S} |

Alan Conversation 2: with Sally, Sadie and Mathew

Breakdown and Repair

There were very few examples of speech that was unintelligible. There are one or two occasions when the researcher was unable to understand what was
being said from the video tape but it was obvious from the participant’s responses that this had not been a problem during the conversation.

**Self-repair:**

Alan and his partners used similar amounts of self-repair which comprised mostly pauses and restarts:

39. A: Nice↓ we went ((nodding)) we looked at the camels ↓{€→D}

76. D: That was nice↑↓ hot weather, very hot ((nodding)) when I went there↓ {€→A}

---

Alan Conversation 1: with Dora

13. S: and we went to↓(.) where else did we go to↓We went to San Tropez↑↓ {€→Sd→A}

136. A: Like↓ bit like Upstairs Downstairs like servants in a big house↑

Alan Conversation 2: with Sally, Sadie and Mathew

**Other Initiated Repair (OIR):**

In conversation 1 Alan’s description of his holiday activity was minimally acknowledged at reduced volume by Dora that initiated a repair:

127. A: Did that ↓↑ {€→D} (..) I went on the water park↓ that was fun↓, {€→D}

128. D: °mm° {€→A}

129. A: I [went to the water park↓]

---

Alan Conversation 1: with Dora

Similarly in conversation 2 Sally did not seem to understand what Alan had said but she did not seek clarification:

130. A: °Oh↓ TV oh↑° that Seventy-one Degrees Norf was quite good↓↑ {€→S↓→S}

131. S: Um↑↓ ((nodding)) {€→A}

132. A: That was fun↓ I watched that↑, what else have I been watching lately↓ ((slight frown)) Um(..), I’ve been watching that ((nod)) Downton Abbey↓↑ {€↑→S}

---

Alan Conversation 2: with Sally, Sadie and Mathew
In both conversations Alan and his partners used repeat or partial repeat of the others’ contribution to seek clarification:

167. S: So tell erm what\th ilk about (.) oh what is your \textit{favourite food} then \textit{Alan} ((smile)) \{€↓→A\}
168. A: Favourite food\th ilk \textit{fish} \{€↓→S\}

Alan Conversation 2: with Sally, Sadie and Mathew

48. D: and the camel \textit{stepped} on it \{€→A\}
49. A: \textit{stepped} on your \textit{shoe} \{€→D\}

Alan Conversation 1: with Dora

Here Alan repeated and clarified the reference of ‘it’ by referring back to shoes that were introduced in line 46.

33. A: Oh, end of September\th ilk \{€φ→DΘ\} ((slight frown))
34. D: End of September \{€→A\}
35. A: ((nod of head)) \{€→D\}

Alan Conversation 1: with Dora

189. A: °I quite like° cod\th ilk \{€→M\}
190. S: Cod\th ilk \{€→A\}

Alan Conversation 2: with Sally, Sadie and Mathew

In conversation 2 Sally was unsure about what Alan was describing when he was in Barcelona and used direct questioning to seek clarification:

305. A: Oh we saw all those stat, all these people standing up like \textit{statues} \[***\] \{€→S\}
306. S: I [don’t know] what that bit is\th ilk \{(frown)\} \{€→A\}
307. A: Like \textit{people} ((pointing up with hand)) like people standing up like \textit{robots} \{€φ→S\}
308. S: Oh \textit{what\th ilk people} \{€→A\}
309. A: Ye:: \{€→S\}

Alan Conversation 2: with Sally, Sadie and Mathew

This is seen as a relatively strong form of other initiated repair (Sidnell, 2010).

Also in conversation 2 it was obvious from Alan’s response that he had not understood Sally’s question:

143. S: So what happened in the a story\th ilk \{€→A\}
144. A: ye::\th ilk ((nod)) \{€→S\}
145. S: °What happened in the the story°\{€→A\}
146. A: well this \textit{lady} \[got to find a\textit{ husband} to repair all the house\]
Sally asked the question again at slightly reduced volume and with a change in intonation pattern.

**Non-verbal communication**

**Eye contact**

Dora maintained almost constant eye gaze to Alan when she was both speaking and listening. Alan frequently broke eye contact with Dora while he was speaking, but usually signalled a transition relevant space by re-engaging eye contact on the final word of his TCU; this was frequently paired with an increase in volume.

```
141. A: Ye, it was a few years ago now↓ ((nod of head, thinking)) (..)
```

```
Alan Conversation 1: with Dora
```

The eye contact in conversation 2 was less consistent. This was partly because of the children who were off camera and who attracted attention and eye gaze at intervals during the conversation; eye contact was also used to refer to the children and to engage them in the conversation:

```
212. S: Pudding↑ ((smile)) [I know somebody else who likes pudding]
    best↓ Martin↑ ((smile)) \{€→M→A→M\}
```

```
213. A:                       [ (LAUGH)] \{€→M→S→camera\}
```

```
Alan Conversation 2: with Sally, Sadie and Mathew
```

Alan and Sally also used the conversation prompt sheet, so often their gaze was directed down to the book in front of them.

Generally if Sally and Alan were not looking at each other their gaze would be down, or down and to the side. There were many examples when both Alan and Sally used the pattern described above:

```
139  S: What↓, what period is it set ↓ {€→A}
```

```
279. A: Yeh↓ ((nod)) been to America↓ {€→S}
```

```
Alan Conversation 2: with Sally, Sadie and Mathew
```

However they also both used looking up, this appeared to be linked with them thinking of a reply:
A: That was fun↓ I watched that↑, what else have I been watching lately↓ ((slight frown)) Um(..), I’ve been watching that (nod) **Downton Abbey**↓↑ {€↑→S}

S: oh OK↑↑ So you need to just **wait** and [see] ((rubbing face)) whether you get anything↑ {€↑→A}

A: Think so↓ (..) not sure ((nod)) where else I’d like to go↓ °don’t know↓↑° Italy’s nice↑ (nod) isn’t it↑ I’ve been to Italy↓ {€♂↑→S}

S: I’d quite **like** to go to:↓ sort of Norway↓↑ or [Sweden↓↑ or:]:

Alan Conversation 2: with Sally, Sadie and Mathew

**Facial expression:**
Most facial expression consisted of smiling. During Alan’s conversation with Dora much of his speech was accompanied by tight eye closing. This only occurred on a couple of occasions with Sally and seemed to suggest some anxiety:

S: Ye↓ (nod) she was **fine**↓ So what are you going to do for holiday next year then↓ {€↓book→A}

A: Don’t know↓ {€♂→S} See what happens↓ don’t know really↑ {♂Θ→S}

Alan Conversation 2: with Sally, Sadie and Mathew

**Nodding and head shaking:**
Alan, Dora and Sally all used nodding very frequently to reinforce their positive answers, and to a lesser degree shaking of their heads for no or negative answers. This was used slightly more by Alan than either of his conversation partners.

**Use of gesture and artefacts:**
Very little gesture was used by Alan or his partners in either conversation. The most common gesture used was “Sh” by Sally when one of the children interrupted the conversation. Deictic gestures (where the interpretation of meaning requires contextual information) were used by all participants to indicate height and movement and Alan used mime to indicate swimming and bowling in conversation 2.

A: Oh, Went swimming in the pool↓ and the pool was a really nice swimming pool↓ ((circle movement with hand)) {€→S}
The conversation prompt sheet was available for both conversations and structured the choice of conversation topics. This was particularly noticeable in conversation 2 where Sally drew Alan's attention to it by pointing:

129. S: ye↑ So you, do you want to tell me what you like watching on the TV↑ ((pointing to book, smile)) {€→book→A}

Alan Conversation 2: with Sally, Sadie and Mathew

**Prosody**

**Intonation**

Alan frequently used a fall/rise (Tone 4) pattern that is associated with reservation and uncertainty:

63. A: (...) um, that's OKish↓ ↑ ((blinking, smile)) {€θ→D}

77. A: Ye::↓↑ {€θ→D} ((nodding head, smile))

Alan Conversation 1: with Dora

132. A: That was fun↓ I watched that↓↑, what else have I been watching lately↓ ((slight frown)) Um(..), I've been watching that ((nod)) Downton Abbey↓↑ {€↑→S}

170 A: I quite like fish↑(... I like [roasts↓] {€φ→S}

Alan Conversation 2: with Sally, Sadie and Mathew

This pattern was also occasionally used by Dora when she asked Alan a question:

58. D: Good↓ ((nodding)) You don't mind flying↓↑ {€→A}

Conversation 1: with Dora

and by Sally when she appeared unsure of what she was saying:

60. S: they were in a bit of a [small cage ↓↑] ((frown)) {€φ→Sd}

141 S: O(..)k↑ [ok↑↑] ((nod)) {€↑}

Alan Conversation 2: with Sally, Sadie and Mathew
Both Dora and Sally also used a rise fall (Tone 5) intonation pattern which indicates surprise and is commonly used with children. This sounded particularly patronising when it was combined with increased volume or pitch:

| 70. | D: I went to **France** this year↑↓ {€→A} |
| 116. | D: It’s freezing **cold** here↑↓ ((smile)) {€→A, ø} |

Conversation 1: with Dora

| 173. | S: = I really like fish↑↓ when we were on **holiday** at the weekend I had fish for breakfast↓ {€→Sd→A} ((smile, reaching and touching Sd)) |
| 175. | S: =It was just **lovely**↑↓ {€→A} |

Conversation 2: with Sally, Sadie and Mathew

**Volume**

Although there were occasions when all participants spoke at a reduced volume, for Dora and Sally this was mostly associated with minimal fillers such as “mm”. There were several examples where Alan talked at reduced volume which gave the impression that he was unsure of what he wanted to say:

| 95. | A: °that was fun↓° ((smile)) {€↓→D} |
| 98. | A: °enjoyed that° ((nodding, smile)) {€→S} |
| 180. | A: ye↓ °Fish is good for you° [isn’t it↑] {€↓→S} |

Alan Conversation 1: with Dora

Alan Conversation 2: with Sally, Sadie and Mathew

At other times this reduced volume appeared to be used by Alan to prompt himself:

| 75. | A: we did a boat trip↓ °what did we do° and went in the **sea**↑ {€↓→M→S} |
| 130. | A: °Oh↓ TV oh↑° that Seventy-one Degrees Norf was quite good↓↑ {€→S↓→S} |

Alan Conversation 2: with Sally, Sadie and Mathew
Finally Alan used reduced volume when he repeated himself or echoed what Sally had said:

<table>
<thead>
<tr>
<th>Line</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>164</td>
<td>A: I wouldn't want to do that↓ {€↓}</td>
</tr>
<tr>
<td>165</td>
<td>S: I <strong>definitely</strong> wouldn't have done [that↓] ((smile)) {€↓→A}</td>
</tr>
<tr>
<td>166</td>
<td>A: [No↓↑] ((shake of head)) ° wouldn't have done that°↓ {€↓→S}</td>
</tr>
<tr>
<td>296</td>
<td>S: <strong>we'd</strong> quite like to go [to↑] {€↓}</td>
</tr>
<tr>
<td>297</td>
<td>A: [&quot;Where you'd] like to go [to↓°] {€→S↓}</td>
</tr>
<tr>
<td>298</td>
<td>S: [ I'd] quite <strong>like</strong> to go to <strong>Barcelona</strong>↑↓ ((smile)) {€→A}</td>
</tr>
</tbody>
</table>

**Pitch**

There were several occasions when the pitch of Sally’s speech was raised; this was usually associated with a rise fall intonation pattern that indicated surprise:

<table>
<thead>
<tr>
<th>Line</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>299</td>
<td>A: oh, <strong>Barcelona</strong>, we. I went to Barcelona once↓ {€↓}</td>
</tr>
<tr>
<td>300</td>
<td>S: Have you <strong>been</strong> there↑↓ ((slight frown)) {€→A}</td>
</tr>
</tbody>
</table>

**Evaluation**

**Through Discourse structure:**

Sally appeared to use a test question to which she already knew the answer. This is typical in adult: child and teacher: pupil interactions:

<table>
<thead>
<tr>
<th>Line</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>359</td>
<td>A: What you going [to see↓] {€↓→S}</td>
</tr>
<tr>
<td>360</td>
<td>S: [the <strong>yellow</strong>] brick road one↓ {€→A↓}</td>
</tr>
<tr>
<td>361</td>
<td>A: <strong>Oh</strong>↑ that'll be good↓ {€↓→S↓}</td>
</tr>
<tr>
<td>362</td>
<td>S: What's that <strong>called</strong>↑↓ ((TO M off camera)) {€→M}</td>
</tr>
<tr>
<td>363</td>
<td>A: (...) Wizard of <strong>Oz</strong>↓ {€↓→S↓}</td>
</tr>
</tbody>
</table>

There is an extended sequence in conversation where the speakers talk about themselves and each other by name rather than using pronouns:

<table>
<thead>
<tr>
<th>Line</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>110</td>
<td>S: mummy's hopeless [at bowling.] ((smile)) {€→A→Sd}</td>
</tr>
<tr>
<td>111</td>
<td>Sd: [who came,] who came after=</td>
</tr>
<tr>
<td>112</td>
<td>A:= and Sadie <strong>came</strong>↑(.) <strong>third</strong>↓, ((smile)) {€→Sd}</td>
</tr>
</tbody>
</table>
This is typical of speech to children, and the sequence began with Sally addressing Sadie and Martin, but this pattern seemed to be adopted for the subsequent turns.

**Through Lexical choice:**

Dora used twice as much evaluative language then Alan. This was noticeable in the amount of appreciation she used and the high level of positive judgements:

| 58. | D: Good↓ *nodding*) You don't mind flying↑ {€→A} |
| 59. | A: No, I don't like the bit when you go up↑ ↑ *(hand indicating up)* {€Ѳ→D} |
| 60. | D: Right↓ taking off↑ {€→A} |

There was very little amplification of evaluations by either speaker, but Dora used a greater range of amplified terminology such as “wow”, “amazing” and “excellent” and a greater range of evaluative words in general.

The balance of the use of evaluation was much more even in conversation 2 and both Alan and Sally used similar amounts of amplification. Alan used more appreciation and affect vocabulary and Sally used more judgement terms. She also had a wider range of evaluative vocabulary with Alan making extensive use of “nice”, “fun” and “good” to evaluate his experiences. It was also noticeable that once Sally had introduced an evaluative term that Alan picked this up and used it himself:

| 43. | S: Ye *nod* that’s a shame↓ {€→A} |
| 44. | A: A bit of [a shame but↓ *nod*] {€→S} |
| 45. | M: *mum↓* (off camera) |
| 46. | S: that’s a shame↓ {€→M} |
| 47. | A: yeh:: a bit of a shame↓ we couldn’t do that↓ {→S→M→S} |

| 58. | S:yeh, but [they were a bit *caged* they were↓ *frown*] [ it was a bit sad] seeing them↑ {€→A} |
| 59. | A: [*oh*] [ oh that’s sad↓] {€→S} |
| 60. | S: they were in a bit of a [*small cage↓* *frown*] {€→Sd} |
| 61. | Sd: [ Yes it was sad↓] *(off CAmera)* |
Summary of Alan

There were marked differences between Alan’s conversations. Dora, who he did not know, asked the majority of questions, maintained almost constant eye contact and used much more evaluative language. However Alan’s eye contact was often fleeting. The conversation with his sister was generally more balanced in terms of the number of questions and the use of evaluative language, but this interaction was also influenced by the presence of his niece and nephew. In this second conversation there was more overlap which usually occurred when the children contributed to the conversation, and the pattern of eye contact was similar for Alan and Sally.

Alan did not appear to have difficulty understanding his conversation partners and there were few occasions when the partner had difficulty understanding him. In these instances the partner used repetition and direct questioning to clarify, but occasionally they did not acknowledge breakdown or seek repair.

Very little gesture was used by any participants in the conversations and there was little variation in facial expression by Alan, apart from smiling. Tight eye closing by Alan was noticeable in the conversation with Dora; this also happened occasionally in the conversation with Sally and appeared to indicate some level of anxiety. Both Alan and his conversation partners made extensive use of head nodding and shaking to reinforce their responses.

Alan’s speech was marked by the frequent use of a rise/fall intonation pattern and reduced volume which gave a tentative quality to much of his speech, but he was able to construct a logical narrative of his experiences with supportive questioning by his partners and with little inter-turn pausing. The range of evaluative terms was more varied by his partners with Alan using a limited number of evaluative terms.
**Similarities and differences between the Research partners**

See Appendix 10 for Table of comparison.

**Discourse structure**

**Topic control**

Topic control is often viewed as an important means of exercising power (Wang, 2006). For Cate and Alan the topic was usually controlled by their communication partners, and attempts at topic shift by Cate were quickly returned to the original topic by her partner. However, Cate had limited resources for introducing new topics. This problem has been identified for users of SGDs (Bloch, 2010) where the listener may “attempt to establish a sequential link between current and prior talk” (p.4) and fail to recognise that the topic has shifted. Negotiating topic shift can also be problematic for individuals with communication difficulties as they may not be able to use the prosodic markers such as pause or intonation to indicate topic completion or have access to pre-shift tokens (Bloch, 2010).

Connor used the topic prompt sheet to successfully introduce new topics although this was often done after a brief pause in the conversation and with no pre-shift token. It may be that the presence of the topic card prompted the conversation partners to ‘allow’ Connor to control the topic. The topic prompt sheet was also used by Alan and Sally, but in this instance Sally used it to introduce new topics.

**Turn construction**

Most of Cate, Connor and Alan’s turns consisted of single TCU which mainly comprised yes/no or single word responses to questions. The allocation of turns was equal in the dyadic conversations, but in the conversations with Cate there were three or four participants in the conversation. Cate remained central to the conversation taking approximately 40% of the turns with occasional ‘side’ conversations that excluded her.

**Co-construction:**

This happened in all the conversations particularly when the speakers were narrating past events. However, it was most prevalent in the conversations with Cate
where she was reliant on others, familiar with her story, to fill in the details. She had some control over this by using eye gaze to bring them into the conversation. Co-construction is reported to happen frequently in storytelling or between very familiar speakers such as husband and wife (Sidnell, 2006). This behaviour appears to be particularly common in conversations involving individuals who have communication difficulties, for example aphasia (Oelschlaeger and Damico, 2000), people who use AAC (Bloch and Beeke, 2008) and people with learning difficulties (Grove, 2006).

**Pause**

According to Ochs et al. (2004) children and adults with autistic spectrum disorders may take longer pauses within and between turns. Jefferson (1998) has suggested that listeners have a tolerance of approximately one second of silence, longer pauses are likely to be seen as problematic. Extended pauses are also a common feature when a SGD device is being used as time is required to construct the message (Higginbotham, 2009). Dobbinson (1998) suggests that frequent longer intra-turn pauses may be indicative of cognitive difficulties and may be related to word searching.

Pausing was not frequent in Alan’s conversations. In Connor’s conversations there were multiple inter-turn pauses which seemed to indicate a struggle to formulate what he was trying to say. Pause can be associated with syntactic structure and prosodic planning (Krivokapi, 2007), or may indicate word searching (Goodwin, 1980). This was particularly noticeable if he was struggling to answer a question or when he finally gave a dispreferred response. Long pauses of over two seconds were common in Cate’s conversations but these were not usually related to the use of her SGD. Pausing occurred when she was required to give an extended answer to a question (rather than yes, no or single word). This may have been related to the physical or cognitive demand of formulating her responses.

There were also frequent pauses by Cate and Connor’s partners before they gave a candidate formulation of what they thought had been said. Schegloff, Jefferson and Sacks (1977) describes how
“other-initiations occur after a slight gap, the gap evidencing withhold beyond the completion point of trouble-source turn – proving an ‘extra’ opportunity, in an expanded transition space, for speaker of trouble source to self-initiate repair”

( p.374)

However, this may also reflect what Wong (2000 p.263) describes as ‘comprehension time’ that gives the listener a moment to comprehend the message before initiating repair.

**Overlap**

Overlap happened at TRPs with all participants. Noticeably for Cate, overlap often occurred after an extended pause by a conversation partner when they expected a response from her, when this was not forthcoming they initiated further talk resulting in overlap.

**Recipient design:**

The conversation partners made adjustments to their speech in response to the perceived needs of the research partners. For example, there was some use of simplified, child-like or idiosyncratic language used in Connor and Cate’s conversations. Also the use of gesture and sign language can be seen as an adjustment to Connor and Cate’s need for additional information.

**Asking Questions**

In general, asking questions was dominated by the conversation partners. The majority of questions used by the conversation partners were yes/no interrogatives designed to elicit a preferred yes response.

However in the conversation between Connor and Eric, Connor asked the most questions, he also asked more wh- questions here than in the other two conversations. This different conversational style may have been related to Eric’s professional role as a hospital chaplain. Doherty (2004) argues against a chaplain being a professional counsellor, but uses the phrase “accompaniment and listening” to describe their role. With Connor’s other partners there were several extended strings of yes/no interrogatives.
The sharpest contrast between the numbers of questions asked was in Cate’s conversations. Her partners were responsible for 322 questions while she only asked two throughout the three conversations. 59% of the partner’s questions were yes/no interrogative questions many of which were candidate responses with a rising intonation when they were unsure of what Cate had said. At other times a more open Wh-question was immediately followed by a yes/no question. This changing of question format by staff talking to people with learning difficulties was noted by Finlay and Antaki (2012). They discuss how this ‘editing’ may break down a complex question into separate parts, but in this data it may be to elicit an answer that the partner can easily understand; a yes or no response rather than a longer more complex answer.

Wang (2006) argues that the action-based and design based preferences associated with asking questions dictate turn-taking, topic and the structure of the next turn, and have a powerful influence within the conversation. She demonstrated an asymmetry in the use of questions; even in casual conversations the ratio of questions used between two speakers was not equal. In institutional conversations this asymmetry was much more marked. For example in medical encounters the doctor asked 94% of the questions, in the classroom the teacher asked 56%. She also found an imbalance between the use of yes/no questions and Wh-questions with many more yes/no questions in both types of encounters. She argues that yes/no questions exert more power and control as they can be seen as ‘information’ confirming/denying; whereas Wh-questions are ‘information seeking’ and can open up the conversation and invite the partner to give additional information. Declarative with tag questions are the most constraining. In conversations with children indirect questions can be used to request action, but are rarely used as true requests for information, the adult typically has prior knowledge of the information she is requesting (Ochs Keenan et al., 1983)

Questions allocate next turn and anticipate and expect a response from the addressee, at the same time as defining or constraining the topic of conversation. However, Ainsworth-Vaughn (2001) argues that in some encounters questions can also be power-sharing as they can handover the floor to the other participant and demonstrate interest in what they have to say.
Breakdown and Repair

Conversation breakdown as a result of communication difficulties by the research partners was not prevalent. This was probably as a result of the restrictions imposed on research participant selection specified by the NHS Ethics Committee. However, there were a number of examples of communication breakdown between Cate and Connor and their partners. OIOR is felt to be the least preferred style of repair (Holtgraves, 2002) but is common in interactions between children and their parents (Laakso, 2010) or where one speaker is viewed as ‘less competent’ (Simmons-Mackie and Elman, 2011).

Cate’s partners often had difficulty understanding her because of the dysarthric nature of her speech. All repairs in Cate’s conversations were initiated by her partners and often involved a ‘strong’ type of repair that clearly located the source of the trouble. This was frequently achieved by the use of direct repetition with a rising or questioning intonation commonly associated with other initiated repair. This contrasts with Bloch’s (2005) and his analysis of conversation between a man with dysarthria (as a result of motor neuron disease) and his mother where the OIR repair was produced with a level intonation projecting a continuation of the utterances rather than a repair or evaluation. There were also occasions in Cate’s conversations when her partner asked her directly to repeat what she had said and at other times her communicative attempts were ignored.

There were also frequent occasions when Connor’s partners were unclear about what he was saying, this was sometimes related to unclear speech but also related to lack of sufficient information or lack of coherence (linking what he said to the previous exchange). Again this repair was often achieved by direct repetition of what he had said with a rising intonation. Connor’s speech also contained several occasions of self-initiated repair which appeared to indicate problems with formulating his ideas when he was trying to provide a string of several TCU’s. According to Philip (2008) people with autism may have poor narrative ability including inadequate use of referencing and poor use of cohesive devices. However self-initiated repair was a common feature for all of the conversational partners.
There was very few occasions when Connor, Cate or Alan had difficulty understanding their partners. However there were a number of occasions when Cate and Connor’s partners had difficulty understanding them. (See discussion on p.145).

Wong (2000) suggests that repair may be delayed in less competent communication partners because of the time needed to analyse the turn and formulate a response. Individuals with learning difficulties are able to manage repair but may do so less frequently (Hatton, 1998). They are also thought to be less responsive to the requests for repair from their communication partners (Brinton and Fujiki, 1991). Brady et al. (1995) studied repair in non-verbal individuals with severe cognitive impairment. They found that these individuals recognised breakdown and attempted repair by the repetition of gestures, but these attempts were not always recognised by the conversational partner. The ability to repair has also been linked with the development of theory of mind, so is thought to occur less often in individuals with autistic spectrum disorder (Philip, 2008). However, Keen (2005) found that children with autism would attempt to repair breakdown in communication with their mothers by repeating or augmenting their first attempt. Repeating what has been said is commonly used as an understanding check with and by children. Adults will repeat what the child has said so as to verify the message (Ochs Keenan, 1983).

**Non-verbal aspects**

**Positioning and posture**

Positioning was particularly important for Cate who used eye contact to conduct her conversations. She was unable to reposition herself so was reliant on her conversation partner being sensitive to this.

**Eye contact**

In most of the conversations the partners maintained almost constant eye contact with the research partner. According to Kendon (1967) speakers tend to look away at the beginning of an utterance and look back at their recipient at the end to signal readiness for a response. Speakers and listeners utilise the ‘gaze window’ (Bavelas, Coates and Johnson, 2002 p.566) to regulate turn exchanges and provide
listener feedback. This constant eye gaze was less so in the conversation between Alan and Sally where they were both often distracted by the presence of the children.

Eye contact was particularly important for Cate although this was sometimes compromised by her physical disability and the positioning of her wheelchair. However Cate used her eyes to ‘conduct’ the conversation and to ask for help from familiar partners to co-construct her narrative. This was significantly compromised when she was prompted to use her SGD and may have contributed to her reluctance to use it.

Connor’s eye contact with his partner was inconsistent and he often broke contact when he was struggling to formulate his reply.

**Facial expression**

Smiling dominated all conversations. Cate used smiling combined with nodding to confirm her partner’s candidate responses, and after an extended string of attempted repair a broad smile indicated when her desired message had finally been recognised.

Connor seemed to use a limited repertoire of facial expressions in contrast to his partners where facial expressions were often exaggerated. Similarly Alan used a limited amount of facial expression. Tight eye closing was noticeable in his conversation with Dora and its occasional use in his conversation with Sally appeared to be an indication of anxiety.

**Nodding and head shaking**

Head nodding to accompany positive answers was used by all participants more frequently than they used head shaking with negative responses. Connor’s partners also used exaggerated head nodding to accompany their evaluative remarks. Cate used nodding and shaking to reinforce her yes and no responses, but the angle of her head meant that it was often difficult to distinguish nodding from shaking. Smiling seemed to be the clearest confirmation of a yes response.

Head nodding is one way that the recipient gives back-channel feedback to the speaker. This is important to demonstrate attention, interest and agreement and can be seen as an invitation to continue (Ward and Tsukahara, 2000). According to
Stivers (2008) mid-story nodding is an important way that the listener shows their understanding and affiliation with what is being said. Head nodding by the conversation partner while they were in the role of listener, was frequently used to reinforce positive answers and also to encourage continuation of a turn, and to a lesser extent head shaking accompanied no or negatives responses. This nodding and shaking was used extensively by Connor’s partners and often appeared exaggerated; but nodding and shaking was used less by Connor himself.

**Gesture and sign**

Very little gesture was used by Alan and his partners. It was used more extensively by Connor and his partners, and Tina and Diane also used some recognisable keyword signs. It is unclear whether use of sign language helped Connor’s understanding of what was being said. These speakers also used a large amount of non-specific emphatic gesture.

The amount of gesture used between Cate and her partners varied between conversations. There was an extended period of the use of keyword signs between Cate and her mother but it was obvious that Cate’s support staff had little knowledge of conventional signing and relied on mime to accompany their speech. It does not seem that Cate required sign language to aid her understanding, but accompanying her own speech with sign did seem to increase its intelligibility.

**Artefacts**

The prompt sheet of conversational topics was used by both Alan and his partners; this provided a structure for the conversations but also served to limit the topics for discussion. It may be that its presence acted as a reminder to his communication partners to allow him a degree of topic control. This prompt sheet was not used by Cate or Connor. However, they both occasionally used artefacts within the environment to augment their verbal message and this strategy was also used by Diane in her conversation with Connor.

Cate only used her SGD when prompted to do so by her partner. This may have been for the benefit of the researcher who was instrumental in securing and programming the device! However it was also observed that to use her SGD Cate
was required to disengage eye gaze from her partners. As already discussed her use of eye gaze gave her some control over the flow of the conversation.

**Prosody**

The speech of all the conversation partners was marked by the use of more varied intonation than the research partners, and this often appeared exaggerated and was sometimes accompanied by an increase in volume and a rise in overall pitch and a slowing of speed. Fall/rising tone was used extensively to give a tentative formulation of what had been said and was used by Cate’s partners to query the accuracy of what she had said. This fall/rise pattern was also common in Alan’s speech, often combined with a reduced volume and appeared to be associated with reservation and uncertainty.

Exaggerated intonation, high pitch, increased loudness and slower speech have all been identified in speech by staff to elderly residents in institutional settings and is perceived as patronising (Ryan et al., 1991). Cate occasionally used a rising intonation to indicate a question, but this was not always acknowledged, and in general there was limited variation in tone in her speech. This is probably a consequence of her physical disability which limits her breath control and coordination. The lack of prosodic features on speech generating devices also limits the ability to express emotion (Wulfing and Hoffman, 2011).

Rise/fall tone is associated with surprise and is common in speech with children (Halliday and Greaves, 2008) and can be perceived as patronising. This pattern is evident in all conversations but was most noticeable in the conversations with Connor. (See discussion chapter 5 p. 163)

**Evaluation**

Evaluation was marked by discourse structure, lexical choice and prosody. Cate and Connor’s partners both used repetition to clarify what had been said. This can serve to mark the original production as in need of repair. Cate’s partners sometimes used question response feedback sequences and Alan’s sister used a test question to elicit information she already knew from Alan and may be seen as an implicit evaluation.
Connor and Cate used very little evaluative language in their conversations and there was no amplification of these. Most of Connor’s evaluations were related to esteem and at times he actively sought approval from his conversation partner. In contrast, their partners used much more evaluative language, much of which was amplified; this is typical of language used to children (Tarplee, 2010). In particular, Cates’ partners made frequent judgements about her speech or her use of the SGD. Dora’s speech to Alan also contained a high number of amplified positive judgements about his performance.

Raised pitch and volume was observed in Connor and Alan’s conversations which along with a rise/fall intonation pattern give a patronising quality to the talk.

**Summary**

This chapter has described the detailed quantitative and qualitative data from conversations between three individuals with learning difficulties and a range of partners. This analysis identified a number of important individual differences, as well as interesting similarities between the conversations. During this analysis a number of overarching themes emerged. These will be discussed and related to the research questions in the following chapter.
Chapter 5: Discussion and Conclusions

Introduction

Chapter 4 has looked at the detailed analysis of the data from each of the research partners. This chapter will discuss the data in relation to the original the research questions. It will begin with consideration of the main research question:

What happens in informal conversations between people with learning difficulties and their communication partners?

From the detailed analysis and the comparison of similarities and differences between the conversations, a number of themes relating to this first research question emerged (see page 75 for detail of these themes). The sub-themes have been grouped under four main areas for discussion. These are:

- Roles, relationships and identity
- Competence and evaluation
- Power and control
- Recipient design and reasonable adjustments

These themes will be discussed in turn. This will be followed by consideration of the other research questions:

How can the research findings be used to improve professional practice?

This will be discussed in relation to the learning disability workforce and also the profession of speech and language therapy.

How can people with learning difficulties be involved in research and how can their skills in research be developed?

This will consider the involvement of people with learning difficulties in this research, and also explore how their involvement could have been extended and enhanced.

This chapter will conclude with reflections on the strengths and limitations of the research and identify possible areas for further study; followed by a summary of the main methodological, theoretical and practical implications of the research and its significance and contribution to current knowledge in the field.
**Research Question 1:**
What happens in informal conversations between people with learning difficulties and their communication partners?

This will be discussed in relation to the four key themes identified.

**Roles, relationships and identity**

Discussing social networks (Blackstone and Hunt Berg, 2002; Barr, McConkey and McConaghie, 2003) was a part of the initial preparation with the research partners to help them to identify people whom they might video in conversation. The six research partners who attended this training described limited social networks which comprised only family and paid staff. None of them identified a peer with learning difficulties or other friends who were not in a professional or caring relationship. Connor chose to video himself with professional staff who supported his local self-advocacy group, and although he referred in his conversation with Diana to having lots of friends, he did not identify them in his social network. Other researchers have identified this lack of relationships (Pockney, 2006) and reliance on staff for friendship (Antaki et al., 2007b); however, social relationships are seen as key to the development of identity and a sense of belonging (Milner and Kelly, 2009). According to Carbaugh (2007) how we structure our communication says something about who we are and our relationship to those with whom we communicate: “Communication practices are formative sites of identity work” (p111).

Zimmerman (1998) differentiates between three types of identity that may impact on interaction. **Discourse identity** relates to the turn-by-turn role in the current interaction – for example storyteller or questioner: “one party assumes a particular identity and projects a reciprocal identity for co-participants” (Zimmerman 1998 p.90). **Situated identity** relates to the particular situation of interaction and remains constant throughout the interaction, for example: pupil:teacher, doctor:patient. **Transportable identity** travels with the individual across situations on the basis of physical or cultural signs and remains constant across interactions. This identity may or may not impact on the interaction. The transportable identity of ‘learning difficulty’ or ‘physical disability’ was particularly obvious in the
conversations with Connor and Cate. This was evident by the adjustments made by the conversation partners and was explicitly referred to by Connor and Eric:

<table>
<thead>
<tr>
<th>Line</th>
<th>Transcript</th>
</tr>
</thead>
<tbody>
<tr>
<td>117</td>
<td>E: with mental health↓ and learning disabilities↓ (indicating with finger) {€→ C}</td>
</tr>
<tr>
<td>118</td>
<td>C: Ye↓ {€→E}</td>
</tr>
<tr>
<td>119</td>
<td>E: Ye↓ ((nodding)) {€→C}</td>
</tr>
<tr>
<td>120</td>
<td>C: Like, like us then↑ ((smile)) {€→E}</td>
</tr>
</tbody>
</table>

Connor Conversation 3: with Eric

Connor clearly acknowledges his identity as a person with a learning difficulty.

Although not explicitly acknowledged, Cate’s visible physical disability may restrict her ability to ‘pass’ as competent, and she is doubly stigmatised by her additional communication difficulties which limit her opportunities to link with others with similar restrictions (Goffman, 1968), and may go some way to explaining her limited social network as she is dependent on staff and family to facilitate opportunities to meet and interact with others. During the research partner training her interactions with the other research partners were mediated by her support staff and no direct interaction was observed.

Although the conversations recorded were supposedly ‘casual’ most of them included paid staff that had some sort of formal or institutional relationship with the research partners and a professional:client identity. This may have had an impact on the style of interaction which, in turn, may have affected the relationship and communicative style.

*Relationships with paid carers and professionals*

Positive relationships with service users are seen as intrinsic to practice in the caring professions (Fisher and Byrne, 2012), but there can be tension between acting as a professional and becoming a friend, and Antaki et al. (2007b) point out how this perception can obscure how these identities are played out. Pockney (2006) identifies the following characteristics of friendship: Intimacy, reciprocity, autonomy and equality. Certainly intimacy would be against institutional policy and would compromise a professional paid relationship. There is also a danger that these relationships are not reciprocal. Williams (2011) discusses the tension for staff between being friends and being carers and increasingly, with personalised budgets, an employee. Fisher and Byrne (2012) also caution staff against emotional
involvement and go on to discuss what they see as an inherent danger in the growth of personal budgets, where these could be used to buy friendship rather than high quality professional support. The relationship must be both professional and personal at the same time. It is hoped that by April 2013 that everyone will have an entitlement to a personal budget (Government, 2012). The intention is to provide greater empowerment and control and this can often be the case (Routledge and Porter, 2011). However, personal budgets open up the possibility of employing existing friends to provide care which may put the employee in a position of conflict. Some people with learning difficulties may have their budget controlled by family who may use this to continue to purchase a family model of care that fails to recognise the autonomy and potential independence of the person being supported.

According to Mansell et al. (2008) staff may feel obliged to focus on physical care and may be driven by task completion and behavioural control (Purcell et al., 2000). Antaki et al. (2007b) highlight that people with learning difficulties are sometimes “in need of having to count care staff among them (their friends)” (p13), and points out the tension paid carers may experience moving between the roles of carer, friend and advocate. Although people with a learning difficulty may think of support staff as friends there is often high staff turnover which limits the viability of sustained relationships. For example Demar (2005, in Gaventa, 2008) traced records for one individual in her late 50s and counted the number of care givers in her life; the researcher stopped counting at 500.

Cate’s conversations involved a number of paid carers, who she describes as her friends, but much of the conversation has qualities of what could be described as institutional talk. Benwell and Stokoe (2006) discuss how institutional talk differs from ordinary talk. Institutional talk is characterised by asymmetrical speaking rights, is driven by institutional goals and agendas and aligns with the institution. Heritage (1984) highlights the use of first pair yes/no interrogatives by professionals which are designed to elicit a positive preference. In the conversations between Cate and her support workers, there was an asymmetry in the relationships. Staff dominated the conversations by the choice of topic, the use of questions and even the decision about when the conversation would finish. Conversation 3 ends with Danielle saying:
“We need to do some work now” implying that conversation with Cate was not seen as part of their job.

Cortazzi and Jin (2004) highlight the implicit asymmetry in a relationship where one person has a communication difficulty and the other does not. This can be further compounded if the relationship is between client and professional where knowledge of background and contextualising information may be limited. However, it is important to recognise that conversation with people with communication impairment is not always easy (Finlay et al., 2008c). Brewster (2004) highlights a tension for staff working with clients with reduced communication, between talking with them and talking about them. Staff may have to work at keeping the talk going (Higginbotham, 1999). This may require greater concentration in order to understand what is said (MacKenzie, Kagan, Deegan, Proll and Bloomfield, 2009), requires conscious monitoring of their own language (Kyle, Melville and Jones, 2009) and an interactive style that questions what someone has said can be ‘face’ threatening (Paoletti, 1998).

Although Cate and her support workers talk about a friendly evening out in the pub, there are elements that do not resemble a group of friends out together. As paid staff they were clearly not drinking alcohol and described themselves as ‘laughing at Cate’ which implies a power differential (Cate Conversation 1: line 384). In this conversation and conversation 3 support staff appear to move between a number of situated identities: personal carer, domestic help, friend and teacher, and there seemed to be a lack of clarity about their roles. Cate is dependent on her staff to facilitate and support her social interactions as she does not have the autonomy to socialise freely and develop independent friendships. According to McConkey (2011) doing things with staff can be a barrier to doing things with friends and Moore and Carey (2005) argue that the presence of staff can hinder the development of friendships.

Institutional characteristics were also evident in Connor’s conversations with Diane and Tina. These conversations involved interactions with people who Connor saw as friends by their inclusion in his social network, but who had a professional relationship with him. There are clear ethical principles which govern relationships between health professionals and their clients. Professional ethics are grounded on
the principles of beneficence and non-maleficence which precludes the development of personal relationships with clients. Tina’s professional identity as a physiotherapist was explicit in the conversation with Connor’s introduction of the topic of exercise. Similarly, he demonstrated awareness of Eric’s professional role as hospital chaplain through discussion of vicars and the church. It is unclear what Connor understands by the term friends, he refers to his ‘mates’ in his conversations with Diane (see page 79 Connor Conversation 1: line 215) but is unable to elaborate as Diane has difficulty understanding him. He also refers to a girlfriend in his conversation with Eric but again there is limited information provided.

Connor’s conversation partners all had a defined professional relationship with him. Professionals may be acculturated into a particular type of communication through their education, training and clinical practice (Cortazzi and Jin, 2004). Perakyla and Vehvilainen (2003) describe how staff develop models and theories of interaction or what they term ‘professional stocks of interactional knowledge’ through their training and supervision. These influence how these professionals interact with their clients. There was an interesting contrast between the communication style of Diane and Tina (health care professionals) and Eric’s style as a hospital chaplain. Diane and Tina’s conversations were dominated by characteristics of institutional talk discussed above, with them asking lots of questions and using multiple TCUs. In contrast, Connor’s conversation with Eric was more symmetrical, with a more equal balance of turn length and the use of questions.

Although this study has confirmed aspects of institutional talk discussed in previous research (Tracy and Robles, 2009; Wang, 2006). It has shown that institutional talk does not always result in domination of the conversation by the institutional representative. It would be useful to consider the differences in interactional style between different paid workers in more detail and across more conversations. The implications of this for staff development are discussed on page 170.
**Family relationships**

Cate and Alan both chose to record conversations with family members. There appears to be little written about communication styles within families of people with learning difficulties. Buhl (2008) discusses how connectedness with family usually decreases with age, but this may not apply for those with a disability, who are more likely to live at home (Barron, McConkey and Mulvany, 2006). Parents have often been ‘pioneers’ in the development of services and see themselves as lifelong carers (Jokinen and Brown, 2005); but Jingree and Finlay (2012) highlight the tension for parents in promoting independence for their adult children with learning difficulties.

This tension was evident within the conversations. Cate’s mother appeared to perceive Cate in conflicting roles. At one stage she talked to her as if she is ‘one of the girls’ on a night out with friends (her carers). At other times she acted in the role of teacher with an adult:child style of interaction, for example, asking test questions to which she already knew the answer and using didactic question: response: evaluation sequences which are common in parent:child interactions (Leahy, 2004). A similar didactic style was also noticeable in the conversation between Alan and his sister; this may have been influenced by the presence of her children, as well as indicating features of her relationship with Alan.

Cate was also aware of her role as ‘child’. For example, she was reluctant to use swear words in front of her mother. Bjornsdottir and Traustadottir (2010) discuss how it can be difficult for people with disabilities to access adult roles, and their life can be controlled by family, professionals and services. Mitchell (2006) describes the struggle that Marjorie (an adult with learning disabilities) had to gain her independence: “One of the most telling parts of Marjorie’s story is that she eventually had to resist against her greatest ally to ensure her independence” (p214). The conversations where Cate’s mother was present demonstrated a reliance on her as a familiar partner with a shared history who was able to supply information when Cate was unable to get her message across.

Narrative is a common part of conversation between friends and family (Norrick, 2007) and presents opportunities for co-narration. Co-telling of familiar stories demonstrates membership and contributes to group cohesion, and
contributes to individual identity (Hewitt, 2006). These memories are emotional, personally important and central to the life story (McLean and Fournier, 2008). The development of life story work with people with learning difficulties has gone some way towards establishing a narrative past for individuals who struggle to recall and retell this for themselves (Atkinson et al., 2000). The ability to share stories is also seen as essential to building meaningful relationships (Grove, 2011). Prior et al. (2011) highlight the reliance on the family as “story guardians” who are able to co-construct past narratives for people with limited communication. When staff leave or family is no longer around, these stories may no longer be available. Cate was reliant on her family (particularly her mother) to ‘co-tell her stories’, for example ‘getting Molly’ (Cate Conversation 1 page 102). This reliance may be perceived as negative and has potential implications for her independence (Almack, Clegg and Murphy, 2009). However, Cate has no other effective strategies for developing this narrative herself; although at times she uses eye gaze to control and orchestrate the conversation. There are occasions when no family member is present where the narrative lacks richness and depth and where it is unclear whether the support workers have gained an accurate interpretation of what she was trying to say (See Having a horse, Cate Conversation 3 p.109).

This research has shown how Cate’s family were able to provide important information and co-construct Cate’s contributions to the conversation with her support workers. Cate’s use of eye gaze allowed her some degree of control and she was able to bring her family into the conversation when she needed to. Rather than emphasising independence from the family:

“...it may be more constructive to involve family carers as collaborators who have practical knowledge about their family members’ preferences,”

(Jingree and Finlay, 2012 p. 427)

However, there is a fine balance between being a resource for conversation and ‘speaking’ for the individual. This resonates with the debate on ‘facilitated communication’ where facilitators have been accused of having undue influence on the content of the communication (Emerson and Grayson, 2010). There are possibilities that new technologies that combine photo archiving, digital recording and Global Positioning System data, may make the process of story recall easier in
the future (Reiter, Tuntarev, Reddington, Turner, Waller and Black, 2011) and may have a positive influence on self-concept (Bunning, Heath and Minnion, 2009). However, currently life story work may be controlled by the professionals who may not imbue past experiences with the same emotional and personal importance; and there is a danger of staff focusing on key life events and excluding ‘trivial tales’ that can capture the true essence of the individual (Grove, 2007).

**Competence and Evaluation**

Goble (1999) observed that the people with learning difficulties in his study placed great emphasis on the opinions that staff expressed about them, indicating their importance in relation to their self-esteem. There is a link between self-concept, group identity and competence. Finlay and Lyons (1998) and Osburn (2006) describes a feedback loop between self-image and competence that can be positive or negative:

![Figure 10: Osburn's Cycle of Self-image and Competency](image)

According to Dowse (2009) the current political climate with a focus on market forces is: “to produce competent, rational, productive citizens who are able to contribute to....the global economy.” (p.576).

The domination of issues of competence in the lives of people with learning difficulties has already been discussed (see page 159). They stand a further risk of being marginalised in a culture that values independence, self-determination and self-sufficiency. Perception of communication is linked to presumptions about intellectual competence and incompetence (Biklen and Kliwer, 2006). In relation to communication, competence may refer to either receptive or expressive ability (or
both). However successful interaction depends on all the participants and it is important to recognise this shared responsibility, what Booth and Booth (1998) refer to as “distributed competence”. It may also be useful to consider the concept of interactional competence, first used by Kramsch (1986) in relation to second language learning. This recognises that language is used in specific discursive practices that depend on all participants involved (Young, 2000). However it is recognised that this competence may be asymmetrical, and that: “the more competent partner often adjusts their interaction style, either directly because of this limited competence, or for reasons to do with power” (Brewster, 2007 p.24). Adjustments were apparent in the data in this study; but it is important to distinguish when these could be seen as supportive to the communication and when this was a result of differences in status and power.

The interactive competence of the research partners was undermined by their partners through their discourse style; in particular, how unintelligibility and miscommunication was handled. Verdonik (2010) discusses how miscommunication may not impact on the success of the interaction, and Dascal and Berenstein (1987) concluded that mispronunciations were often ignored as long as the gist of the conversation could be followed. In some contexts, maintaining a positive dialogue or relationship may be as, if not more, important than conveying and understanding information. There are occasions when miscommunications are ignored in the conversations with Connor (see page 84) and the flow of the conversation continued. However, most frequently Connor and Cate’s partners used repetition of what they have said as an understanding check. This OIOR indicates the source of trouble but can be perceived as questioning the adequacy, accuracy or plausibility of what has been said (Sidnell, 2010a) and is therefore potentially undermining. It is felt to be a less preferred form of repair and is seen as common where one speaker is viewed as ‘less competent’ (Simmons-Mackie and Elman, 2011). Signalling incomprehension can be seen as face threatening for both participants and may implicitly question the competence of the individual (Paoletti, 1998). Paoletti observed that, paradoxically, strategies of not seeking clarification were positively motivated and maintained the conversation, but actively contributed to a construction of senility for the group of patients with dementia she was studying.
However Bloch (2005), while acknowledging that this type of repetition can question competence in ‘normal’ talk, suggests that it can be seen as ‘a resource for the co-construction of meaning’ (p.41) when one individual’s speech is difficult to understand; and is part of active co-construction.

There were also frequent occasions when the conversations resembled parent:child or teacher:child interactions. This implies a relationship of competent (teacher):incompetent (child). These examples were marked by the use of Request-Response-Evaluation (Leahy, 2004) or Initiation-Response-Feedback sequences (Jones, 2007), (See Connor page 95, Cate page 120.) There were also other instances of adult: child conversation styles, for example the use of test questions (Brewster, 2007) to which the answer was already known (see Alan page 138), shepherding to a desired response (Rapley, 2004) (See Alan page 130) and the use of Correct Production Sequences (Wilkinson, 2011) where the partner continued to correct the production of the partner even though they had understood what was intended (see Cate page 121). This correction explicitly addresses what is seen as lapses in competence (Jefferson, 1987).

The use of evaluative language by the conversation partners was identified as an interesting feature during the analysis. Evaluation can be seen as a form of competency judgement, and the right to deliver an evaluation of someone’s performance can be seen as an important marker of status (Williams 2011 p.82). According to Duchan, Maxwell and Korvarsky (1999): “…evaluation can impact on one’s notions of competence (and incompetence) and ultimately how they affect an individual’s notions of self-identity” (p.30).

As evaluative language emerged as a particular feature of interest it was necessary to find a way to to analyse this in more detail. Systemic Functional Linguistics and the work of Martin and White (2005) was used to provide a framework for this analysis.

As can be seen in Table 10 Connor and Cate’s communication partners used much more evaluative language than them, and they were more likely to amplify these evaluations. The balance of evaluative language appeared to be more even in family conversations (highlighted in blue), and evaluative language appears to be a
key feature of staff or ‘institutional’ conversations. This difference will be discussed in more detail when power and control are considered (page 166).

<table>
<thead>
<tr>
<th>Connor</th>
<th>Conversation 1</th>
<th>Conversation 2</th>
<th>Conversation 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Staff</td>
<td>Staff</td>
<td>Staff</td>
</tr>
<tr>
<td></td>
<td>Connor</td>
<td>Diane</td>
<td>Connor</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>35</td>
<td>10</td>
</tr>
<tr>
<td>Evaluation</td>
<td>3</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>Amplification</td>
<td>0</td>
<td>17</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cate</th>
<th>Conversation 1</th>
<th>Conversation 2</th>
<th>Conversation 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Staff</td>
<td>Family</td>
<td>Staff</td>
</tr>
<tr>
<td></td>
<td>Cate</td>
<td>Partners</td>
<td>Cate</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>39</td>
<td>1</td>
</tr>
<tr>
<td>Evaluation</td>
<td>0</td>
<td>11</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Alan</th>
<th>Conversation 1</th>
<th>Conversation 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Staff</td>
<td>Family</td>
</tr>
<tr>
<td></td>
<td>Alan</td>
<td>Dora</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>31</td>
</tr>
<tr>
<td>Evaluation</td>
<td>1</td>
<td>19</td>
</tr>
</tbody>
</table>

This evaluation often related to the research partner’s performance, either commenting positively about something they had done, or in Cate’s conversation making negative comments about her speech or use of the SGD. Amplified evaluation was often linked to what could be seen as relatively trivial positive achievements (Rapley, 2004). For example, when Connor talks about catching the bus on his own:

249 E: That’s very↓ that’s **very very** good↑↓ ((nodding, raising eyebrows)) (..), yes↓ ((nod)) that’s **very** good↓ I’m very **pleased**↑ (..) So you

Connor Conversation 3: with Eric
At times Connor actively sought the approval of his conversation partner (see page 96).

Antaki et al. (2000) identified the use of ‘high grade assessment’ that seems excessive for the circumstances, as a feature of interviewing and a characteristic of institutional talk. This contributes to the perception of patronisation and will be discussed in more detail later (page 163).

Evaluation was also noticeable in the communication partner’s use of intonation. Intonation has a grammatical, semantic and social role as well as a psychological relationship to attitude (Mathieson, 2001). The use of rising intonation (questioning pattern) was common when Cate and Connor’s partners used repetition to check what they had said. This type of understanding check ‘could have the ability to raise questions of competence’ (Bloch, 2005 p.43). In all the conversations there were times when tentative acceptance or doubt was signalled by the use of fall/rising tone; this was also used by Cate’s partners to query the accuracy of what she had said. Rise/fall tone was also used frequently; this is used to signal surprise and is common in speech to children. Again this can be perceived as undermining competence.

**Recipient design and reasonable adjustments**

It is recognised that partners adapt their communicative behaviour to their audience based on what they know or believe about them. Recipient design involves: ‘the choice of just that phrase which will allow you to find the unique thing I am referring to, when it could be referred to in a thousand ways’ (Levinson, 2006 p.51). As well as being central to the organisation of interaction, recipient design is also important for identity construction (Williams, 2011). Newman-Norlund et al. (2009) found that their subjects approached interaction with a conceptual model of the addressee but subsequently adjusted this in light of the effectiveness of the exchange. Schegloff (1989) suggests that not only are speakers oriented to and sensitive to the co-participants and the context; but that this is displayed within the interaction. However, speakers may underestimate the listener’s knowledge which can be viewed as talking down or insulting by the listener, or the speaker may overestimate the partner’s knowledge or awareness of the topic (Ochs Keenan, 1983
However, Chadwick and Joliffe (2009) found that staff working with people with learning difficulties were often unaware of the communication profiles of the people they work with, and did not vary the quality and style of their speech (McConkey et al., 1999). Hostyn and Mae (2009) also found that nurses failed to adjust their speech to the needs of their patients with profound intellectual impairments.

Recipient design is bi-directional and it can be a resource that the listener can use in interpreting talk (Liddicoat, 2007). The research partners were seen to design their talk to be appropriate to their partner. Cate was particularly sensitive to the needs of her listener and used short phrases which she would further simplify and add supporting gesture if she had not been understood. The lack of repair in Alan’s conversations is an indication of his attention to the needs of his communication partners. Although Connor was perhaps the least aware of the needs of his partner, and on occasions did not provide sufficient information for his partners to understand him (see page 85), this was the exception rather than the rule. Adjustment was also made by the communication partners, for example, the additional use of gesture and sign language, the use of single TCUs, slower speech rate (Eric) and exaggerated intonation.

At times the talk used by the conversation partners seemed to have a patronising quality. Patronising speech is sometimes referred to as ‘baby talk’, and has been discussed extensively in relation to intergenerational communication. Hummert and Ryan (1996) define it as: “inappropriate modification based on age stereotypes of incompetence and dependence rather than on the actual communication needs of older persons” (p 149). Without the reference to age this definition could equally apply to communication with people with learning difficulties. Patronising speech can be seen as ‘over-accommodation’ to the needs of the listener (Armstrong and McKechnie, 2003). Rust (2010) identifies a number of features of patronising speech. These include the use of diminutives, speaking louder, more slowly, with higher pitch and exaggerated intonation, the inappropriate use of collective pronouns, and the use of shorter sentences. In addition, Armstrong and McKechnie (2003) highlight a number of non-verbal features such as low levels of eye contact or staring, inappropriate proxemics (too close, or standing over), inappropriate gesture and
body language (head shaking, shoulder shrugging, crossed arms) and insensitive use of touch.

In the conversations in this study patronising speech was marked in a number of ways and appears closely linked to many of the evaluative strategies outlined above. It was sometimes evident through the use of rise/fall tone patterns, increased stress, higher pitch and loudness, but was also through exaggerated facial expression and constant eye gaze. In addition the over use of evaluative language, especially when this was amplified and related to trivial achievements further added to this overall impression.

The fear of appearing patronising is frequently expressed by staff working with individuals with learning difficulties, and can be one factor that contributes to resistance to changing their communicative behaviour. People with learning difficulties have also expressed a dislike of this type of talk: “How can people talk to people with intellectual disabilities? They need to talk without being patronising” (Williams, 2011 preface). There appears to be a fine balance between sensitivity to the needs of the partner and patronising speech. The Equality Act (2010) promotes equal access for people with disabilities and demands that reasonable adjustments be made:

“In most circumstances, service providers must make reasonable adjustments to remove any barriers – physical or otherwise – that could make it difficult or impossible for disabled customers to use their services”


Thus access is not just about ramps and better signage – it is about making services easier to use for all disabled people. In Nind and Seale’s study (2009) access to appropriate communication was described as essential by people with learning difficulties. The participants highlighted the importance of the use of symbols and keyword signs and the use of their preferred methods of communication.

Communication training is seen as crucial for staff working with people with learning difficulties and is a core skill in the induction training for all new learning difficulties staff (Skills for Care, 2009). This includes understanding how communication should be adjusted to the needs of the individual to ensure that what is being said has been understood (Skills for Care, 2010a). However, this
training is all too often based on a ‘communication predicament’ rather than a ‘communication enhancement’ model (Ryan, Hummert and Boich, 1995). This training often recommends using many of the strategies associated with patronising speech listed above, and the current study suggests that greater understanding of this should be used to make communication-enhancing adjustments (see page 176 for further discussion).

The relationships between speakers, the perception of competence and patronising talk all have an impact on the interactive style and how the conversations are controlled. This control will now be explored in more detail.

**Power and Control**

Much has been written about power and control operating on people with learning difficulties (Jingree et al., 2006). Bjornsdottir and Traustadottir (2010) describe how they are frequently viewed as perpetual children, dependent and incompetent. Similar issues are evident when the individual has significant communication difficulties (Ochs, Solomon and Sterponi, 2005; Ferguson and Armstrong, 2004). Most research has centred on professional relationships and what might be seen as ‘institutional’ talk. This study aimed to look at casual conversation between friends and family. However, many of the conversations were with people with whom the research partners had some sort of institutional relationship, either as paid carers or professional staff. Nevertheless, there appeared to be little difference in the conversation style between Cate and her family, and Cate and her support workers, other than more use of manual signs and gesture by her parents. There was also little difference in the conversation style for Alan in the conversation with a member of staff and his conversation with his sister, apart from a more balanced use of evaluation between him and his sister. The most noticeable difference was in the conversation between Connor and Eric. This was marked by a more symmetrical balance of the use of questions, but this conversation still included a high level of evaluation by Eric (see page 86).

Fairclough (1989) describes three ways in which the contribution of non-powerful participants can be controlled: through relationships, through the subjects discussed and through the content (what is said and done). The control exercised
through relationships has already been discussed, but the assertion of power was also evident through the topic and structure of the conversations.

Most of the conversations were asymmetrical, with the conversation partner taking responsibility for topic choice, the use of longer TCU strings, the amount and type of questioning and pedagogic or parent:child type interactions. Often the topic was initiated and controlled by the communication partner particularly for Cate and Alan, even when they were given a choice of what to talk about this was prompted by a ‘topic invitation’ from their partner. Cate’s ability to introduce new topics was hampered by her poor speech intelligibility, but when she may have tried to introduce a new topic this attempt appears to have been often ignored by her partner. Bloch (2010) identified this difficulty where speech was unintelligible and there was a problem signalling utterance end and topic shift. When Cate did manage to introduce a new topic her partner quickly returned the conversation to the original subject. Cate was further disadvantaged as she was reliant on her conversation partner to position her wheelchair so that she could establish eye gaze with her partners and access her SGD if she chose to use it. The importance of eye gaze to “conduct” the conversation emerged during the analysis but did not appear to be evident to her conversation partners.

In contrast Connor tended to initiate topics in his conversations but this was sometimes abrupt using a ‘news announcement’ (Sidnell, 2006) rather than step wise topic shift or the use of a pre-shift token (Jefferson, 1993). This greater control may have been aided by the use of the topic prompt sheet, but this in itself may have constrained the topics available for discussion and had been decided by the researcher. This will be discussed further in the implications for practice and in the limitations of the research.

The use of questioning was dominated by most of the conversation partners. Not only did they use significantly more questions; yes/no interrogative questions were used more than more open Wh-type questions. In these data the majority of yes/no questions were designed to elicit a preferred yes response and these were usually affirmed. When a dispreferred response was given this was accompanied by a pause or delay by the research partner, which may indicate a level of unease or that the ‘wrong’ answer had been given.
Wang (2006) argues that questions are a means of exercising power over subordinate individuals, questions dictate turn allocation and maintain control of topic. He argues that yes/no or ‘polar’ questions exercise more power than Wh-questions as they present a complete proposition for acceptance or confrontation by the addressee. They are also presented in a way that constrains the response (Raymond, 2003) and invites affirmation (Heritage and Robinson, 2011; Wilkinson, 2011). The predominance of questioning, particularly the use of yes/no questions, is well recognised in medical and therapy encounters (Tracy and Robles, 2009). In this research this was also observed in conversations with support staff and family members.

In Cate’s conversation a more open Wh-question was often immediately followed by a closed yes/no interrogative. This changing of question format was identified as recognised practice by support staff in an attempt to gain an adequate reply (Finlay and Antaki, 2012). However, Cate was not given an ‘Opportunity Space’ to reply to the first question before the reformatted question was asked. This is common where the ‘mouth speaker’ will ask a question so that they can understand the reply (Clarke, 2010).

Power was also evident in other ways. There were occasions for all three research partners where they were referred to by name or in the third person. This was particularly noticeable for Cate where her partners sometimes talked ‘about her’ rather than ‘with her’. There were also times when her partners explicitly doubted the accuracy of what she was saying. The extensive use of evaluation has already been discussed, but the right to offer an evaluation of someone’s performance also suggests a position of power (Martin and White, 2005).

Blackstone et al. (2007) makes a useful distinction between the notions of communication parity and symmetry. Symmetry and asymmetry refer to observable behaviour, as described above, whereas parity relates to one’s perception, it is:

“the extent to which interactants themselves feel that they are (a) equal partners in the interaction (as befits the context), (b) have equal access to communication time and resources, and (c) are comfortable in presenting their authentic selves in context.”

(p 198)
This research did not consider how the research and conversation partners viewed their interactions and whether they were aware of the power asymmetries observed. This would be an interesting area to investigate. However communication support should consider how people with learning difficulties may be able to achieve parity in their interactions with others.

A relationship of parity should be considered to exist between friends, but paid staff and professionals may already be in a position of power (Goble, 1999) and are viewed by people with learning difficulties as more competent and in control (Jingree et al., 2006). This power and control is then further enforced by the interactional style that they engage in. As already discussed on page 153, the development of individual budgets, placing the person with learning difficulties in the role of employer, may help to move to a relationship of greater parity, and there is evidence to suggest that this is beginning to have a positive impact (Rabiee et al., 2009).

This research has shown that there were some differences between conversation with family members and those with staff; but features commonly associated with ‘institutional’ talk were observed in all conversations. As already highlighted effort needs to focus on the development of relationships that engender parity and a joint collaborative approach to conversation.

The conversations studied were frequently dominated and controlled by the conversation partners. These partners were seen to adjust their style of communication, but this was not always in ways that enhanced communication and could often appear patronising, this was particularly marked by the over use of evaluative language and could be seen as ‘competence’ reducing. There is also a need to consider the terminology that is used in discussing competence and empowerment. A focus on the role of ‘competent speaker’ making adjustments implies incompetence on the part of the other partner. Similarly the concept of empowerment implies that one individual is in the position of being able to grant power to others (Jingree and Finlay, 2008).
Research Question 2:
There will now be consideration of the second research question:

How can the research findings be used to improve professional practice?

This research has highlighted how communication partners can be in a position of power and undermine the confidence and competence of people with learning difficulties and/or communication impairment. This has significant implications for the learning disability workforce who need to be aware of how their communicative style can impact on those with whom they work.

Implications for the learning difficulty workforce

It is suggested that the person without communication difficulties is better placed to learn and implement new strategies (Kevan, 2003) than those with communication difficulties. This research has highlighted how communication partners adjust their style of interaction in ways that can undermine competence and appear patronising. Communication training has been seen as essential for those working with people with learning difficulties (Skills for Care, 2010a), but has focused on improving the knowledge and skills of the learning difficulty workforce in understanding and responding to people with a learning difficulty with communication difficulties. However this has had limited impact (see Chapter 2 page 43); and staff are often unaware of the specific communication needs of the people with whom they work (Finlay et al., 2008d) and fail to adjust their communication style (Chadwick and Jolliffe, 2009). Training has tended to focus on specific communication tools and techniques and has failed to address staff’s intrinsic beliefs about people with learning difficulties and the impact that this can have on their interaction with the individuals that they work with (Bell, Purcell, Walker and Nisbet, 2001). This research has shown how staff can take control of the conversation through the use of questioning and patronise their partner through their interactive style. It may help if training included consideration of values and attitudes as well as developing knowledge and skills; and encouraged staff to reflect on their own interactive style. Staff may also benefit from support to use this knowledge in their
own work environment, in order to engage in competency and esteem enhancing communication rather than disempowering interaction.

The literature review has identified a range of factors that contribute to staff becoming effective communication partners. These are illustrated in Figure 11 and discussed below.

![Diagram of Becoming an Effective Communication Partner](image)

**Figure 11: Becoming an Effective Communication Partner**

**Awareness of the legislative context**

Article 21 of the United Nations Convention on the Rights of Persons with Disabilities recognises the importance of freedom of expression and opinion, and access to information. It states that:

“Parties shall take all appropriate measures to ensure that persons with disabilities can exercise the right to freedom of expression and opinion, including the freedom to seek, receive and impart information and ideas on an equal basis with others and through all forms of communication of their choice.”

(United Nations, 2006 p.14)

Additionally, the Equality Act (2010) promotes equal access for people with disabilities and demands **reasonable adjustments** that include access to communication. Organisations and their staff need to understand this legislation and the consequences for day-to-day practice. Making these adjustments is a legal duty not an option.
**Organisational support**

This legislation then needs to be embedded in organisational policies that recognise the importance of communication, and that supports staff to see that as a key role (Ankrah, Leak and Pooley, 2010). Reinders (2008) highlights that all too often staff are under managerial pressure to comply with standards rather than develop meaningful relationships with clients. However according to Bigby et al. (2009) how staff support participation is rarely monitored or reported in inspection documents, although:

“There is no inherent reason why mechanisms to monitor staff support for client participation and choice cannot be as effective and demanding of compliance as those that monitor health and safety issues”

(p. 374).

The Care Quality Commission (Care Quality Commission, 2009-10) stress that they “focus on people’s direct experience of care, rather than simply on whether a provider has the right processes in place,”(p 8) and they employ “experts by experience” to help with their inspections. Their inspectors are beginning to question the communication skills of staff working in homes for people with learning difficulties (personal communications).

It should be recognised that time spent communicating with service users and supporting their development of relationships with others is an essential part of their role; this needs to be supported and driven at management level.

**Positive perceptions of people with learning disabilities:**

Public attitudes to people with disabilities are becoming more positive, but people with learning difficulties are still viewed less favourably than those with physical or sensory impairment (Staniland, 2009). According to Williams (2011) people with learning difficulties are often treated like children, and physical characteristics and activities associated with learning difficulty can negatively influence staff attitudes (Egli, Feurer, Roper and Thompson, 2002); too often staff can see their role as providing care rather than facilitating active engagement. Positive staff attitudes have been shown to affect the quality of staff client
engagement (Dobson et al., 2002). This notion of caring can maintain the cared-for person in a position of dependency and helplessness (Shakespeare, 2000). There has, however, been an increase in positive roles models and the use of co-trainers with a learning difficulty who are “experts by experience” has been shown to have a positive impact (CHANGE, 2011).

**Understanding of role**

This research has illustrated how support staff move between a numbers of roles with little awareness of this:

As carer or supporter:

<table>
<thead>
<tr>
<th>312. DN: I only know that I done her monthly support plan today↑ [I read it↓]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cate Conversation 2: with her father, mother and Nina</td>
</tr>
</tbody>
</table>

As advisor:

<table>
<thead>
<tr>
<th>151. L: Yeh↓ ah↑↓ you’ve got to find things to entertain yourself↓ when you’re there then↑↑ You should tell them↓ I’m bored with this↑ give me something else [to do↓] {€→C}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cate Conversation 3: with Lisa and Daisy</td>
</tr>
</tbody>
</table>

As teacher:

<table>
<thead>
<tr>
<th>152. L: What does it begin with↑ can you work that out↑ {€→C}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cate Conversation 3: with Lisa and Daisy</td>
</tr>
</tbody>
</table>

Clegg et al. (1996) identified a number of roles that support staff play; these included service provider, meaning maker, mutual supporter and companion. Jingree et al. (2006) further identified the roles of teacher, enabler, service representative and advocate; and highlighted the conflict that may occur between promoting independence and fulfilling a duty of care (Shakespeare, 2006). In contrast to people with physical disabilities, people with learning difficulties may not only require help with physical care but may be reliant on staff for emotional support, company and advocacy (Williams, 2011). Beresford (2008) calls for the adoption of new terminology which highlights the roles of “assistance” and “support” and moves away from the notion of care.

The implementation of personal budgets has increased the direct employment of staff, but this is often packaged as ‘purchasing care’ without
acknowledging the important role that staff may have in supporting someone to be competent and independent (Williams, 2011). The funding for appropriate training is not always considered when personal budgets are set and there may be little monitoring of the competencies of staff employed in this way.

Those who work within a ‘deficit’ model will assume incompetence, whereas those working within a ‘facilitating’ model will see their roles as supporting development (Goodley, 2001). Chapman et al. (2012) concluded that support staff are in a good position to advocate for the people they support, although they sometimes lacked the confidence and skills to do this. This research indicates that it may be useful to help staff to have a greater understanding of how their interaction style can impact on the clients they support; and to understand their role in facilitating community involvement and positive interactions and relationships with others.

**Communication tools and techniques**

The development of specific communication skills and techniques are usually included within any training course (Gloucstershire Total Communication, 2012). However, the evidence suggests that frequently these techniques are not used in practice (Chadwick and Jolliffe, 2009). Training and development should take this into account and needs to help staff to bridge these skills into practice (Graves, 2007).

A review of the literature supported by the observations from this research has identified strategies that can enhance communication, that are seen as useful by people with learning difficulties (Nind and Seale, 2009) and have evidence to support their use (Enderby, Pickstone, John, Fryer, Cantrell and Papaioannou, 2009). It has also recognised adjustments that have no enhancing function and can contribute to a perception of patronising speech. These are summarised in Table 11 on page 175.

Training tends to focus on the specific ‘communication enhancing’ strategies such as the use of keyword signing or pictorial support, but may not consider communicative style. This research has demonstrated how staff and family members may take control of the conversation by deciding the choice of topic, asking too many questions, adopting a didactic style (Question: response: feedback) and using
### Communication enhancing Strategies

| Use of shorter sentences (Thurman, 2011) | Raised pitch |
| Toleration of pause (Mondada, 2006) | Increased volume |
| Use of gesture and signing (Powell, 2000) | Exaggerated facial expression |
| Eg: Makaton, Signalong | Over used and amplified evaluation |
| Use of artefacts (Jones *et al.*, 2002) | Inappropriate use of collective pronouns |
| Eg: Objects of Reference | Low levels of eye contact or staring |
| Use of pictures (Aldridge, 2007; Murphy, 2006) | Inappropriate proxemics |
| Eg: Talking Mats™, Picture Exchange Communication System | |
| Access to a shared history (Prior *et al.*, 2011) | |
| Eg: Communication Passports, Life stories and Storytelling groups | |
| Information that is easier to read and understand (Owens, 2006) | |
| Eg: Books Beyond Words, Easy Health website | |

### Patronising Communication – no enhancing function

| Table 11: Enhancing/Patronising Talk |
| | |

amplified and exaggerated evaluation. These issues need to be actively explored during training.

**Reflective communication style**

It is not sufficient to deliver skills and knowledge training without providing staff with the opportunity to see these skills in action, practice and refine their skills and receive positive feedback (Enderby *et al.*, 2009). Clifton (2012) calls for ‘Stocks of Interactional Knowledge’ to be developed through the practitioner’s reflection on their own practice. The use of videoed interaction with a familiar partner, as in this
research; could be used to inform assessment and provide material for training and reflection.

There have been innovations in training in the field of aphasia that addresses the issue of implementation of skills. For example, Connect – the Communication Disability Network (Connect, 2008) provides training for people working with individuals with aphasia. Their training uses people with aphasia as “training together trainers” who have a functional conversation with the trainees and provide feedback. In addition the Supporting Partners of People with Aphasia in Relationships and Conversation (SPPARC) (Lock, Wilkinson and Bryan, 2001) programme uses video analysis to provide positive feedback to the conversation partners of those with aphasia.

Finlay, Walton and Antaki (2011) used video collected for CA to provide feedback to staff working with people with learning difficulties. They found staff were able to reflect on their practice and identified potential changes in practice, but highlighted the need for clear ground rules to avoid potential criticism of practice. They have produced guidance for the use of video for staff development (Finlay, Antaki and Walton, 2008a) which highlights the importance of consent and confidentiality and appropriate involvement of managers. Video Interaction Guidance (VIG) has been used in clinical settings with parents. This consists of a trained guider who uses video footage of a guide in a real-life communicative situation to analyse sequences of successful interaction (James and Landy, 2010).

Video modelling and Video self-modelling has also been used in the field of AAC (Cafiero, 2012), again this focuses on identifying and sharing examples of good practice. This study has demonstrated that with support people with learning difficulties can collect useful video data that can contribute to a ‘Communicative Partnership’ Assessment (see p178) and provide material to enhance staff skills and training.

Many of the issues discussed in relation to the general learning difficulty workforce are also relevant to health, social care and education professions who should have the appropriate skills to interact and reflect on their communication style. However the nature of their relationship may be very different and much more
fleeting. Professional staff may be reliant on support staff who know the individual well, to facilitate interaction and advocate for them.

It is important to consider the purpose of the communication and who is in the best position to support this interaction. Sometimes giving and receiving key information may be vital and this may be best supported by the use of communication tools, such as easier to read information, photographs and objects. At other times it is the pleasure in the interaction and the resulting increase in self-esteem that is important and this may require very different tools, strategies and mind sets.

**Implications for speech and language therapists**

Historically speech and language therapy intervention has taken a deficit model that focussed on the individual with communication impairment. Research on speech and language therapy conversations has highlighted a number of issues. For example, strategies to support conversation with patients with aphasia often undermined the clients communicative confidence and ignored the interactive competence they brought to the conversations (Simmons-Mackie and Damico, 1999). Adherence to the ‘rules of the therapy game’ were often seen as competency-lowering and took little account of the patient’s ‘Lifeworld’ (Kovarsky *et al.*, 1999; Kovarsky, 2008); and there was frequently a loss of a shared history and knowledge of the macro social community because of limited access to informants to provide background information (Parr, 2004). The speech and language therapists were frequently unaware of the power that they held. The provision of communication tools such as communication books and Speech Generating Devices may be seen as empowering the individual, but the professional may maintain power through the selection of vocabulary (Graves, 2000; Brewster, 2004).

According to Van der Gaag (1998) communication support for people with learning disabilities has undergone:

“a paradigm shift from the traditional, individualised, therapeutic approach based upon a medical model of disability to the integrated environmental approach based upon a social model of disability”

(p 92)
Communication intervention now also focuses on adapting the environment and modifying the behaviour of the communication partners see page 12 (Royal College of Speech and Language Therapists, 2003). However, the current drive for ‘evidenced based practice’ (Goldbart, Buell and Chadwick, 2012; Smith and Murray, 2011) and measurement of outcomes (Triangle, 2012) has increased the need for professionals to demonstrate the impact of their intervention. Environmental approaches and partner training may improve the quality of the interaction in a given setting, but this may not change the communication profile of the individual and the impact can be difficult to measure.

Although intervention methods may be developing, communication assessment has remained focused on an impairment model and this assessment can be competence lowering as it identifies difficulties (Korvarszy, Duchan and Maxwell, 1999) and highlights what the individual is unable to do. There is still an emphasis on measuring the skills and deficits of the individual (Abudarham, 2002) with few tools that evaluate the environment or the contribution of conversational partners (Koski and Launonen, 2012), although these are slowly emerging (Buzolich, Russell, Luger-Bergh and McCloskey, 2008). The assessment model recommended by the speech and language therapy professional body (RCSLT) although emphasising a person-centred approach, excludes consideration of the wider context and the communication style of communication partners (see Figure 12 below), and Koski and Launonen (2012) suggest that “little is known about how SLTs evaluate carers” (p686).

The assessment situation is already one of unequal power and the individual’s communication is unlikely to be typical of their usual way of interaction. CA has been used to provide a structure for assessment of communication between individuals with aphasia and their partners (Lock et al., 2001), that is then used for partner training. It is hoped that the framework of analysis used in this study can be developed into a ‘Communication Partnership’ observational framework to help speech and language therapy professionals to systematically observe videoed interaction with familiar partners in a range of settings. A draft prototype has been developed, an extract of this is illustrated in Table 12 on page 180 (See Appendix 11.
for full framework). This is a simplified version of the analysis undertaken in this research.

![Diagram of Process of Assessment from RCSLT Position paper (Baker et al, 2010 p.23)](image)

Figure 12: Process of Assessment from RCSLT Position paper (Baker et al, 2010 p.23)

but provided prompt for observation of interactive behaviour. It is hoped that this can be piloted and refined for wider use. This would assist them in taking into account the contribution of context and ensure consideration of the communication dyad. This would focus on ‘looking’ rather than testing and as well as contributing to a communication evaluation may provide data for training and feedback to families and carers.

**Research Question 3:**

The final research question considered:

How can people with learning difficulties be involved in research and how can their skills in research be developed?

**Involvement of people with learning difficulties in the research**

It is important to consider the development of staff skills and attitudes, but more work needs to be done to support people with learning difficulties to achieve positions of parity in their interactions, and to become confident to express their opinions and assert themselves in conversation. This voice is being heard and these
skills are being developed through the self-advocacy groups, but still remains a problem for those with significant communication impairment.

<table>
<thead>
<tr>
<th>Area of Interaction</th>
<th>Person with learning difficulty</th>
<th>Their Conversation Partner</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discourse structure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topic choice and control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of questions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conversation breakdown</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 12: Conversation Partnership Evaluation

Walmsley and Johnson (2003) have called for inclusive research with people with learning difficulties; with their involvement in all aspects of the research including data collection and analysis, theorising and authoring of papers. There has been debate about how inclusive this can be in relation to theorising without a danger of downgrading the significance of the findings (Koenig, 2012). Nind and Vinha (2012) suggest a continuum of co-working, from formalised to improvised approaches. In this research project the constraints imposed by the ethical approval process meant that the researcher had to take a formalised approach to involvement which limited the flexibility to improvise and change the methodology as the research progressed.

This study can be seen as taking a participatory approach to research to some extent. The research partners received training to further their understanding of research and were actively involved with the collection and selection of data. However, they had little involvement in planning the research or with the analysis or theorising processes. Nind calls for greater inclusion of people with learning difficulties in data analysis but acknowledges that some spheres of analysis may not
be accessible to them (Nind, 2011). Although participation with the CA processes was not possible because of ethical approval and time constraints; it would have been beneficial for the research partners to have had the opportunity to provide their views of the conversations and to have been involved in the identification of overall themes (Williams, 1999).

Once the research is complete it is planned to compile a report of the key findings in an appropriately accessible format that can be shared with the research partners and their conversation partners. A follow-up meeting is to be arranged to feed back the findings. This will need to be handled sensitively to avoid what could be construed as personal criticism. This will also provide an opportunity to discuss their involvement with the dissemination of the results, and explore their potential to work with the researcher to develop the role of ‘training together trainers’.

**Limitations of the research**

Analysing data from a range of sources demands rigorous scrutiny and defensible reasoning to ensure that the findings are credible and authentic (Lincoln and Guba, 2000). There is much discussion in the literature about the subjective role of the researcher in qualitative research and the need to ‘bracket’ or monitor one’s own subjectivity. It was important to recognise my own perspective and biases, and my relationship to the research partners and the data provided. It must be accepted that there is no final ‘correct’ interpretation (Schwandt, 2000). The data collected and analysed in this study were grounded in the subjectivity of the researcher, so it was important to let the data speak for itself (Morrow, 2005) by the inclusion of examples of the transcribed data throughout.

The lack of familiarity with Conversation Analysis at the beginning of the project meant that the use of data sessions (ten Have, 2007) was not included in the original proposal and maintaining confidentiality meant that data sharing was not possible. With the permission of the research partner a small amount of anonymised data was presented at one session, and the resulting feedback from the group was extremely valuable. In future studies these would be an intrinsic part of the research process. The lack of opportunity for others to view the data potentially limits the quality of the findings and the analysis remains the work of the researcher.
“interpretation of video data needs to take into account the subjective perspective of the researcher (even more in situations when analysis is done by one person only).”

(Knoblauch and Schnettler, 2012 p.353)

However, the same systematic and rigorous analytical frameworks were used across all the conversations to ensure the credibility and internal consistency of the analysis.

Although the use of video in research and clinical practice is becoming more common place, there are recognised limitations; this includes decisions about what to film, how to categorise, transcribe and analyse the data and how to present the analysis. The inclusion of video stills was considered, but even using photographic distortion it was felt that the anonymity of the subjects could not be adequately protected. This would have provided illustration of some of the non-verbal aspects of the conversations but would not have contributed to the overall analysis. Luff and Heath (2012) also highlight problems with selecting the angle and framing of the recording. This was outside the researcher’s control and resulted in some useful data being missed. For example Connor’s use of facial expression and eye gaze in his conversation with Tina.

As already discussed, the constraints imposed through the ethical approval process limited the flexibility of the study and restricted the degree of participation by the research partners. It was important that the trust of what can be seen as relatively powerless research partners was not abused (McManee, 2001) and that there were beneficial effects for those involved. It is hoped that the findings from this research will be used to improve the quality of staff training and support and to involve the research partners in this process. The use of videoing of interaction with current communication partners may enable individuals to have an active involvement in this process. The framework for observation (see p178) of these data may also result in a more sensitive way of identifying the communication strengths and what strategies may be most supportive for them.

The original research proposal planned to include a greater number of research partners, but this was not achieved (see page 13). This imposed a limitation on the quantity of data and the breadth of analysis possible, but instead afforded an
opportunity for a greater depth of analysis. This resulted in a more nuanced view of
the data and identified aspects that would have been missed if a broader analysis of
more conversations had been undertaken.

**Areas for further study**

The original intention of the researcher was to focus on communication
breakdown and repair. However, for the group of research partners involved and
from a greater understanding of Conversation Analysis, these did not emerge as key
issues. Undertaking this research has allowed the researcher the opportunity to
become familiar with these methods of data analysis and how the methodology
could be extended to consider conversations with a wider group of research
partners, and particularly to include those who have greater difficulties with the
understanding of more complex language and limited verbal communication. This
may provide challenges in relation to consent and meaningful participation in the
research process. However, undertaking this research has provided a greater
awareness of the usefulness of this methodology and the value for the individual and
their partners in understanding their communication in this way. This would support
the argument that their involvement had personal benefits and could be seen as
being in their best interest.

The people that the research partners chose to video were all seen as people
within their close social network but this did not include friends who also had a
learning difficulty. It would be useful to have a greater insight into these social
networks and if possible to look at interaction within these relationships. Examining
data which included interaction with family members was very interesting and
provided some valuable insights. However, these data were limited and further
investigation of this would be useful; in particular how people with learning
difficulties use the resources of these familiar partners to construct narratives from
their past.

There was also difference in interactive styles between those who could be
seen to have an institutional relationship with the research partners with learning
difficulties. It would be interesting to consider these differences by analysis of a greater range of conversations.

This research project has highlighted how conversation partners can engage in exaggerated or amplified evaluation when talking to people with a learning difficulty. This gives the impression of being patronising to outside listeners, but this research did not get an understanding of how this is perceived by the research partners themselves. This would be an interesting perspective to gain. Although this project tried to take a participatory relationship with the research partners this was limited. It would be helpful to explore how greater participation could be established particularly in the analysis and theorising stages.

The collection of video and the analysis used in this research has resulted in a framework that may be useful for a more sensitive and holistic assessment of the communication difficulties experienced by people with learning difficulties and their partners. The usefulness of this tool would need to be further researched; it would be useful to pilot this within a clinical setting and evaluate its validity as an assessment tool. It would also be valuable to explore how this could be used in the training and development for the staff team supporting the individual.

**Summary and contributions to knowledge**

Undertaking this research has been an interesting journey. The original area of interest was in communication breakdown between people with learning difficulties and their partners, and how this is managed. However the quality of the data and the level of analysis this afforded has resulted in a more nuanced consideration of the process of conversation. This has significant implications for practice both within the field of learning difficulties, but also to many individuals with communication impairment and the speech and language therapy profession.

This study has identified patterns of interaction that may be common in conversations with people with learning difficulties. It has highlighted the asymmetries of power and control that can exist and provides an understanding of issues that may lead to better patterns of engagement and contribute to more effective preparation and training of staff.
The study has combined methods of data analysis to gain an in-depth understanding of what happens in these conversations and demonstrated the value of examining the non-verbal and prosodic aspects of the interactions. In particular, it has sought ways to understand the evaluative nature of these encounters, and has expanded the understanding of how this plays out and adds to the overall asymmetry of these interactions and the consequent positioning and disempowerment of individuals with learning difficulties. The examination of intonation patterns and the use of evaluative language have helped to identify conversational patterns that are perceived as patronising. Although patronisation has previously been examined in relation to children and older people there has been little discussion of this in relation to other disadvantaged groups.

Previous research has considered the concept of ‘communicative competence’ in relation to people with learning difficulties (Biklen and Kliewer, 2006; Brewster, 2007); but in the main this competence has been seen to reside within the individual. This study has expanded this thinking to consider the concept of ‘interactional competence’, where the success of the conversation is seen as a corporate responsibility between all partners within a conversation context. Interactional competence acknowledges the importance of a multi-dimensional perspective (Lindgren, 2008) considering linguistic, non-verbal and conversational dimensions. This competence is distributed between all involved in the conversation (Young, 2000), is dependent on their shared knowledge (Schegloff, 1998) and is contingent on the context. It is both context dependent and context renewing (Ochs, Kremer-Sadlik, Sirola and Solomon, 2004). Understanding is achieved by reference to the local context of what has gone before as well as aspects of the physical environment, and the ‘current’ contribution provides the immediate context for understanding the subsequent one. It is also influenced by the wider context or ‘social structure’ (Schegloff, 2007) which is brought to the interaction by the transportable identities of the conversation partners (Zimmerman, 1998).

This research has highlighted the observable asymmetry in conversations in that could be viewed as institutional, although it also found similar patterns in casual conversation with family members. Symmetry and asymmetry are the observable characteristics of conversations, but there needs to be greater consideration of the
issue of parity that relate to the lived experience of the individual. It may not always be possible for individuals with a communication impairment to achieve symmetry, for example asking closed questions and using others as an information resource may be effective communication strategies. However, their conversation partners should see them as equal collaborators in the interaction and ensure that they “are comfortable in presenting their authentic selves in context” (Blackstone et al., 2007 p.198).

The need to redress the balance of power is particularly important for those who are in a professional relationship with people with learning difficulties, and the concept of parity has significant implications for the workforce who need to be clear about their role in relation to the people that they serve. It also has significant implications for the speech and language therapy profession whose responsibility should be to make sure that the voice of those they work with is heard.

Speech and language therapy with people with learning difficulties has seen a pendulum swing. Historically, the individual with a communication impairment was seen as the locus for assessment and intervention. More recently this has swung to consideration of the influence of the context and the conversation partner. Intervention has focused on adapting the environment and providing staff training with limited consideration of skill development for the individual with learning difficulties. As well as identifying patterns of interaction this research has highlighted individual characteristics within conversations suggesting that this type of analysis may be a useful tool for the appraisal of the communication partnership. Intervention then should take into account this dynamic, and consider ways to increase the confidence and skills of people with learning difficulties to become equal partners in the interaction, as well as working with their conversation partners.

Although communication is recognised as a basic human right (United Nations, 2006) there are still issues of equality of access. Communication is much more than the transmission of information, it is essential to the building and maintaining relationships and meaningful opportunities to communicate impact on positive self-image and well-being. Although people with learning difficulties may
have some limitations in their ability to communicate and conversations may sometimes necessarily appear asymmetrical, their communication partners need to make ‘reasonable adjustments’ that value and respect their partner and strive for parity in the interaction. (Aoki, 2008)

Rather than considering that people with learning difficulties wear a cloak of ‘competence’ (Edgerton, 1967) or ‘incompetence’ (Bogdan and Taylor, 1994), it may be helpful to consider a ‘distributed competence’ (Booth and Booth, 1998); an ‘umbrella of competence’ that the partnership can share. This emphasises the combined skills and responsibilities that all can bring to the interaction.
Bibliography


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BELL, D. & CAMERON, L. 2007. From Dare I say...? to I dare say: a case example illustrating the extension of the use of Talking Mats to people with learning disabilities who are able to speak well but unwilling to do so. British Journal of Learning Disabilities, 36, 122-127.


BIGBY, C., CLEMENT, T., MANSELL, J. & BEADLE-BROWN, J. 2009. 'It's pretty hard with our ones, they can't talk, the more able bodied can participate': staff attitudes about the applicability of disability policies to people with severe and profound intellectual disabilities. Journal of Intellectual Disability Research, 53, 363-376.


COMMISSION FOR SOCIAL CARE INSPECTION 2006. Joint investigation into the provision of services for people with learning disabilities at Cornwall Partnership NHS Trust.


DANIELI, M. & BAZZANELLA. Linguistic markers in coming to understanding. 8th Meeting of AIIA, 2002 Siena, Italy.


DISABILITY RIGHTS COMMISSION 2007. Equal Treatment: Closing the Gap - 1 year on.


DOWSE, L. 2009. 'Some people are never going to be able to do that'. Challenges for people with intellectual disability in the 21st century. Disability & Society, 24, 571-584.

DREYFUS, S. 2006. When there is no speech: a case study of the non-verbal multimodal communication of a child with an intellectual disability. Doctor of Philosophy, University of Wollongong.


FLYNN, M. 2012. Winterbourne View Hospital: A Serious Case Review. South Gloucestershire Safeguarding Adults Board.


GROVE, N. Scripts, Recounts and Stories: Implications for planning intervention with children who have developmental disabilities. 9th Research Symposium, 2006 Dusseldorf, Germany. ISAAC.


JINGREE, T. & FINLAY, W. M. L. 2008. 'You can't do it ... it's theory rather than practice': staff use of the practice/principle rhetorical device in talk on empowering people with learning disabilities. Discourse & Society, 19, 705-726.


KINSELLA, P. 2000. What are the Barriers in Relation to Person-Centred Planning?


LAWSON, D. 2008. We're hiding the truth: eugenics lives on. The Independent, 27/5/08.


LUFF, P. & HEATH, C. 2012. Some 'technical challenges' of video analysis: social actions, objects, material realities and the problems of perspective. Qualitative Research, 12, 255-279.


MONDADA, L. 2006. Participants' online analysis and multi-modal practices: projecting the end of the turn and the closing of the sequence. Discourse Studies, 8, 117-129.


PMLD NETWORK Consent for videos and photos of people with PMLD.


POWELL, G. 2000. Current research findings to support the use of signs with adults and children who have intellectual and communication difficulties Available: www.makaton.org [Accessed 26th September 2008].


REITER, E., TUNTAREV, N., REDDINGTON, J., TURNER, R., WALLER, A. & BLACK, R. How was school today...? Communication Matters, 2011 Leicester.


SKILLS FOR CARE 2010b. Have you thought about a career in social care?


SMITH, J. D. 2006. Speaking of Mild Mental retardation: It's No Box of Chocolates, or is it? Exceptionality, 14, 191-204.


THE LEARNING DIFFICULTIES RESEARCH TEAM 2006. Let me in - I'm a Researcher.


THURMAN, S. 2011. Communicating Effectively with People with a Learning Disability, Kidderminster, BILD.


TRIANGLE 2012. The Outcomes Star™ for your life. Triangle.


the lives and experiences of people with learning difficulties. London: Hodder and Stoughton.


Appendix 1: Glossary and Acronyms

Ways of studying Communication

**Psycholinguistics**: branch of linguistics studies variation in linguistic behaviour in relation to psychological notions such as memory, perception, attention and learning

**Sociolinguistics**: branch of linguistics studies relationship between language and society

**Semiotics**: study of patterned behaviour in communication in all its modes

**Ethnography**: the study of a way of life by using a range of data gathering methods, including most prominently participant observation and qualitative interviewing

**Ethnomethodology**: an ‘alternate sociology’ developed by Harold Garfinkel, studying the folk methods used to constitute social states of affairs

**Kinesics**: the interpretation of body language such as gesture and facial expression

**Proxemics**: the study of the cultural, behavioural, and sociological aspects of spatial distances between individuals.

Terminology from Conversation Analysis

**Recipient design**: refers to ‘a multitude of respects in which talk by a party in a conversation is constructed or designed in ways which display an orientation and sensitivity to the particular others who are the co-participants’ (Sacks et al 1978 p.42-3) (ten Have)

**Intersubjectivity**: refers to the shared meanings constructed by people in their interactions with each other

**Turn Constructional Unit (TCU)**: the part of an utterance that might be a complete turn, after which another speaker may take over

**Transition Relevance Place (TRP)** the moment in the production of a turn-at-talking in which that turn might be possibly complete and another speaker might take over

**Self-Initiated Self Repair (SISR)**

**Self-Initiated Other Repair (SIOR)**

**Other-Initiated Self Repair (OISR)**

**Other-Initiated Other Repair (OIOR)**
First Pair Part (FPP)
Second Pair Part (SPP)

Other Acronyms

Alternative and Augmentative Communication (AAC)
General Practitioner (GP)
Integrated Research Application System (IRAS)
National Health Service (NHS)
Person Centred Planning (PCP)
Picture Exchange Communication System (PECS)
Profound and Multiple Learning Disability (PMLD)
Systemic Functional Linguistics (SFL)
Speech Generating Device (SGD)
Speech and Language Therapist (SLT)
Social Role Valorisation (SRV)
Video Interaction Guidance (VIG)
Appendix 2: Invitation to take part in research

Dear X,

I am interested in helping people to communicate better

I want to look at how people talk to each other

I want to video this.

Would you like to help?

I am sending some more information

I am running a training day to talk about research

This day is on Wednesday 13\textsuperscript{th} October

From 10:00am to 4:00pm

At:

Refreshments and lunch will be provided

Please return the attached slip if you would like to come

I would be interested in helping with research

I would like you to visit me to talk about the research

I would like to attend the course on 13\textsuperscript{th} October
I will require help with transport

Signed  

Name:
Appendix 3: Information sheet for Conversation Partners

_______ is helping me in research to look at what happens when people with learning difficulties have difficulty in conversation with others, and how the situation is resolved. I am a speech and language therapist and have worked with people with learning difficulties for over 30 years. I am currently studying for a Doctorate of Education at Exeter University. This project has been approved by the University and NHS Ethics Committees.

The research
I have recruited people to form a “Research Advisory Group”; this includes people with learning difficulties. The group are helping to guide the research process and make sure information is easy to read and understand. The people who help with the research have given their consent to their involvement and are free to withdraw from the project at any time.

Data collection and storage
______ would like to video about 10 -15 minutes of their conversation with you. This should be a conversation that is part of your day to day interaction with them, and not staged for the video. If you are happy to participate they will ask you to sign a consent form and complete a brief written questionnaire.
Confidentiality

The video recordings will be downloaded onto a secure, password protected personal computer for analysis and only accessed by the researcher and research partner. Following the recording I will view the video with the research partner and delete any of the video that they are not happy with. I will discuss the video with them and ask some questions.

Data analysis and write up will be anonymised, and will be securely stored in a locked cabinet in a secure building.

At the end of the project all personally identifiable video and written notes will be destroyed.

Data Analysis

If they are happy, I will then look very closely at the video and write down what is being said, I will particularly look at when communication is problematic, where there is misunderstanding and how this is resolved. I will not be looking at the informative content of the conversation.

If you and the research partner give consent I may conduct a short follow up interview with you.

The Results

When I have analysed the data I will write this up as a detailed report for the university. Information will be anonymised and I will
make sure that no personally identifiable information is included.

This report will include background to the project, how I went about it, my results and recommendations for improving communication.

I will also do a summary report for wider distribution; this will include an easy to read summary. I will make sure that everyone involved in the research receives a copy of this report.
Appendix 4: Saying yes to being videoed

Saying yes to being recorded by video camera and it being used for research.

Name ................................................................. Date: ........................................

I say it is ok to be recorded by video camera.

I say it is ok for the video to be used by BLANK Trust.

BLANK Trust has told me the video will be used for research.

I understand that I can write to the trust if I change my mind. I understand that the trust will need to know this for 14 days before they will stop using the video.

Signed: ................................................................

Please fill this in and send it back to:

The video will be stored safely and destroyed at the end of the project

Or ring and speak to:
Appendix 5: Saying yes to research

Consent to Celia’s Research
I do not have to take part in this research
I can stop taking part when ever I want
No information about me will be used, unless I have been asked
All information will be kept safe
It will not be shared with other people
My name will not be used in any reports
I will keep a copy of this form

Celia will keep a copy

If I have any questions I can speak to Celia,

Her phone number is

Signed: 

Date: 

Name printed:
Appendix 6: Phonemic Transcription

Vowels:

Bird: /ɜː/  
wet: /e/  
fork: /ɔː/  
Father: /ɑː/  
bat: /æ/  
food: /uː/  
Pig: /ɪ/  
foot: /ʊ/  
computer: /ə/  
Teeth: /iː/  
dog: /ɒ/  

Diphthongs:

Cake: /eɪ/  
bite: /aɪ/  
about: /aʊ/  
Boat: /əʊ/  
boy: /ɔɪ/  
wear: /eə/  
Beer: /ɪə/  
pure: /ʊə/  

Consonants:

Hot: /h/  
shut: /ʃ/  
vet: /v/  
Sit: /s/  
think: /ɵ/  
win: /w/  
Tap: /t/  
other: /ð/  
sing: /ŋ/  
Man: /m/  
television: /ʒ/  
zebra: /z/  
Nut: /n/  
chair: /tʃ/  
but: /b/  
Dog: /d/  
get: /ɡ/  
fat: /f/  
King: /k/  
pet: /p/  
yes: /j/  
Light: /l/  
run: /r/  
jug: /dʒ/  

Glottal stop: ?
Appendix 7: Key concepts used in analysis

Conversation Structure

According to Eggins and Slade (1997) approximately 50% of the conversations they analysed consisted of “chat”. Hollander and Gordon (2006) describe three types of “linking devices” used in the social construction of talk. These are Explanations – why a particular event or behaviour occurred and are pervasive in everyday conversations. Storytelling - which relays a sequence of past events, and Forecasting – constructs possible futures.

Topic Management

Topics may be initiated with an elicitor that is designed to draw out a candidate topic from the next speaker without suggesting what this might be (“OK what shall we talk about”), or they may be elicited by topic nomination orientated to a particular newsworthy event (“Did you see what happened...”) or by a news announcement orientated to speakers own news event (“Let me tell what I did yesterday”).

According to Jefferson(1993) topic shift usually displays some form of attention to the previous topic either by a minimal pre-shift token (such as: yeah, hm hm) or a pre-topic shift assessment (e.g. Oh how really lovely).

However stepwise transition of topic is pervasive in conversation. Schegloff describes how

“utterances can be built in such formats, starting with something connected to the prior topic, with, then, the second part using something else which is connected to the first part of the utterance, not to the prior topic”


Sometimes this shift is gradual and barely noticeable, at other times it may happen in a stepwise fashion using a pivot that links between them (Sacks, 1995).
A new topic has been started though a long way from where it began.

**Turn construction and Turn allocation**

According to Sacks, Schegloff and Jefferson (1974) turn taking is:

a) Locally managed - in other words organised around current and next turn  
b) Party-administered – sorted out between the speakers involved  
c) Recipient designed - participants design their talk to be understood by their recipient, taking into account shared knowledge

Each turn is constructed of what Sacks, Schegloff and Jefferson (1974) termed “**Turn Construction Units** (TCU)”. These may consist of a single word or gesture, a phrase, clause or sentence. Each turn will consist of at least one and maybe several TCUs. The completion of each TCU is a possible opportunity for a potential next speaker. Sacks et al (1974) called this the “**Transition Relevance Place**” (TRP). They also described how turn transition is usually accomplished. At the first TRP the current speaker may select the next speaker, if they do not select then the next speaker may make a self-selection or the current speaker may carry on with a second TCU. This sequence will recur as each subsequent TRP. If the current speaker wishes to retain the turn they may rush through the TRP with no pause between TCUs. The recipient monitors the current speech to detect possible ends to the TCUs in order to establish their turn.

**Co-construction:**

CA recognises that partners engage in active co-construction of conversation and may build turns collaboratively. Lerner (1996) describes multi-turn TCUs which consisted of two components – a preliminary component that has a projectable possible final component that provides recognisable possible completion by another speaker. Sacks (1992) described how a single TCU could be developed incrementally by multiple speakers.
**Pause:**

Pauses in talk are common and may be intra-turn or inter-turn. Intra-turn pauses may be related to syntactic structure and prosodic planning (Krivokapi, 2007), used for dramatic effect, word searching or to signal that the service of a hearer is needed (Goodwin, 1980) or may be used to gain eye contact from the listener (Liddicoat, 2007).

Inter-turn pauses usually occur at TRP and may provide an “opportunity space” for the listener to take a turn (Mondada, 2006), or to allow time for self-repair (Schegloff, 2000b); but may also be used within a TCU to invite completion by the listener, for example if searching for a word (Sidnell, 2010a). A next speaker usually allows one beat of silence before starting a next turn. Longer silences may indicate trouble with understanding or disalignment with the preceding proposition (Schegloff, Koshik, Jacoby and Olsher, 2002). Jefferson (1998) has suggested that listeners have a tolerance of approximately one second of silence, longer pauses are likely to be seen as problematic.

**Overlap:**

Conversation is littered with overlap and interruption. However CA has established that this overlap is usually brief and occurs in highly restricted place in the conversation (Sidnell, 2010a). It is a product of turn taking organisation rather than a violation of it and is generally unproblematic. Schegloff (2000a) describes “terminal overlap” where the recipient predicts what is being said and that there is a possible TRP, and begins their turn early, resulting in a brief overlap of conversation. Overlap may also occur when the recipient uses interpolations or “continuers” which demonstrate that they have understood the speaker and that the turn is not yet complete. Sidnell (Sidnell, 2010b) suggests that overlap is only heard as interruption when the participants are involved in competing trajectories of action and where there may be evidence of disaffiliation.
**Recipient design:**

It is recognised that communication partners adapt their communicative behaviour to their partner based on what they know or believe about them. Recipient design involves the

“the choice of just that phrase which will allow you to find the unique thing I am referring to, when it could be referred to in a thousand ways”

*(Levinson, 2006 p.13).*

Newman-Norlund et al (2009) found that their subjects approached interaction with a conceptual model of the addressee but subsequently adjusted this in light of the effectiveness of the exchange. Schegloff (1989) suggests that not only are speakers oriented to and sensitive to the co-participants and the context; but that this is displayed within the interaction. Recipient design is also a resource that the listener can use in interpreting talk *(Liddicoat, 2007).* Speakers may underestimate the listener’s knowledge which can be viewed as talking down or insulting by the listener, or the speaker may over-estimate partners knowledge or awareness of the topic *(Ochs Keenan, 1983).*

Rapley (2004) highlights how interviewers may ‘shepherd’ conversational partners with learning difficulties to a desired answer through the design of their questions. As well as being central to the organisation of interaction recipient design is also important for identity construction *(Williams, 2011).*

**Adjacency pairs, use of questions and preference organisation:**

A great deal of conversation is organised into sequences or pairs of action by different speakers. These ‘**adjacency pairs**’ comprise a First Pair Part (FPP), which influences the form of the Second Pair Part (SPP), which, in turn, has conditional relevance to the FPP *(Liddicoat, 2007).* This occurs in greetings, farewells and probably most commonly in question and answer sequences where the question (FPP) will constrain the form of the answer (SPP). If the SPP does not occur then its absence is noticed and is likely to influence the subsequent talk. This basic adjacency
sequence is closely linked to turn-taking organisation. The first speaker should stop speaking at the end of the FPP and the second speaker should produce a SPP.

In most sequence types there are a range of alternative SPP responses to a FPP. Schegloff (2007) suggests that these alternate types of responses are not symmetrical alternatives, but that there are preferred responses. These are not psychological preferences but are seen as preferences because of their observable regularity.

Schegloff (2007) distinguishes between action-based preferences – the recipient does or gives the thing requested, and design-based preferences which influences the form of the response, for example many questions are designed to elicit a yes or no response. Speakers typically design dispreferred responses by incorporating delay or silence, or by prefacing the response with appreciations, mitigations or accounts.

**Asking questions:**

The term ‘question’ can be defined as a ‘request for information’ (Ainsworth-Vaughn, 2001). They can be defined as grammatical, semantic or discourse categories. Grammatically questions usually have an interrogative form (Halliday, 1985) where the subject and first verb may be inverted (e.g. “Is it raining?”), or by the use of interrogative words such as what, where; or the inclusion of a tag construction at the end of a TCU (e.g: “isn’t it?”). Semantically a question requests further information and anticipates a response from the listener (Quirk et al., 1985). In terms of discourse a question is an elicitation of a linguistic response (Tsui, 1994).

Questions may be marked by the intonation (Halliday and Greaves, 2008). Declaratives can be recognised as questions as long as they use a rising intonation (Koshik 2005 cited in Tracy and Robles, 2009).

Quirk et al (1985) define three classes of questions yes/no or polar questions that expect affirmation or negation, Wh questions that expect a reply from an open range of possible responses and alternative questions where the reply is constrained to a small range of given options.
Terminology used to describe questions.

Polar questions, or what Raymond (2003) called Yes/No Interrogatives (YNI) typically expect a “yes” or a “no” response. Sacks (1987) suggested that they are designed towards a preferred response. He argued that affirmation is the preferred proposition, and questioners will exploit emerging delays in listener response to redesign their question to elicit an aligned response (Sacks 1987 cited in Heritage and Robinson, 2011). Raymond found a 3:1 ratio of conforming to nonconforming responses in casual conversations. He also describes how nonconforming responses constrain the action of subsequent turns, most commonly by expanding the sequence. Heritage (1984) suggests that in institutional conversations professionals will design their First pair Part YNI to elicit a positive preferred response. Cederborg et al (2009) found that children and young people with learning disabilities often changed their response to a YNI if the question was repeated.

In contrast, Wh-interrogatives consisting of a Wh-question word such as what, where, who, when, how, why, which; probe for additional information and allow for a greater range of possible responses, but also set up an expectation of how this information will be structured (Eggins and Slade, 1997).

Repetition:

Repetition serves several different cognitive, conversational and interactional functions (Danieli and Bazzanella, 2002); and the same repetition may
serve more than one function. Repetition may be comprehension-oriented or production-oriented and may be partly oriented to both. Repetition can also be a way of initiating repair (Sidnell, 2010b). In adult to adult conversations partners generally assume understanding and rely on verification through head nods, discourse markers and minimal tokens such as *Umm, yeh* etc (Ochs Keenan, 1983). Repetition can be used in multi-TCU turns or multi-sequence turns to indicate that the turn is moving into a closing section (Schegloff, 2011).

Repeats used in repair are generally louder, have expanded pitch range, longer duration and have changed articulator properties (Curl, 2005). A useful Taxonomy of repetition has been developed by Bazzanella

*Repair:*

Repair may be initiated by the speaker themselves or triggered by their partner.

**Self-initiated self-repair** (SISR) occurs when the speaker recognises and repairs the breakdown themselves. Alternatively, they may seek the assistance of the conversational partner (**Self-Initiated Other Repair** SIOR).

*Speaker: I need to buy one of those things for mixing my cake a .....*

*Partner: A food processor*

Self-initiated repair is preferred, and usually occurs in the same conversational turn as the trouble source or at turn transition. It can be signalled by perturbations (*Um, er*) sound cut offs or sound stretches (Liddicoat, 2007). Occasionally self-repair may occur in the third turn where the listener has not indicated a problem with understanding but the speaker detects this from their response.

Other initiated repair may occur when the communication partner indicates the breakdown but the repair is carried out by the speaker (**Other Initiated Self Repair** OISR), or the communication partner may both initiate and provide the repair (**Other Initiated Other Repair** OIOR). This is felt to be the least preferred style of
repair (Holtgraves, 2002) but is common in interactions between children and their parents (Laakso, 2010) or where one speaker is viewed as ‘less competent’ (Simmons-Mackie and Elman, 2011). Other initiated repair is usually signalled by turn construction devices such as “huh” “what”, or Wh questions, repeats, partial repeat plus a question or a “do you mean...?”; and usually results in a discontinuation of the current action while the correction is accomplished. This may not only carry out the business of correcting, but may also address lapses of competence or conduct (Jefferson, 1987). On other occasions this OIR is embedded and is not explicitly acknowledged by the trouble source speaker but the repair information is assimilated into subsequent talk.

Sidnell (2010) describes a ‘natural ordering’ of other initiated repair with open-class initiator only indicating that there is a trouble, through the use of WH questions which begin to pin-point the sources of the difficulty through to “candidate repeats” and understanding checks.

Open class → Wh-word → Repeat+Wh-word → Repeat → Understanding check

[WEAKER] → [STRONGER]

(From Sidnell (2010a) p.118)

Repair may be realised through repetition, which may include prosodic and non-verbal changes although the linguistic content remains unchanged. It may also be achieved through revision by substitution, replacement or rewording; augmentation (the provision of additional information) or by a string of multiple repairs. Volden (2004) found that children gave more additional information through the use of prosody and gesture if the initial attempt at repair failed. Of course repair may also end in failure! According to Meaden, Halle, Ostrosky and Destefano (2008) the amount of repair that occurs is influenced by the type of breakdown that occurs, the familiarity with the conversational partner and the motivation for both partners to persist with the conversation.

Alexander, Whetherby and Prisant (1997) suggest that in order for repair to occur the speakers need to be able to demonstrate goal direction or intentionality,
understand the needs of their communication partner, recognise that breakdown has occurred and have an effective means to manage the repair; this may be verbal or non-verbal.

**Non-verbal aspects – positioning, eye contact, intonation, gesture and use of artefacts**

CA has increasingly recognised the importance of non-verbal and non-vocal aspects of communication, especially since the greater availability of video rather than audio data. This account will focus on six aspects of non-vocal behaviour: positioning and posture, eye gaze, facial expression, nodding and head shaking, gesture and the use of artefacts. It will also consider the importance of prosody (intonation, volume and pitch).

**Positioning and posture**

Positioning of speakers helps to establish the interactive ground (Goodwin, 2000a). Higginbotham (2009) highlights how people position themselves during interaction influences the communication modes and strategies that they use. This can be particularly significant for people who use AAC whose communication partner may need to be positioned where they can look at the screen of a Speech Generating Device (SGD). There can also be asymmetry of position if one person is seated in a wheelchair and unable to move position or gain eye contact from their communication partner.

**Eye gaze:**

Gaze can seek to control the behaviour of others and has a role in the management of conversation (Schieffelin, 1983). According to Goodwin a “speaker should obtain the gaze of his recipient during a turn at talk”. (1981 p.57). If this gaze is lacking pausing, self-repair or recycling of the turn beginning may be used as a strategy to gain eye gaze. The maintenance of eye gaze can be used to hold the turn and expand on the topic (Radford and Mahon, 2010). Goodwin also suggests that the recipient gazing at the speaker is more important that the speaker gazing at the recipient. Gesturing speakers routinely bring their eye gaze to their hands at the onset of a gesture to draw attention to its relevance (Streeck 1993 in Sidnell, 2006).
Eye gaze will be disrupted if one speaker is reliant on augmentative communication where their focus may be on hand gestures or a Speech generating Device (SGD) (Clarke and Wilkinson, 2010)

Facial Expression:
Ekman (1997) argues that although facial expression transmits information, this is not its function and represents automatic and innate behavioural patterns. However, the research literature does not support this and has shown that it is influenced by the social context (1983a; Blair, 2003). Facial expression differs between blind and sighted individuals (Avital and Streeck, 2011). Goodwin and Goodwin (1986) describes the “thinking face” where the speaker momentarily withdraws from the interaction and assumes a pre-occupied expression.

Nodding:
According to Schabracq (1987 in Caris-Verhallen et al., 1999) there are three functions of head nodding. To regulate the interaction and change turns, to support spoken language and to comment and maintain rapport. Speaker and listeners nod for different purposes. A succession of listener head nods can display attunement and affiliation (Aoki, 2008). Speaker head nods may be used to elicit recipient responses (Aoki, 2011). Helweg-Larsen et al (2004) found that nodding could be a hallmark of lower status within the conversation. Individuals with autism are thought to nod and shake their heads less often, this is particularly apparent when they are in the listener role (Garcia-Perez, Lee and Hobson, 2007).

Gesture and sign language:
Gesture and speech are systematically organised in relation to each other (Berry, 2009), and may mutually elaborate each other (Goodwin, 2000a). Not all gestures are designed to be communicative and people may continue to use gesture when their conversational partner is unable to see them.

Many gestures are idiosyncratic and do not have a standard form, whereas others which Kendon (2000) classifies as ‘emblems’, have a standard shared meaning. Gestures may be iconic in that they have some link with their meaning—such as number hand shapes, deictic where the meaning is related to the context
such as points; or what Goodwin describes as ‘symbiotic’ gestures whose meaning is formed from the combination of the gesture with talk and the physical context. Other forms of gestures include ‘beat’ that accompany the rhythm of speech (McNeill, 2005), ‘regulators’ that control the speech of someone else (e.g. *slow down*, *keep going*) and ‘adaptors’ which indicate state of mind (*such as scratching head when puzzled*) (Danesi, 2007). Gestures are distinguished from sign languages which use hand shapes in a conventional manner and are more consciously monitored by the user (Sweetster, 2009). The meaning of gestures and manual signs are conveyed by a combination of hand shape, orientation, location, pattern of movement and intensity.

**Use of artefacts and visual icons:**

Ochs and Solomon (2005) stressed the importance of artefacts within the environment as one key dimension in language acquisition; and adult language to young children frequently comments at what the child is looking at. Mondada (2006) demonstrated not only the importance of artefacts in interaction, but how the manipulation of them provided additional meaning. However the importance of objects in interaction is often overlooked (Cowley and Kravchenko, 2005). They may be used in a systematic way, such as the use of ‘Objects of Reference’ (Parks, 2003). Visual icons, including photographs, pictorial symbols and line drawings, resemble their referent in some way, these may be used incidentally in conversation or as a systematic communication system in the form of a communication book, in Picture Exchange Communication System (PECS) or on a Speech Generating Device (Detheridge and Detheridge, 2002).

**Prosody:**

Prosody is the supra-segmental aspect of language, and includes intonation (the variation in pitch), volume, rhythm and stress.

**Intonation**

Intonation is signalled by tonic prominence – a salient syllable that stands out because of a combination of increased volume, duration and change in pitch (Halliday and Greaves, 2008) along with tonicity – the direction of pitch change.
Intonation has a grammatical, semantic and social role as well as a psychological influence relating to attitude (Mathieson, 2001). The meaning expressed by intonation has been extensively studied within Systemic Functional Linguistics (Halliday and Greaves, 2008). In English we recognise five simple tones:

<table>
<thead>
<tr>
<th>Tone</th>
<th>Description</th>
<th>Usage/meaning</th>
<th>Notation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tone 1</td>
<td>fall</td>
<td>Declarative</td>
<td>↓</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wh Interrogative</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Imperative</td>
<td></td>
</tr>
<tr>
<td>Tone 2</td>
<td>rise</td>
<td>Yes/no interrogative</td>
<td>↑</td>
</tr>
<tr>
<td>Tone 3</td>
<td>Level rising</td>
<td>imperative</td>
<td>→↑</td>
</tr>
<tr>
<td>Tone 4</td>
<td>Fall rising</td>
<td>“reservation”</td>
<td>↓↑</td>
</tr>
<tr>
<td>Tone 5</td>
<td>Rise fall</td>
<td>“surprise”</td>
<td>↑↓</td>
</tr>
</tbody>
</table>

**Common English Tone Patterns**

There are also two compound tones that are combinations of two of the simple tones.

Each speech function has a typical or “unmarked” tone; variation from this provides further interpersonal meaning. For example a declarative clause with falling-rise tone (Tone 4) adds features of reservation while a rising-falling tone (Tone 5) marks the information as surprising. This pattern is common in conversation between adults and children, and can be perceived as patronising when used between adults. (Halliday and Greaves, 2008).

The importance of intonation in signalling interrogatives and its use in repair has already been discussed. As well as signalling interrogatives rising intonation is used to signal new information; when a speaker introduces something that he thinks the listener does not know (Ochs Keenan, 1983). Intonation is also important in evaluation (see below).
**Pitch and volume:**

Although pitch and volume are important in intonation, there may be an overall variation in these which can signal meaning. Shute and Whezldall (1995) noted an overall increase in pitch when mothers were talking to their children, and Ryan et al (1991) noted a similar change in conversations with the elderly.

**Evaluation:**

According to Duchan, Maxwell and Korvarskey:

“...evaluation can impact on one’s notions of competence (and incompetence) and ultimately how they affect an individual’s notions of self-identity”

(Duchan et al., 1999 p.3).

Evaluation can be achieved through lexical choices, the use of grammatical and discourse resources and through non-verbal elements such as timing, repetition, intonation and movement.

Hollander and Gordon (2006) describe evaluation as one of the finishing (as in varnish or paint) devices in conversation, that adds shades of meaning. Recipients of evaluation may upgrade or downgrade an evaluation through their response.

Eggins and Slade (1997) suggest that the language of appraisal or attitudinal colouring of talk is one of the least researched areas in linguistics. The exception to this has been the work of Martin and White (2005) who have worked within the field of **Systemic Functional Linguistics (SFL).**

Martin and White (2005) have particularly focussed on evaluation or appraisal in written text but their framework has been applied to casual conversations by Eggins and Slade (1997). Martin and White define three main categories of appraisal:

- **Appreciation:** aesthetic evaluation of process, objects etc.
**Affect**: concerned with registering positive or negative feelings

**Judgement**: deals with attitudes towards behaviour

These categories have been further subdivided (see Appendix 8 Appraisal SFL) but only these first order categorisations will be used in this research. Martin and White also consider how these terms can be graded or amplified.
Appendix 8: Appraisal and SFL

A provisional outline of appraisal resources in English adapted from Martin 1994 from Eggins and Slade (1997)
### Appendix 9: Connor's Conversation 1

<table>
<thead>
<tr>
<th>Line</th>
<th>Dialogue</th>
</tr>
</thead>
<tbody>
<tr>
<td>216.</td>
<td>D: <strong>WO</strong>o↑, Okaydokey↓, right, {€→sheet} what shall we talk about then↑ (<strong>looking at paper in hand</strong>)</td>
</tr>
<tr>
<td>217.</td>
<td>C: <strong>(standing up and walking in front of D)</strong></td>
</tr>
<tr>
<td>218.</td>
<td>D: What do you fancy talking about↓ what's a good subject for you Connor↑(..) {€→C}</td>
</tr>
<tr>
<td>219.</td>
<td>C: Holidays↑ (<strong>off camera</strong>)</td>
</tr>
<tr>
<td>220.</td>
<td>D: <strong>holidays</strong> (<strong>nod, putting flat hand up</strong>) nice choice↑↓ (<strong>nodding head</strong>) (..) Handsome↑↓ OK then↑, going on holiday↓ {€→C}</td>
</tr>
<tr>
<td>221.</td>
<td>C: Butlins↑ (<strong>sitting down</strong>)</td>
</tr>
<tr>
<td>222.</td>
<td>D: <strong>BUT</strong>lins↓ {€→C} (0..) ay↓ {€→C}</td>
</tr>
<tr>
<td>223.</td>
<td>C: I've been Butlins Christmas↓ {€→D}</td>
</tr>
<tr>
<td>224.</td>
<td>D: Very nice↑↓ (<strong>pulling body back</strong>) (..) very nice↓ you <strong>planning</strong> to go again↑ {€→C}</td>
</tr>
<tr>
<td>225.</td>
<td>C: ar, next summer↓ {€→D} (<strong>smiling</strong>)</td>
</tr>
<tr>
<td>226.</td>
<td>D: oh-er↓,{€→C} so what's so great about Butlins↑ What's your <strong>favourite</strong> bit↑</td>
</tr>
<tr>
<td>227.</td>
<td>C: (<strong>leaning back in chair, smiling</strong>) Pantomimes ↓ {€→→D}</td>
</tr>
<tr>
<td>228.</td>
<td>D: oh <strong>right</strong>↑↓ (<strong>slight turn of head, eye brows raised,</strong>) what <strong>pantomime</strong> did you see↑</td>
</tr>
<tr>
<td>229.</td>
<td>C: eh um, Ala, Aladdin↓(..) once↓ (<strong>putting hands behind head, smile</strong>) {€↓→D}</td>
</tr>
<tr>
<td>230.</td>
<td>D: (<strong>nodding, eye brows raised, smile</strong>) yeh↑</td>
</tr>
<tr>
<td>231.</td>
<td>C: yeh,<strong>(hands behind head)</strong> went swimming↓{€}, (..) um go-carts€ {€→C} (..) <strong>fair</strong>↓ (<strong>leaning towards C, smiling</strong>)</td>
</tr>
<tr>
<td>232.</td>
<td>D: Oh gosh↓ do you like a few of the old beers [then↑] (<strong>miming drinking pint, smile</strong>)</td>
</tr>
<tr>
<td>233.</td>
<td>C: [ yeh↓] {€→D} (<strong>smiling</strong>)</td>
</tr>
<tr>
<td>234.</td>
<td>D: yeh↓ yeh↓ {€→C} (<strong>nodding head, smiling</strong>)</td>
</tr>
<tr>
<td>235.</td>
<td>C: Entertainments↓ {€→} (<strong>smiling</strong>)</td>
</tr>
<tr>
<td>236.</td>
<td>D: <strong>Entertainments</strong>↑↓ (<strong>emphatic head nod, smile</strong>) , right, yes↓ (<strong>nod</strong>) {€→C}</td>
</tr>
<tr>
<td>237.</td>
<td>C: {€→D}</td>
</tr>
<tr>
<td>Line</td>
<td>Transcript</td>
</tr>
<tr>
<td>------</td>
<td>------------</td>
</tr>
<tr>
<td>238.</td>
<td>D: Do they still wear red <strong>coats</strong> at Butlins↑ (<strong>indicating own top</strong>) {€→C}</td>
</tr>
<tr>
<td>239.</td>
<td>C: (<strong>nodding head</strong>) ye {€↑→D}</td>
</tr>
<tr>
<td>240.</td>
<td>D: Oh <strong>DO</strong> they↑↓ (<strong>chin up, nod</strong>) {€→C}</td>
</tr>
<tr>
<td>241.</td>
<td>C: Ye↓ {€→D}</td>
</tr>
<tr>
<td>242.</td>
<td>D: ye, °oh rightly ho↓↑ {→C} (<strong>no, smile</strong>) I went to Butlins <strong>years</strong> (<strong>nod</strong>) ago↓↑</td>
</tr>
<tr>
<td>243.</td>
<td>C: {€→D} and do p, and I do a paper round o::n↓, (..) every↑ (..) {€↑} every month↓ {€→D} do paper round↑ (<strong>smiling</strong>)</td>
</tr>
<tr>
<td>244.</td>
<td>D: Right↑ {€→C} (<strong>nodding head</strong>)</td>
</tr>
<tr>
<td>245.</td>
<td>C: Advertisers↓ {€→D}</td>
</tr>
<tr>
<td>246.</td>
<td>D: oh e↓↑ {€→C} (<strong>pulling face, chin tuck back</strong>)</td>
</tr>
<tr>
<td>247.</td>
<td>C: Get paid for it well↓↓, get paid for it↓ (<strong>smile</strong>) {€→D}</td>
</tr>
<tr>
<td>248.</td>
<td>D: <strong>Excellent</strong>↑↓ (<strong>emphatic nod</strong>) right↓ (<strong>nod</strong>) so you’re getting a bit of money behind[ you (<strong>signing money</strong>) as well] ye↑ (<strong>nod, smile</strong>)</td>
</tr>
<tr>
<td>249.</td>
<td>C: [Yeh, yeh] (<strong>smile, scratch head</strong>) {€↓}</td>
</tr>
<tr>
<td>250.</td>
<td>D: so where else do you like going↑ Is <strong>Butlins</strong> your <strong>ultimate favorite</strong>[place] ↑ (<strong>gestures with hands, nod</strong>) {€→C}</td>
</tr>
<tr>
<td>251.</td>
<td>C: [Yeh↓] {€↑}</td>
</tr>
<tr>
<td>252.</td>
<td>D: Is it↑ (<strong>nod</strong>) and how many times have you been to <strong>Butlins</strong>↑ {€→C}</td>
</tr>
<tr>
<td>253.</td>
<td>C: (<strong>thinking</strong>) (0.4) {€→D} wha, lots↓</td>
</tr>
<tr>
<td>254.</td>
<td>D: Lots↓ (<strong>nod</strong>). Have you↑ [yeh↓] (<strong>nod</strong>) {€→C}</td>
</tr>
<tr>
<td>255.</td>
<td>C: [yeh] (<strong>wiping face, smile</strong>) {€→D}</td>
</tr>
<tr>
<td>256.</td>
<td>D: Ok↑ (<strong>nod</strong>) so who do you go to <strong>Butlins</strong> with↑ {€→C}</td>
</tr>
<tr>
<td>257.</td>
<td>C: Mum↓ {€↑}</td>
</tr>
<tr>
<td>258.</td>
<td>D: Mum↓ {€→C}</td>
</tr>
<tr>
<td>259.</td>
<td>C: Dad↓ {€↑→D}</td>
</tr>
<tr>
<td>260.</td>
<td>D: Yeh (<strong>nod</strong>)</td>
</tr>
<tr>
<td>261.</td>
<td>C: {€→D} and my nan↓ (<strong>smiling</strong>)</td>
</tr>
<tr>
<td>262.</td>
<td>D: <strong>Right</strong>↓ (<strong>nod, chin tuck, eye brows raised</strong>) so a right little old (<strong>nodding</strong>) shindig</td>
</tr>
<tr>
<td>Line</td>
<td>Transcript</td>
</tr>
<tr>
<td>------</td>
<td>------------</td>
</tr>
<tr>
<td>263.</td>
<td>C: Like singing, I like singing well (leaning down to shoe) I like Elvis one (nod) Elvis ({\varepsilon \rightarrow D})</td>
</tr>
<tr>
<td>264.</td>
<td>D: You don't (slight shake of head) do the old Karaoke do [you(\uparrow)] (smiling) ({\varepsilon \rightarrow C})</td>
</tr>
<tr>
<td>265.</td>
<td>C: [Yes(\downarrow \uparrow)] (pulling back, smile, nod) ({\varepsilon \rightarrow D})</td>
</tr>
<tr>
<td>266.</td>
<td>D: Do you(\uparrow) [(\varepsilon \rightarrow C)] (head towards C, smiling)</td>
</tr>
<tr>
<td>267.</td>
<td>C: Yeh ({\varepsilon \rightarrow D})</td>
</tr>
<tr>
<td>268.</td>
<td>D: LAUGH((\varepsilon \rightarrow C))</td>
</tr>
<tr>
<td>269.</td>
<td>C: I've got a bo..., I've got a bubble machine (counting on fingers) a thing, a co.. (Karaoke) in my bedroom ({\varepsilon \downarrow \rightarrow D, \varepsilon})</td>
</tr>
<tr>
<td>270.</td>
<td>D: Right(\uparrow) (nod, smile) ({\varepsilon \rightarrow C})</td>
</tr>
<tr>
<td>271.</td>
<td>C: I got a new, I'm getting a new one(\downarrow \uparrow) ({\varepsilon \rightarrow D})</td>
</tr>
<tr>
<td>272.</td>
<td>D: OK(\downarrow) (nod, smile) ({\varepsilon \rightarrow C})</td>
</tr>
<tr>
<td>273.</td>
<td>C: X Factor one(\downarrow) (..) again (leaning forward towards D, smiling) ({\varepsilon \rightarrow D})</td>
</tr>
<tr>
<td>274.</td>
<td>D: Right(\downarrow) (emphatic nod, smile) Oh [lord] (shaking head) ({\varepsilon \rightarrow C})</td>
</tr>
<tr>
<td>275.</td>
<td>C: [I got] all the gear in my bedroom ({\varepsilon}) I got tar (guitar), (indicating on finger)</td>
</tr>
<tr>
<td>276.</td>
<td>D: [Yeh(\uparrow)] ({\varepsilon \rightarrow C})</td>
</tr>
<tr>
<td>277.</td>
<td>C:[(\varepsilon \rightarrow D)] the lot ({\varepsilon \rightarrow D}) (smiling)</td>
</tr>
<tr>
<td></td>
<td>C: (..) Microphone (\downarrow)</td>
</tr>
<tr>
<td>278.</td>
<td>D: Do you put your hair up (Placing hand on top of head) in a big quiff (circular movement of hand over head, smile) ({\varepsilon \rightarrow C})</td>
</tr>
<tr>
<td>279.</td>
<td>C: I've got Elvis (putting head back and smiling) wig at home ({\varepsilon \rightarrow D})</td>
</tr>
<tr>
<td>280.</td>
<td>D: Oh an Elvis wig (Placing hand in front of face, laughing)</td>
</tr>
<tr>
<td>281.</td>
<td>C: Yeh ({\big smile}) ({\varepsilon \rightarrow D})</td>
</tr>
<tr>
<td>282.</td>
<td>D: Have you got the Elvis (drawing sideburns on face with index fingers) sideburns as well(\uparrow) There er what about the sun glasses (drawing glasses on face with fingers) do</td>
</tr>
<tr>
<td>Line</td>
<td>Text</td>
</tr>
<tr>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>283.</td>
<td>C: [Yeh↓] ((nod, pull back and smile)) {€→D}</td>
</tr>
<tr>
<td>284.</td>
<td>D: Yeh↓ ((nodding)) you’ve ((pointing to C)) got those as well [have you]↑ ((laughing)) {€→C}</td>
</tr>
<tr>
<td>285.</td>
<td>C: [Yeh↓] ((leaning back and laughing)) and the costume↑ {€→D}</td>
</tr>
<tr>
<td>286.</td>
<td>D: Oh my lord↑↓ not the ((shake of head)) white one↑ {€→C}</td>
</tr>
<tr>
<td>287.</td>
<td>C: No black one↓ {€→D}</td>
</tr>
<tr>
<td>288.</td>
<td>D: Oh you’ve got the black one↑ ↑ ((nod)) yeh↑ {€→C}</td>
</tr>
<tr>
<td>289.</td>
<td>C: yeh ↓ {€→D}</td>
</tr>
<tr>
<td>290.</td>
<td>D: Yeh↓ {€→C}</td>
</tr>
<tr>
<td>291.</td>
<td>D: It’s a bit like his↑ (..) ((waving flat palm up and down)) was that when he was very very young↑ ((emphatic gesture with clawed hand)) [or] {€→C}</td>
</tr>
<tr>
<td>292.</td>
<td>C: [Yeh] ((nod)) {€→D}</td>
</tr>
<tr>
<td>293.</td>
<td>D: Yeh OK↓ so what’s your favorite Elvis song↑ {€↑€→C},</td>
</tr>
<tr>
<td>294.</td>
<td>C: (2.1) Teddy bear↓ {€→D}</td>
</tr>
<tr>
<td>295.</td>
<td>D: Is it↓ ((surprised look and sit up, smile)) Teddy bear↑ {€→C}</td>
</tr>
<tr>
<td>296.</td>
<td>C: And All shook up one↓ {€→D}</td>
</tr>
<tr>
<td>297.</td>
<td>D: And All shook up↓ ((emphatic nod, smile)), yeh, oh right↓ OK↓ so you’ve got the old microphone↓ ((miming using mike)) you give it this↓ [yeh]↑ {€→C}</td>
</tr>
<tr>
<td>298.</td>
<td>C: [Yes↓] {€φ}</td>
</tr>
<tr>
<td>299.</td>
<td>D: Yeh↓ ((nodding))</td>
</tr>
<tr>
<td>300.</td>
<td>C: and the Elvis moves ((twisting hips and legs, smile)) {€→D}</td>
</tr>
<tr>
<td>301.</td>
<td>D: And ((nodding)) you do the ((LAUGH)) {€φ}</td>
</tr>
<tr>
<td>302.</td>
<td>C: ((LAUGH, rest head on arm)) {€φ}</td>
</tr>
<tr>
<td>303.</td>
<td>D: ((LAUGH slapping leg)) Have you won any competitions↑↑ {€→C}</td>
</tr>
<tr>
<td>304.</td>
<td>C: No↓ not yet↓ {€→D}</td>
</tr>
</tbody>
</table>
D: Not yet↓ well ((shake of head)) I think that’s a shame↑ I think that’s an INJUSTICE↑="((emphatic gesture with hand))"

C:= and I tchu↑, and I o, {€↑} and I like pool↓ ((nod)) {€→D}

D: ..) (smile,(thinking expression)) Pool↑ ((slight nod)) {€→C}

C: yeh↓ play pool and that↓ ((mimes using cue)) {€→D}

D: Oh do you↑ ((pull back)) {€→C}

C: Yeh↓ {€→D}

D: Are you a good [shot with your] {€→C}

C: [I won , I won a] {€φ} I won a trophy once↓,((rubbing finger on nose)) {€→D} mm (..)

D: Oh ((eye brows raised, pull back)) Blimey↑↓ {€→C}

C: I won trophy on pool↓ (..) competition↓ {€φ→D}

D: Yeh↓ ((nod)) {€→C}

C: and a Juday↓ (judo? Two day?) (..) once↑{€→D}

D: Crickey↑, ((pull back, eyebrows raised)) [you're' a bit↓] ((nodding, movement of hand, smile)) a bit good then↑ {€→C}

C: [You know] ((pointing on thigh, smile)) {€↓→D} Yeh↓

D: yeh↑ ((nod)) oor↑↓ ((pull back, laugh))

C: Bit ?? something↓ ((shaking flat hand, smile)) {€→D}

D: ((LAUGH, lean forward)} {€→Cφ}

C: ((leaning back)) Right↓ what we {€→prompt card €→D}

D: {€φ}Right↓ OK↓ so↓ {€→C} that’s, so ((indicating on fingers)) you like singing Elvis songs↑

C:Yeh {€φ}

D: You’re ((indicating on fingers)) very good at playing pool↑ {€↓→C}

C: Yeh↓ {€φ→D}

D: ((pull head back, slight shake of head)) Any other talents↑ {€→C}

C: (...) X I wa↓ I wat ↓I like X Factor↓ (..) on TV↓ ((nodding, smile)) {€→Cφ→C}

D: Do you↑ Do you ((nodding)) sing along to that as well↑ {€→C}
<table>
<thead>
<tr>
<th>Line</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>330.</td>
<td>C: No↓ <strong>(shake of head, smile)</strong> {€→D}</td>
</tr>
<tr>
<td>331.</td>
<td>D: Do you watch Strictly <strong>(nod)</strong> Come <strong>Dancing</strong>↑↓ {€→C}</td>
</tr>
<tr>
<td>332.</td>
<td>C: <strong>Yeh</strong>↓ {(leaning forward)} <strong>Do you</strong>↑ {€→D}</td>
</tr>
<tr>
<td>333.</td>
<td>D: I <strong>do</strong> actually↓ Do you give it all the <strong>moves</strong> {(miming waltz movements, smiling)} around the, around the lounge↑ {€→C}</td>
</tr>
<tr>
<td>334.</td>
<td>C: Nar↓ {(waving with flat hand, smiling, turning away)} {€→D \φ}</td>
</tr>
<tr>
<td>335.</td>
<td>D: {(LAUGH, smile)} <strong>NO</strong>↑↓ I'm [surprised↑↓] {€→C}</td>
</tr>
<tr>
<td>336.</td>
<td>C: [Do you want] to do that then↑ {(pointing to camera)} recorder↑ {€→D}</td>
</tr>
<tr>
<td>337.</td>
<td>D: {€→camera} (..) Do I <strong>record</strong> it↑ {€→C} <strong>SOME</strong>times I record it if I [miss something↓] {(nod, slight frown)}</td>
</tr>
<tr>
<td>338.</td>
<td>C: {(Pointing at camera)} record it on there↓ {€→D}</td>
</tr>
<tr>
<td>339.</td>
<td>D: Oh, I don't know darling↓ {(shaking head, eye brows raised)} <strong>what</strong>↑↑{(..} <strong>Strictly</strong>↑ {€→camera→C}</td>
</tr>
<tr>
<td>340.</td>
<td>C: No↓ {(pointing to camera)} {€→camera→D}</td>
</tr>
<tr>
<td>341.</td>
<td>D: Oh you <strong>dancing</strong>↑ {(pointing C and camera)} {€→C}</td>
</tr>
<tr>
<td>342.</td>
<td>C: No↓ {€→D→camera} {(pointing to camera, smiling)}</td>
</tr>
<tr>
<td>343.</td>
<td>D: &quot;I'm not bothered↓&quot; {(shake of head)} {€→C→camera→C}</td>
</tr>
<tr>
<td>344.</td>
<td>C: {€→camera} [I want play ] {€→D} I want play it back↓ see what it sounds like↓ {(pointing to camera)}</td>
</tr>
<tr>
<td>345.</td>
<td>D: Oh <strong>OK</strong>↓ {(nodding)} That's cool↓ when we've <strong>finished</strong>↓ {(signing finished)} yeh↓ {(nodding head)} we could do that↓ {(nodding head)} yeh↓ {€→camera→C}</td>
</tr>
<tr>
<td>346.</td>
<td>C: <strong>Yeh</strong>↓ {€→D \φ→D}</td>
</tr>
<tr>
<td>347.</td>
<td>D: Do you think you've had enough {(sideways movement of head)} talking to me↑ {€→C}</td>
</tr>
<tr>
<td>348.</td>
<td>C: No↓ let me ask you↓ what you {€→ prompt card} [what you↓]</td>
</tr>
<tr>
<td>349.</td>
<td>D: [Ok↓ look well] {(nodding)} we were talking about going on <strong>oliday</strong>↑↓ {€→prompt card →C}</td>
</tr>
<tr>
<td>350.</td>
<td>C: <strong>Yeh</strong>↓ {€→D}</td>
</tr>
</tbody>
</table>
D: and we've ended up talking about Elvis Pre (he)sley↑↓ (nod, smile) {€→C}

C: Yeh↓ {€↓} ((smile))

D: and the **X Factor**↑↓ ((shake of head LAUGH)) {€→C}

C: yeh↓ {€→prompt card} ((smile))

D: ((LAUGH)) So we **slightly** ((drawing circle on prompt card with finger)) gone off track↓ haven't we↑ {€↓prompt card}

C: {€→D€→card}

D: OK↓ so you've talked about your **family**↓ {€↓prompt card→C}

C: °Mm↓° {€↓prompt card} ((looks serious))

D: {€→C} yeh, so you've got your mum↓ your dad↓ your **Nan**↑ ((counting on fingers))

C: Yeh↓ {€↓}

D: Got any ((shaking head)) brothers and sisters↑ {€→C}

C: ((putting one finger in the air)) hh (1.6) Yes↓ somewhere↓ {€↓→D} ((smile))

D: Somewhere↑↓ ((Emphatic nod, LAUGH,)) {€→C}

C: ((leaning back, LAUGH)) {€↓→C}

D: is that a brother↑ (..) or a sister↑ ((shake of head)) {€→C}

C: (..) **Both**↓ {€→D}

D: **Both**↑ ((emphatic nodding head)) OK↓↑ so you've got a brother and a sister↓ yeh↑ {€→C}

C: Yes↓ {€→D}

D: I've got **three** ((pointing to self)) brothers↓ ((nod)) {€→C}

C: Yeh↓ ((nod)) {€→C↑}

D: ((point with I finger)) and a **sister**↓ {€→C}

C: ((reaching to prompt card)) {€→card}

D: **OK**↑ (0.3) right, Pets↓ {€→card}

C: You got any pets↑ {€→D}

D: **OK**↓ ((sitting down)) {€→prompt sheet}

C: Cheerio↑ **be good** →↑ ((someone leaving room)) ((sitting down)) {€↓table behind}
377. D: Righty ho so you have shared a room with Paul Duff (nod of head, smile) then↑
   (Od→prompt sheet→C)
378. C: Yes↑ (nod) (Od→D)
379. D: You kept him awake (nod, smile) all night↑ (Od→C)
380. C: Yeh↑ (LAUGH, sitting back in chair, reaching to prompt sheet) (Od→C)
381. D: ((LAUGH)), blimey that must be some heavy snoring↑↑ (nodding) (Od→C→prompt card)
382. C: ((picking up prompt card and showing to D)) (Od→prompt card→C→prompt card) (1.6)
383. D:[How] heavy do you snore↑ (Od→C↓→C)
384. C: (Od→D) oot↑ ((smiling))
385. D: How heavy do you snore↑ (Od→C)
386. C: gr huw (Od→D)
387. D: Ooo, yeh↑ (pulling face, nod) that’s loud↓ (Od→C→prompt sheet)
388. C: yeh↓ (Handing prompt sheet to D)) (Od→prompt sheet→D)
389. D: Yeh↓ ((nod)) OK then So↓ (..), we’re discussing favorite food weren’t we↑ (Od→Card)
390. C: uh hu↓ (turning and looking at card)) (Od→Card)
391. D: You come up with pasties↓ (Od→C)
392. C: Yeh↑ (Od→D→camera→D)
393. D: Bit partial to a pasty me self↓ (eyes narrowing, nod) (Od→C)
394. C: Yeh↑ (Od→C round room)
395. D: Yeh↑ not bad↑ not bad↑ (Nodding head) (..) Is it just pasties↑ what about a roast
dinner↑ (Od→C)
396. C: (pointing to camera) that better↓ that better in it↑ (Od→D)
397. D: ((leaning forward and looking at camera)) That is better actually↑ (nod) (Od→camera)
   Yeh↑ (nod)
398. C: I like compu↑ I like computers↑ I like computers as well↓ (Od↓→D)
399. D: You like computers↑↑ (nod, screwing up face)) (Od→C)
400. C: Yes (Od→D)
<table>
<thead>
<tr>
<th>Line</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>401.</td>
<td>D: <strong>Do you</strong>° (pulling face) {€→C}</td>
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<tr>
<td>402.</td>
<td>C: (miming using keyboard) Yes ↓ {€↓ at hands →D}</td>
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<tr>
<td>403.</td>
<td>D: Oh, I don't understand them° (shaking head, pulling face) I'm not (shake of head) very good [at computers] ↓ {€→C}</td>
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<tr>
<td>404.</td>
<td>C:</td>
<td>[No°] {€φ→D}</td>
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<tr>
<td>405.</td>
<td>D: No ↓ I'm alright° (nodding) I'm alright° (shrugging shoulders) I can get by↓ (spread hand movement, nodding) {€→C}</td>
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<tr>
<td>406.</td>
<td>C: Yeh↑ {€φ}</td>
<td></td>
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<tr>
<td>407.</td>
<td>D: But I'm not brilliant (indicating with flat hands) with them↓ {€→C}</td>
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<td>408.</td>
<td>C: No↑ {€φ→D}</td>
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<tr>
<td>409.</td>
<td>D: Do you do that whole internet stuff↑ (indicating with flat hands) {€→C}</td>
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<tr>
<td>410.</td>
<td>C: Yes↓ {€→D} ((smile))</td>
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<tr>
<td>411.</td>
<td>D: <strong>Do you</strong>° (nodding)</td>
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<tr>
<td>412.</td>
<td>C: Sometimes yes ↓ ((smiling)) {€φ}</td>
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<tr>
<td>413.</td>
<td>D: (nod) what eBay° {€→C}</td>
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<tr>
<td>414.</td>
<td>C: Nar↓ {€→Dφ} (shaking head, smile)</td>
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<tr>
<td>415.</td>
<td>D: No↓ (pull face, shake of head) I don't understand eBay↓ (shake of head) {€→C}</td>
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<tr>
<td>416.</td>
<td>C: (pointing to camera)</td>
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<tr>
<td>417.</td>
<td>D: I don't either↓ (pull face) {€→camera} so what about cameras° {€→C} Are you any good with cameras↑</td>
<td></td>
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<tr>
<td>418.</td>
<td>C: Yeh↓ (nod of head) {€→D}</td>
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<tr>
<td>419.</td>
<td>D: Photography↑ {€→C}</td>
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<tr>
<td>420.</td>
<td>C: Yeh↓ (nod of head, smile) {€→D}</td>
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<td>421.</td>
<td>D: (pull head up) Are you° {€→C}</td>
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<tr>
<td>422.</td>
<td>C: Yeh↑ ((smile)) {€→D}</td>
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<tr>
<td>423.</td>
<td>D: Oh right↓ OK° (nodding) Have you got nice photo albums at home↑ (mime holding book) {€→C}</td>
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<tr>
<td>424.</td>
<td>C: Yeh° (nod)° {€φ→D}</td>
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<tr>
<td>425.</td>
<td>D: Oh nice↓ (nodding head) What you got in your photo albums↑ {€→C}</td>
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<tr>
<td>Line</td>
<td>Transcript</td>
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<tr>
<td>426.</td>
<td>C: All sorts ↓ {€→D}</td>
<td></td>
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<tr>
<td>427.</td>
<td>D: ([LAUGH]) ↓ {€→C}</td>
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<tr>
<td>428.</td>
<td>C: But ↓ {€→C}</td>
<td></td>
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<tr>
<td>429.</td>
<td>D: Oh↓ ((shrug and nod)) obviously↓ yeh↑ ↓ {€→C}</td>
<td></td>
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<tr>
<td>430.</td>
<td>C: My mate↓ ↓ {€→C}</td>
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<tr>
<td>431.</td>
<td>D: Ah↑↑ who’s your mate↑ ↓ {€→C}</td>
<td></td>
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<tr>
<td>432.</td>
<td>C: (..) re i cor (?)↓↓ {€→D} ((smiling))</td>
<td></td>
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<tr>
<td>433.</td>
<td>D: Right yeh↑↑ OK↓ ((nodding head slowly, does not understand)) ↓ {€→C}</td>
<td></td>
<td></td>
</tr>
<tr>
<td>434.</td>
<td>C: (..) Yeh↓↓ {€φ}↓ I got lot of mates↓↓ {€→Dφ}↓ ((sitting back in chair))</td>
<td></td>
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<tr>
<td>435.</td>
<td>D: <strong>Have you</strong>↓↓ ↓ {€→C}</td>
<td></td>
<td></td>
</tr>
<tr>
<td>436.</td>
<td>C: Yeh {€→Dφ} ((smiling))</td>
<td></td>
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<tr>
<td>437.</td>
<td>D: Is he like your best mate↑ {€→C}</td>
<td></td>
<td></td>
</tr>
<tr>
<td>438.</td>
<td>C: Yeh {€→D} ((smile))</td>
<td></td>
<td></td>
</tr>
<tr>
<td>439.</td>
<td>D: oh right↓↓ ((nodding head)) Ok↓ got any girlfriends↑ {€→C}</td>
<td></td>
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<tr>
<td>440.</td>
<td>C: I <strong>did</strong> have one↓↓ {€→C}</td>
<td></td>
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<tr>
<td>441.</td>
<td>D: did you↑ {€→C}</td>
<td></td>
<td></td>
</tr>
<tr>
<td>442.</td>
<td>C: No good ((shaking head, smiling)) {€→Cφ}</td>
<td></td>
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</tr>
<tr>
<td>443.</td>
<td>D: No good↓↓ {€φ}↓↓ (shake of head) fair enough mate↓↓ {€φ}↓↓ ((nod)) Fair enough↓↓↓ {€→Dφ} ((nodding))</td>
<td></td>
<td></td>
</tr>
<tr>
<td>444.</td>
<td>C: ((Pointing to camera))↓↓↓ Is that’s it then↑↑↑ in it↑↑↑ {€→camera→D}</td>
<td></td>
<td></td>
</tr>
<tr>
<td>445.</td>
<td>D: I don’t <strong>know</strong>↓↓↓ ((shrug shoulder, shake of head))↓↓↓ if you think you’ve had enough↑ ((finish movement with hands))↓↓ that’s fine↓↓ (..)↓↓ {€→camera→C} ((shake of head))↓↓↓ Have you had enough↑ ((nod of head))</td>
<td></td>
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</tr>
<tr>
<td>446.</td>
<td>C: Shall we try it ((pointing to camera))↓↓↓ see what it sounds like↑ {€→camera→D}</td>
<td></td>
<td></td>
</tr>
<tr>
<td>447.</td>
<td>D: you <strong>just</strong> want to see what <strong>It looks like</strong>↓ don’t you↑ ((nodding, smile)) {€→Cφ}</td>
<td></td>
<td></td>
</tr>
<tr>
<td>448.</td>
<td>C: Yeh↓↓ ((nod))↓↓ {€→D}</td>
<td></td>
<td></td>
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<tr>
<td>449.</td>
<td>D: Yeh↓↓ ((nod))↓↓ go on then↓↓ ((indicating camera with head))</td>
<td></td>
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<tr>
<td>450.</td>
<td>C: ((Getting up and going to camera))↓↓↓ Press, press play in it↑↑↑</td>
<td></td>
<td></td>
</tr>
<tr>
<td>451.</td>
<td>D: I don’t know↓↓ {€φ}↓↓ {€→camera}↓↓↓ I haven’t got a clue↓↓↑</td>
<td></td>
<td></td>
</tr>
<tr>
<td>452.</td>
<td>C: Press play</td>
<td></td>
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</tbody>
</table>
**453.** D: I've **told** you Connor↓ ((small shake of head)) it's no good asking **me**↑ {€→camera}

**454.** C: That one↑

<table>
<thead>
<tr>
<th>Column 1</th>
<th>Column 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oh what a beautiful day: Evaluative language</td>
<td></td>
</tr>
<tr>
<td>(2.4) (..) Pause</td>
<td></td>
</tr>
<tr>
<td>[a car] Overlap</td>
<td></td>
</tr>
<tr>
<td>[yes please]</td>
<td></td>
</tr>
<tr>
<td><strong>A pen</strong> Emphasis, louder</td>
<td></td>
</tr>
<tr>
<td>↑ Rising intonation</td>
<td></td>
</tr>
<tr>
<td>↓ Falling intonation</td>
<td></td>
</tr>
<tr>
<td>{€→} Eye gaze towards</td>
<td></td>
</tr>
<tr>
<td>{€♂} Look away</td>
<td></td>
</tr>
<tr>
<td>((nod)) Gesture</td>
<td></td>
</tr>
<tr>
<td><strong>Repeat</strong> Repeat by communication partner</td>
<td></td>
</tr>
<tr>
<td><strong>Repeat</strong> Repeat by research partner</td>
<td></td>
</tr>
<tr>
<td>Turn number</td>
<td></td>
</tr>
<tr>
<td>Transcription</td>
<td></td>
</tr>
<tr>
<td>Column 3</td>
<td>Number of TCUs in turn</td>
</tr>
<tr>
<td>----------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Column 4</td>
<td>Notes</td>
</tr>
</tbody>
</table>
# Appendix 10: Table of comparison

## Summary conversation Features

<table>
<thead>
<tr>
<th></th>
<th>Cate</th>
<th>Connor</th>
<th>Alan</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Discourse Structure</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Topic control</strong></td>
<td>Tried to use objects and events to shift topic – partner brought back to original topic after few turns? not understood because of unintelligibility EG where attempt at shift ignored</td>
<td>Dominated topic control</td>
<td>Mostly controlled topic Abrupt topic change – topic nomination No pre-shift tokens or assessments</td>
</tr>
<tr>
<td><strong>Turn construction</strong></td>
<td>Mostly 1 TCU Yes/no, single word 2 TCU yes + additional Info</td>
<td>Mostly 1 TCU More 2 TCU Double questions OQ + Wh Q</td>
<td>Mostly 1 TCU Yes Pausing, repetition, self repair Tina – 3-8 TCU</td>
</tr>
</tbody>
</table>
### Summary conversation Features

<table>
<thead>
<tr>
<th></th>
<th>Cate</th>
<th>Connor</th>
<th>Alan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cate Partners</td>
<td>Connor Partners</td>
<td>Alan Partners</td>
</tr>
<tr>
<td></td>
<td>Chains of Q, yes/no</td>
<td></td>
<td>+Q</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Sally 2 TCU yes + additional Info</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Sally 2+ story telling</td>
</tr>
<tr>
<td><strong>Co-construction</strong></td>
<td>Multiple examples – shared knowledge</td>
<td></td>
<td>Narrative of past events with Qs from partner</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Narrative of past events with Qs from A</td>
</tr>
<tr>
<td><strong>Recipient design</strong></td>
<td></td>
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</tr>
<tr>
<td>Performance</td>
<td>1:280 Prompted to demonstrate knowledge</td>
<td></td>
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<tr>
<td>Test questions</td>
<td>1:176 ask her who the lady was? 1:207 3:86 – what was my horse called, persistence with use of</td>
<td></td>
<td>Sally: Q she already knew answer</td>
</tr>
</tbody>
</table>
### Summary conversation Features

<table>
<thead>
<tr>
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<th>Cate</th>
<th>Connor</th>
<th>Alan</th>
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<tbody>
<tr>
<td><strong>Shepherding</strong></td>
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<tr>
<td>Cate Partners</td>
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<tr>
<td>VOCA</td>
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<tr>
<td><strong>Use of questions</strong></td>
<td>Very few Q’s</td>
<td>Dominated by partner</td>
<td>Dominated by partner</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Large nos clarification</td>
<td>Eric: C more Qs, more WH Q, mostly Yes/no Noticeable pause before non-preferred answer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Qs with rising intonation</td>
<td>Dominated by partner Eric problems understanding C’s Q Tag Qs to initiate agreement or reassurance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes/no Q’s to co-construct message or clarification</td>
<td>Tina and Diane: extended Q/yes sequences</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Very few tag Qs</td>
<td>Sally: yes/ no, tag Q</td>
</tr>
<tr>
<td><strong>Breakdown and Repair</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>Breakdown</strong></td>
<td>No problems understanding partner – but difficult to be sure because of reduced</td>
<td>Frequent understanding checks Use of familiarity and prior</td>
<td>2 occasions where they had difficulty understanding C Utilising fillers</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>V little unintelligibility</td>
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<td></td>
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<td></td>
<td>Sally: did not understand A – but didn’t seek clarification</td>
</tr>
</tbody>
</table>
**Summary conversation Features**

<table>
<thead>
<tr>
<th></th>
<th>Cate Partners</th>
<th>Connor Partners</th>
<th>Alan Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>intelligibility</strong></td>
<td></td>
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<tr>
<td>Frequent unintelligibility</td>
<td></td>
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<tr>
<td><strong>knowledge</strong></td>
<td></td>
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</tr>
<tr>
<td><strong>Self repair</strong></td>
<td>No SIR, frequent OIR</td>
<td>Self initiated repair</td>
<td>Similar amount as partners – pauses, restarts</td>
</tr>
<tr>
<td>Reduced content, +gesture</td>
<td>Struggle to formulate ideas with multiple TCUs</td>
<td>Tina and Eric as much</td>
<td>Similar amount as Alan – pauses, restarts</td>
</tr>
<tr>
<td><strong>Other initiated repair</strong></td>
<td>Frequent repeat/partial repeat – rising tone candidate answer question request for repetition Extended sequence – range of strategies</td>
<td>Provided additional information</td>
<td>Repeat/partial repeat</td>
</tr>
<tr>
<td></td>
<td>Initiated repair when didn’t understand C Repeat/partial repeat – rising tone increased emphasis Occasional direct correction or additional info</td>
<td></td>
<td>Initiated repair when didn’t understand A Sometimes reduce volume Repeat/partial repeat – rising tone</td>
</tr>
<tr>
<td><strong>Overlap</strong></td>
<td>Mostly at TCU</td>
<td>Mostly at TCU</td>
<td>Mostly at TCU</td>
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</table>

*Note: TCU stands for Turn Changing Unit.*
<table>
<thead>
<tr>
<th>Summary conversation Features</th>
<th>Cate</th>
<th>Connor</th>
<th>Alan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cate</td>
<td>Partners</td>
<td>Connie</td>
<td>Partners</td>
</tr>
<tr>
<td>confirmation or continuer – reflected polarity</td>
<td>TCU confirmation or continuer reflected polarity</td>
<td>Frequent polarity between partner overlap At TCU, significant pause, when Cate didn’t respond they filled turn</td>
<td>confirmation or continuer reflected polarity</td>
</tr>
<tr>
<td>Once to disagree with partner</td>
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<tr>
<td>Sometimes her contribution ignored and the overlapped</td>
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<tr>
<td>Pauses</td>
<td>Frequent pauses of 2+ sec – no discomfort Pause if not requiring simple Y/N or single word answer</td>
<td>Delay when C unintelligible before they offer candidate answer or OIR</td>
<td>Inter-turn pauses – formulation problem? Lon pauses when he struggled to answer or gave dispreferred answer</td>
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<td></td>
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<tr>
<td></td>
<td><strong>Cate</strong></td>
<td><strong>Connor</strong></td>
<td><strong>Alan</strong></td>
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<td>------------------------</td>
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</tr>
<tr>
<td><strong>Cate Partners</strong></td>
<td>Connor</td>
<td>Partners</td>
<td>Alan</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Eric; Inter-turn pauses</strong></td>
</tr>
</tbody>
</table>

**Paralinguistic features**

<table>
<thead>
<tr>
<th><strong>Intonation and stress</strong></th>
<th><strong>Cate</strong></th>
<th><strong>Connor</strong></th>
<th><strong>Alan</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mostly falling tone</td>
<td>More varied tone</td>
<td>More varied tone</td>
<td>More varied tone</td>
</tr>
<tr>
<td>Rising tone</td>
<td>Occasionally to ask Q – not always acknowledged</td>
<td>Occasionally to ask Q</td>
<td>More varied tone</td>
</tr>
<tr>
<td>Fall/rise tone</td>
<td>To deny what was said</td>
<td>Used to express reservation, queried accuracy of her content Uncertain about understanding</td>
<td>Occasional for tentative answer Unsure of what C saying</td>
</tr>
<tr>
<td>Rise/fall tone</td>
<td>When definite about her answer + broad smile</td>
<td>increased stress, facial expression and increased</td>
<td>Very noticeable – increased stress, facial expression and increased pitch</td>
</tr>
<tr>
<td><strong>Summary conversation Features</strong></td>
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<td>----------------------------------</td>
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</tr>
<tr>
<td><strong>Cate</strong></td>
<td><strong>Connor</strong></td>
<td><strong>Alan</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Cate</strong></td>
<td><strong>Partners</strong></td>
<td><strong>Connor</strong></td>
<td><strong>Partners</strong></td>
</tr>
<tr>
<td><strong>Speaking to dog</strong></td>
<td><strong>pitch</strong></td>
<td><strong>2: 201 doesn’t want to finish-dispreferred no</strong></td>
<td><strong>1:143 Minimal fillers</strong></td>
</tr>
<tr>
<td><strong>Reduced volume</strong></td>
<td></td>
<td><strong>1: 105 ye</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Variation in pitch</strong></td>
<td><strong>Increased pitch evident</strong></td>
<td><strong>3:132 oh right</strong></td>
<td><strong>Increased pitch evident</strong></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Non-verbal communication</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eye contact</strong></td>
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<tr>
<td>Summary conversation Features</td>
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<tr>
<td>-------------------------------</td>
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<tr>
<td><strong>Facial expression</strong></td>
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<td></td>
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<tr>
<td><strong>Nodding and head shaking</strong></td>
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<tr>
<td><strong>Gesture and sign</strong></td>
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<td></td>
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<tr>
<td>Summary conversation Features</td>
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<tr>
<td>-------------------------------</td>
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<tr>
<td><strong>Cate</strong></td>
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<tr>
<td>Cate</td>
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<tr>
<td>Conversation 2: similar amount as partner – sign sequence with M</td>
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<tr>
<td>Conversation 3: additional info</td>
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<tr>
<td>Artefacts</td>
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<tr>
<td><strong>Use of language</strong></td>
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<tr>
<td>Sound system</td>
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<tr>
<td>Grammatical structure</td>
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<tr>
<td>Lexical choice</td>
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<tr>
<td>Summary conversation Features</td>
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<tr>
<td>-------------------------------</td>
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<tr>
<td><strong>Cate</strong></td>
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<tr>
<td>Cate: Partners</td>
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<tr>
<td><strong>accuracy</strong></td>
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<tr>
<td>Child like Qs</td>
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<tr>
<td>Favourite colour</td>
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<tr>
<td><strong>Third person</strong></td>
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<tr>
<td>Cate: 1 line 207 In all 3 conversations</td>
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<tr>
<td><strong>Evaluative language</strong></td>
</tr>
<tr>
<td>Very little, no amplification Swearing sequence</td>
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<td></td>
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<tr>
<td>Dora: appreciation, judgement, little amplification, but amplified terminology</td>
</tr>
<tr>
<td>Sally: Equal amount, more appreciation and affect, nice, fun, good Copied Says term ? amplification</td>
</tr>
<tr>
<td>Sally: Equal amount, more judgement Wider vocab ? amplification</td>
</tr>
</tbody>
</table>
Appendix 11: Framework of Analysis

<table>
<thead>
<tr>
<th>Area of Interaction</th>
<th>Person with learning difficulty</th>
<th>Their Conversation Partner</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discourse structure</td>
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<tr>
<td>Topic choice and control</td>
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<td>Use of questions</td>
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<tr>
<td>Conversation breakdown</td>
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<td>Area of Interaction</td>
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<tr>
<td>Self repair</td>
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<td>Initiation of repair</td>
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<td>Overlap</td>
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<td>Pause</td>
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<tr>
<td><strong>Language</strong></td>
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<tr>
<td>Lexical choice</td>
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<tr>
<td>Syntactic structure – including length of sentences, use of tense</td>
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<td>Sound system</td>
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<td><strong>Prosody</strong></td>
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<td>Pitch</td>
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<td><strong>Non-verbal communication</strong></td>
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<td>Eye gaze</td>
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<td>Nodding/head shaking</td>
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<td>Use of pictures</td>
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<tr>
<td><strong>Use of communication tools</strong> – egg: SGD, communication passport etc</td>
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</tbody>
</table>

**General Comments:**

**Summary:**
<table>
<thead>
<tr>
<th>Person with a learning Difficulty:</th>
<th>Partner:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of conversation:</td>
<td>Context/environment:</td>
</tr>
<tr>
<td>Assessment completed by:</td>
<td>on:</td>
</tr>
</tbody>
</table>