Understanding, developing and evaluating home-school partnerships for children on the autism spectrum through home-school reading

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*Pseudonym

Abstract

This mixed-methods study was set in a suburban local authority nursery and primary special school (3-11yrs) for children on the autism spectrum. The study consisted of four consecutive phases, designed to:

- examine the factors which affect parent participation in, and teacher facilitation of, home-school reading for nursery and primary school aged children with autism;
- develop a model of parent and teacher collaborative working to help parents carry out reading activities with their autistic children at home;
- evaluate the intervention and understand its impact on the participants.

Phase 1 of the study (Autumn Term, 2013) employed a parent questionnaire and a review of a previous teacher survey to gain understanding of home and school reading practices prior to intervention. Phase 2 (Autumn Term, 2013) was a training phase that drew on the Phase 1 data. It consisted of separate training workshops for school staff and parents. These included activities to help participants explore attitudes towards collaborative home-school working and to develop understanding, skills and confidence in teaching children with autism to read. Phase 3 (Spring Term, 2014) was a 12-week home-school reading programme in which parent and teacher pairs worked collaboratively to share strategies and carry out similar reading activities in both home and school settings. Phase 4 (Summer Term, 2014) was the evaluation phase, which comprised semi-structured interviews with parents and teachers and analysis of the pupils' school assessment data relating to reading skills.

Overall, the intervention was successful in helping parents and teachers to develop their skills and confidence in supporting their autistic children to transfer and generalise their in-school learning to the home. In particular, parents benefitted from their children demonstrating greater shared-attention and concentration skills during reading activities at home. The findings suggest a model framework for developing and implementing a home-school reading programme for children with autism.

Declaration and word count

I hereby declare that, except where explicit attribution is made, the work presented in this thesis is entirely my own.

Word count (exclusive of appendices, the list of references and bibliographies but including footnotes, endnotes, glossary, maps, diagrams and tables): 44,989 words.

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2,000 Word reflective statement

I have always had an interest in research and academic learning. My teaching career began in 2000, when I wrote about aspects of my Newly Qualified Teacher induction year to gain MA credits. I continued to carry out small-scale action research projects during my first four years of teaching in a mainstream primary school. At that time, my interest was in Religious Education (my first degree was in Theology) so much of my Masters work centred on that. Soon after completing my Masters in 2004, I changed tack and moved into specialist autism education. This was a steep learning curve and a challenge I relished. I had been used to thinking creatively about how to teach abstract religious concepts to young mainstream children and yet, suddenly, trying to teach basic concrete concepts to children with autism was equally as challenging, if not more so! Working with children on the autism spectrum presents unique obstacles to the teacher, as many of the approaches used to teach children in mainstream education do not work. The children's characteristically autistic difficulties with language acquisition and social interaction can make it hard for the teacher-pupil relationship to develop and for teaching and learning to flourish. I had to learn new ways to communicate, interact and teach. I was fascinated by this specialist learning environment and the unique, isolated worlds of the children, which staff tried so hard to penetrate. Gradually, I gained competence in this new field and worked my way up through the ranks of the school to join the Senior Leadership Team (SLT) in 2008. I began my EdD in 2009, keen to explore further and document my growing expertise in autism education. It is an exciting time to be engaging with autism research. Awareness is growing rapidly through the media, yet relatively little is known about this intriguing condition and expert understanding is continually changing, as illustrated by the American Psychiatric Association's recent updating of the diagnostic criteria for autism spectrum disorder (APA, 2013).

The EdD taught courses and institution-focused study

The *Foundations of Professionalism* (FoP) module, which I studied at the beginning of the EdD, was important in setting the scene for the start of my doctoral work. I have a vivid memory of a FoP lecturer describing the difference between an EdD as a qualification for the *researching professional* and the PhD as a qualification for the

professional researcher. This clear distinction enabled me to appreciate that my research was very much linked to my professional role as a practitioner in education. It was my professional role as a teacher and member of the school SLT which would shape my research questions and provide the context in which my research would take place. I was fortunate in that the Pan London Autism Schools Network (PLASN) had been set up in recent years by headteachers of specialist autism schools in London, with a view to facilitating research, which might contribute to development and improvement of practice in these schools. The PLASN helped me to think about how my research might be useful and influential in the field of autism education. Assessment was identified by the PLASN group as an important area in which research should take place and I was the Assessment Coordinator in my school at the time, so academic assessment of children with autism became my key theme.

My Assessment Coordination work in my own school had brought to light problems with assessing autistic pupils using the statutory P Scales (QCA, 2009). The level descriptors focus heavily upon characteristics of typically developing children (language skills, social interaction and so on) and it can be an extremely difficult and subjective task to decide which level descriptor best fits a child with autism, who does not learn or exhibit learning in the same ways as his/her neurotypical peers might. I was, therefore, very clear that my research would set out to identify what autistic pupils working at the various P Scale levels actually achieve and how they demonstrate their learning, with a view to adapting or revising the level descriptors to be more 'autism-friendly'. I pursued this work during my two *Methods of Enquiry* (MoE) modules, examining a small area of the maths P scales and compared the learning patterns, strength and difficulties that our pupils demonstrated in their maths work with the P Scale assessment criteria. I was able to show that there were aspects of the P4 Number criteria that were not achievable by autistic pupils in my school, but also that the pupils were over-achieving in relation to other aspects of the level criteria. The implication of this is that any P level assigned to an autistic pupil does not adequately indicate what the pupil can actually do. In some aspects, s/he is likely to under-achieve (particularly in aspects relating to communication and interaction) and in some aspects s/he will exceed the criteria (particularly in practical tasks).

I continued my investigation into P Scale assessment for children with autism in my Institution-Focused Study (IFS). For this, I examined the children's performance in relation to the Science P Scales, using a variety of evidence (work samples, classroom observations, interviews with teachers) to determine how the children's learning and skills mapped onto the statutory assessment criteria and whether the levels they were given provided a true reflection of their skills and understanding. Again, I found that some aspects of the criteria for any given level were exceeded (e.g. in skills such as sorting, ordering, putting equipment together), whereas other areas were not achieved (e.g. planning, predicting, collaborative working), in line with the typical strengths and difficulties associated with autism. It was apparent that many children could be given a high level (e.g. P8) in certain skills, yet match the criteria of a much lower level (e.g. P4) in other skills. This makes it an extremely difficult and arbitrary task for teachers to assign and report one overall science level to each child using the P Scale criteria (the current statutory requirement). This difficult situation had been the subject of debate amongst teachers of children with autism for a long time and my MoE and IFS work had given me the opportunity to examine it thoroughly and provide compelling evidence, as well as to apply newly acquired research skills in the process. Despite presenting the evidence to the PLASN research group and PLASN making every effort to engage Ofsted and Government representatives in the debate, we were unable to make headway. It is interesting that the current Government decided to abolish National Curriculum (NC) levels from September 2014, with schools entrusted to find their own ways to demonstrate pupil progress, though P Scales remain statutory for assessing and reporting progress of children with special needs who are working below NC levels. Perhaps, in time, this will change.

It felt as though my P Scale assessment research had reached a halt, or at least a significant pause. I had demonstrated my theory but it was going to be very difficult to take it any further and to influence policy. I decided to branch out and choose different areas of study for my fourth taught course and for my thesis. I chose *Using Psychoanalytic Perspectives to Make Sense of Education* (CPA) for the optional taught course and thoroughly enjoyed it. My school had employed psychotherapists to work with staff and children and I was very interested in their work and perspectives. My CPA study utilised classroom observation, focus group discussions and individual interviews

with staff to explore how the behaviours and characteristic of children with autism affect the staff who work with them. During the CPA course, I realised my preference for taking time to observe and consider issues and to think carefully about why a situation or phenomenon is occurring before making a decision about what to do or planning a course of action. I am very conscious of the trend in education (and leadership and management) to find 'quick fixes' to problems. Almost as soon as a problem has been identified, the question 'what can we do about it?' is posed and there is a rush to find a remedy, which I find frustrating. For my thesis I was keen plan a study in which I would be able to evaluate and understand a situation, then build on this understanding to develop a bespoke programme, or programmes, of action to meet the needs of the participants. In this way, I would hopefully be able to change practice and make a real difference to the people I work with, which I had been unable to do with my MoE and IFS work.

Thesis

The development of home-school learning and parental involvement in education was something that was very important to the SLT at my school and we were considering ways to promote it amongst colleagues and parents. Home-school reading seemed to be the obvious area in which to start this work. Given that this field of study was very different to the previous work I had done in the taught courses and IFS, I carried out a new and extensive literature search and review, as well as drawing on my learning from my earlier work. I developed a four-phase study, which started by gaining understanding of current practice prior to any intervention (Phase one), training staff and parents (Phase Two), a 12-week programme in which teacher and parent pairs worked collaboratively to develop and transfer strategies from school to home, to help children with autism to read and/or share books and reading activities with their parents at home as well as at school (Phase 3), and finally to evaluate the impact of the work on all participants (Phase 4). This ambitious, year-long study employed a range of methods including questionnaires, focus groups, video observations, interviews and analysis of secondary assessment data. The study generated copious data in each phase, which took a further year to review thoroughly, but which also enabled many opportunities for triangulation of findings. Analysing the data gave me the opportunity to become familiar

and competent with aspects of SPSS and NVivo software, as well as using traditional methods of data coding with highlighter pens, scissors and glue!

I have had the opportunity to present aspects of my thesis at two poster conferences and an international conference, enabling me to discuss aspects of the study and share findings with teaching colleagues and other research students, locally nationally and internationally. My self-confidence and presentation skills have been greatly enhanced through the EdD. I have continued to benefit from the advice of my supervisors. I have met with them regularly throughout the course and this has helped me to refine my writing style and think through issues of conjecture so that I am able to argue my case clearly and confidently, drawing on my evidence.

Writing up my thesis has taken longer than I first anticipated. I have realised how carefully each section and chapter must be thought through in order to produce a coherent whole thesis. The skills I have developed most in this final year are those to do with organisation, clarity of argument and confidence to deliver my knowledge to different audiences.

I have recently been offered a change of role in the school where I work, partly based upon the skills I have gained through my doctoral studies. From September 2015, I began work as the Staff Tutor at the school, meaning that primarily my work is training staff and visitors in different aspects of autism education, rather than working with the children at the school. This continues to be a promising opportunity, which will enable me to develop further my skills in research and adult education beyond the end of my EdD course.

R.E. Walker, November 2015

Understanding, developing and evaluating home-school partnerships for children on the autism spectrum through home-school reading

R.E. Walker

Chapter 1: Introduction

1.1 Purpose and context of the study

This research study, to my knowledge, is the first of its kind to examine the factors that affect parent participation in, and teacher facilitation of, home-school reading for nursery and primary school aged children with autism, and to develop and evaluate a model of parent and teacher collaborative working to help parents to read with their autistic children at home. It was set in a local authority special school, which had 92 pupils on roll, aged from three to eleven years, all of whom had a diagnosis of autism. The pupils represented a diverse ethnic and socio-economic mix, coming from all over the suburban borough in which the school was situated. In this study, the school has been given the pseudonym 'Cherrycroft' to protect anonymity¹. The fieldwork took place over one academic year, from September 2013 to July 2014.

The term 'home-school' is used throughout this thesis to denote the link between home and school; 'home-school partnerships' refers to the relationships between the parents and teachers (or school staff) regarding the children in their care. For this study, homeschool reading was chosen as the vehicle for collaborative work and relationship development between parents and teachers, although any kind of 'homework' or 'home-school learning' could have been chosen. I use the terms 'pupils' and 'children' interchangeably throughout the thesis because pupil was typically used amongst Cherrycroft staff; child or children was used more commonly with parents. As the other key participants in the study were both staff and parents, the nouns would be naturally interchangeable depending upon context.

¹ All names of people and places have been changed to protect anonymity.

I began teaching at Cherrycroft in 2005, and was promoted to senior leadership some years later. My work at the school has given me considerable experience of teaching children with autism, discussing their learning and progress with parents and, more recently, working to develop whole-school practice to improve outcomes for all our pupils.

Home-school reading was identified as an ideal starting point for the development of home-school work for several reasons. Learning to read has long been considered one of the most important aspects of early education and a key priority for nursery and primary school teachers (Merttens and Vass, 1990; Stainthorp and Hughes, 1999). It enables access to other curriculum areas (Riley, 1996) and encourages communication and language development in young children (Stainthorp and Hughes, 1999; Vandermaas-Peeler et al, 2012; Waterland, 1988). In addition, teacher and parent surveys had indicated a strong desire for sharing the teaching of reading in both home and school settings.

At the time of the study, Cherrycroft had two English Coordinators; teachers who had responsibility for coordinating the English curriculum across the school. These two colleagues worked alongside me to carry out some aspects of the study. One of them had conducted a survey of teachers by questionnaire prior to this study (March, 2013), which had revealed that although 47% of pupils (43 pupils) took books home from the school library on a weekly basis, only 17% of pupils (16 pupils) brought the books back with comments from parents written in the accompanying reading diary. Prior to the current study, teachers were largely unaware of reading practices in the homes or what support parents might need to read with their children or to use reading activities or materials sent home from school. One might assume that reading with children is a fairly common activity for parents to do with their children, and that most staff and parents would remember their own parents (and even grandparents) reading to them, or hearing them read when they were children. Yet, similar assumptions could not be made in the context of this autism-specific school. Many children with autism have no, or very limited, verbal language (Aarons and Gittens, 1999); many struggle to share activities or resources with other people in different settings (Jordan and Powell, 1995; Wing, 1996); and many do not respond to 'typical' or mainstream teaching strategies (Jordan and Powell, 1990; Magnusen, 2005). These factors pose significant challenges for teachers

and parents in helping children with autism learn to read. This study focuses on how a group of teachers and parents worked together to overcome some of these challenges and to build partnerships centred on shared teaching and learning between home and school settings.

1.2 Definitions: autism and reading

Autism is a life-long neurodevelopmental, spectrum condition. Those with autism vary widely in their abilities and severity of symptoms (American Psychiatric Association (APA), 2013). Despite the heterogeneity of the autistic population (Charman et al, 2011), all individuals share some key characteristics on which the diagnosis is based. They all have difficulties in reciprocal social communication and interaction, and restrictions in behavioural repertoire, including sensory processing difficulties (APA, 2013). These difficulties are often associated with poor language development and limited jointattention skills (Mundy, Sigman and Kasari, 1990), making it difficult for parents and teachers to engage and interact with autistic children and to facilitate learning (MacKenzie, 2008). Over half of the pupils at Cherrycroft were either non-verbal or had extremely limited verbal language skills, restricted mainly to proper nouns, nouns and short, learnt 'functional' phrases such as 'help please' or 'I want biscuit'. They tended not to engage readily with staff or peers unless they had been taught to do so through highly motivating activities using favoured toys, objects, sounds or movements, typical of autistic children (Jones, 2002). Two thirds of the pupils at the school were learning at P scale levels (QCA, 2009), which are the levels preceding the National Curriculum levels, and thus many were at significantly delayed stages of learning for their ages.

Owing to the significant delay in many autistic pupils' cognitive development and learning levels, and their difficulties acquiring and using language, many of the pupils in the study were not yet able to read or understand the meaning of books or other reading materials. Some pupils could read familiar words and had developed 'reading behaviours' such as holding books the right way up and turning pages. Other pupils were able to read aloud fluently but might struggle with the meaning of texts. The ability range across the school was wide, regardless of age. For the purposes of the study and the development work in Cherrycroft, the two English Coordinators and I chose to define two groups of pupils, 'pre-readers' and 'emerging readers' (see *Figure 1*). These terms

may be used differently in other reports and literature on the teaching of reading, however, I provide a rationale for my use of these terms in my literature review (Chapter 2, Section 2.3), where I discuss the theories regarding learning to read and compare typical learning stages with those of children with autism.

Pre-readers are those children who are at the earliest stages of learning and who are beginning to explore symbols, words and books but not yet able to read. These pupils may have trouble sharing books and activities with others and may not yet know how to use books.

Emerging readers are those children who are able to read some words, phrases and sentences but may struggle with unfamiliar words. These pupils might find it hard to make sense of what they have read or to answer questions about what they have read. They may still prefer to look at books on their own rather than share them with others.

Figure 1: Two categories of readers at Cherrycroft School

To meet the varying needs of the pupils in the study, teachers worked on a wide range of learning objectives with their pupils, employing an equally wide range of teaching techniques. Although some pupils were taught typical primary school reading strategies such as decoding using phonics and word recognition using flash cards, other children needed to be taught simply to sit with someone and tolerate a book or picture being placed in front of them. At the start of the study it was not known whether the work to be done at home by parents would mirror the work done by teachers in school or whether the children would need completely separate learning objectives for the two settings. This was something which teachers and parents worked out together as part of the 12-week home-school reading programme in this study.

1.3 Personal journey as an education professional and researcher

I was responsible for assessment at Cherrycroft and much of my doctoral work prior to the thesis study focused on academic assessment of children with autism. Children with autism often have patchy learning profiles (Wing, 1996), with uneven levels of attainment in different areas of learning and across different subjects. My Institution Focused Study (IFS) (Faulkner, 2013)² centred on how pupils' attainment and progress

² My surname changed from Faulkner to Walker when I married in February, 2013.

in Science was mapped and whether the P Scales³ and National Curriculum Levels (QCA, 2009), the statutory attainment scales for all children at the time, were suitable for capturing the uneven attainment patterns of our pupils. My IFS highlighted the difficulties autistic children have in generalising their learning and skills across a variety of contexts. For example, they may be able to identify birds in the air when out on a trip but not in a photograph; or to say *'hello'* to peers as part of a registration session in class but not be able to do so when passing them in the corridor. It was therefore difficult for teachers to make judgements about the skills children have because the children could perform very differently in different contexts. It was clear that teachers found it very important that our pupils could generalise their learning so that skills could be used equally well in different contexts. Not only did the children need to be able to work and function equally well throughout the school building and throughout the school day; they also needed to be able to transfer their learning to the home environment as well. This was particularly true in relation to communication skills, which are vital for children to be able to interact with family, friends and wider society.

For my thesis, I decided to change my focus from assessment to home-school learning and the relationships between staff and parents ('parent-teacher partnerships'), which would be necessary to enable the children to generalise their learning and skills from school to home. My expertise in assessment work would inform the use of both linear assessments (such as P Scales and National Curriculum levels) and lateral assessments (such as assessing performance of the same skills in a variety of contexts) to measure the skills and attainment of the pupils in both home and school settings, to judge the effectiveness of the intervention.

The main challenge for my colleagues and myself was in understanding how to proceed with establishing a home-school reading programme in such a unique context. Although teachers could give some anecdotal examples of encouraging families to try activities at home, and parent workshops were held on a variety of learning themes each year (of which about 15 families attended regularly, though not always the same families), the school held very little knowledge about the impact of interventions with families in the

³ P Scale levels are the levels preceding National Curriculum levels, for children with special educational needs who are working below level 1 of the National Curriculum.

home. Parents who attended workshops were encouraged to complete workshop evaluation forms about the sessions but the longer-term impact of this input was not formally assessed. It was not known how many parents had attempted to use the home activity ideas, which their child's class teacher had included in class newsletters or on the school website. My IFS work had taught me the importance of establishing a clear picture of the starting point; a baseline from which intervention could begin and from which development could be tracked, measured and evaluated (Rallis and Rossman, 2003). My first task therefore was to gain a clear understanding of what parents were already doing with their autistic children in terms of helping them with reading skills and what teachers were doing in terms of involving parents in the teaching and learning of reading skills.

For this study, as with my IFS (Faulkner, 2013), I worked within the paradigm of flexible, mixed-methods research. The study was planned in four phases (explained in greater detail in Chapter 3: Methodology and Methods), with each phase designed to answer different aspects of the research questions (Section 1.5). Phase 1 and Phase 2 were relatively broad in scope, involving surveys of large samples of the school community (69 parents and 52 staff). The resulting data were largely quantitative and analysed using SPSS (IBM, 2013). As the study progressed through Phases 3 and 4, the sample size decreased considerably though the richness of data increased, with a group of 18 self-selected parents choosing to participate more intensively in training and 13 parents in a home-school reading development programme with their child's/children's class teacher(s). The study culminated with semi-structured individual interviews with nine teachers and 11 parents. Phases 3 and 4 yielded data that were mostly qualitative in nature and which, in some cases, helped to provide interpretations of some patterns found in the initial surveys. It was important that there was some flexibility in the design of Phases 2, 3 and 4, as each would build on the findings of the preceding phases.

At the heart of this study was a varied group of children, each with unique interests and needs; the parent-teacher partnerships that formed around them were also wideranging, with no two partnerships working in exactly the same way. It was therefore very fitting that this study should be designed in a unique and flexible way which responded to the participants and built on their ideas. Through working together to develop a model of collaborative home-school learning, the study helped me as a researcher, teacher and senior leader, and my colleagues, to better understand and help the children and families we worked with as well as to answer some important questions for the field of autism education.

1.4 Rationale for the study

Although there have been many studies on working with parents and the impact of home-school reading programmes in mainstream schools, there are no published academic studies (at least to my knowledge) examining how parents engage in homework, including reading and pre-reading activities, with their autistic children; neither does there appear to be any studies on the impact that such work might have on home-school relationships, parent-child relationships and on pupil progress. I argue that raising and educating children with autism in Special Educational Needs and Disabilities (SEND) schools is significantly different to doing so with neurotypical children in mainstream schools and it brings unique challenges for parents and teachers, as examined in this thesis. As well as addressing this gap in school-based research, this study was particularly pertinent to me, as a member of the Cherrycroft Senior Leadership Team (SLT), and my teacher colleagues, as we tried to ascertain the best ways of engaging with parents and involving them in their children's education (a key area in our School Development Plan for 2013-2015). We were keen to find ways for teachers and parents to gain a deeper understanding of each other's natural contexts, how the children functioned within these different settings and how parents might best support their children's learning.

1.5 Research questions

The overall aim of the research was to construct a model of collaborative home-school learning for children with autism. This was done by understanding the factors which affected home-school partnerships and home-school reading for children with autism in particular; to develop parent-teacher relationships through a home-school reading programme over 12-weeks, and to evaluate the work through the perspectives of all participants.

The research questions were:

1. Prior to the study intervention, how did parents and teachers at Cherrycroft School support their autistic children in learning to read and what were their attitudes to home-school reading partnerships?

2. What were the barriers to parents' engagement with, and teachers' facilitation of, home-school reading?

3. Which factors enabled teachers' facilitation of, and parents' and children's engagement with, home-school reading during the study intervention?

4. What impact did the home-school reading study intervention have on the participants, their relationships and their practice?

1.6 Overview of the study

The design of the study comprised four discrete phases. Phase 1 consisted of a baseline survey of parents to ascertain the current reading practices in the home, and attitudes towards helping their children learn to read. Phase 1 also included a review of the teacher questionnaire that had been completed six months earlier. Phase 2 was a training phase which drew on the responses of the questionnaires. It consisted of an inservice training (INSET) day for classroom staff and SLT members which focused on the rationale for the study, activities which explored staff attitudes to teaching reading and home-school partnerships, and workshops on teaching techniques for children of differing abilities. There were also two parent workshops (one aimed at parents of children who were considered 'pre-readers'; one for parents of children who were considered 'emerging readers' (see Figure 1, Section 1.2). Phase 3 was a 12-week homeschool reading programme in which parents and teachers worked in partnership to share the teaching of reading skills across home and school settings. Phase 4 was the evaluation phase, which comprised semi-structured interviews with most parents and all of the teachers who participated in Phase 3, and analysis of the pupils' school assessment data relating to reading. A much fuller account of the study methodology and methods is provided in Chapter 3.

To outline the organisation of this thesis, Chapter 2 provides a review of the extant literature, examining the role of the school in supporting parents of children with

autism; the teaching of reading and home-school reading as the basis for building homeschool relationships and issues specific to working with young children with autism. In Chapter 3, the methodology and methods of the study are discussed, with reference to, and comparison with, other home-school reading studies. Chapter 4 gives the rationale for the way I have reported the findings and describes the participants who took part in each phase of the study. In Chapters 5, 6, 7 and 8, I present the main findings of study and a discussion of them in relation to each of the four research questions respectively. Chapter 9, the final chapter, provides a summary of findings, the study's contribution to knowledge, and the implications for the field of autism research and for me personally and professionally as an EdD researcher.

Chapter 2: Literature review

2.1 Scope and methodology of the review

There have been many other studies on home-school collaboration for the teaching and learning of reading skills, set in both mainstream and special schools (e.g., Hewison and Tizard, 1980; Hindin and Paratore, 2007; Kelly-Vance and Schreck, 2002; Macleod, 1995). One of the key aspects of this study, which sets it apart from the others, is that it has children with autism at its heart. I argue that autism has a distinct impact on the education and home-life of children with such a diagnosis, affecting how these children are taught and cared for. The relationships between their teachers and parents will be affected by these differences as the distinct needs are catered for, adapted to and discussed between teachers and parents. To understand how autism may affect a child's education and home-life, it is important to examine first what the diagnosis entails and to describe the typical characteristics of children with the condition. Since the parentteacher relationships in this study are focussed on home-school reading, I turn next to the teaching of reading and discuss the literature on how autism may affect children's development of reading skills. Finally, and most importantly for this study, I consider the role of parents in supporting their autistic children in learning to read and draw on the literature available regarding the development and evaluation of teacher-parent partnerships for collaborative pedagogy across school and home.

Combinations of relevant search terms (i.e. autism, special needs, parents, teachers, collaboration, home-school, learning, generalisation, homework, reading) were used systematically to search educational databases to find peer-reviewed academic journal articles relevant to this study. Eighty-four journal articles were reviewed, in conjunction with book chapters on similar themes. I was unable to find any references to studies which cover the same areas or scope as the present one. Indeed, several articles on similar themes (e.g. Arciuli *et al*, 2013b; Benson, Karlof and Siperstein, 2008; Fylling and Tveit Sandvin, 2006; Hirsto, 2010) highlight the lack of literature in this area and call for further examination of parent involvement in the education of children with special needs.

2.2 What do we know about autism?

Diagnosis and pedagogical implications

Autism has long been regarded as a spectrum condition (Wing, 1996) with 'wide heterogeneity' (Charman et al, 2011) amongst those who have it. In my Methods of Enquiry (MOE) and IFS (Faulkner, 2013) reports, I used the term autism spectrum disorder (ASD), a common label, in line with the Diagnostic and Statistical Manuals (DSM) (American Psychiatric Association, 2013). However, the negative connotation of the word disorder has made this label unpopular amongst those people in the autistic community (e.g. Wenn Lawson⁴) who view autism as a different way of thinking rather than as something inherently negative, for which a cure should be sought. Amongst professionals (including amongst staff at Cherrycroft), it is common to use person-first language, such as *children with autism*, though a recent survey (Kenny *et al*, 2015) indicated that *autistic person* is preferred by many people on the autistic spectrum. I have therefore chosen to use varied terminology in this thesis to reflect the diversity of opinion on this matter.

Autism is a developmental, neurological condition which is not yet entirely understood. It used to be considered that people with autism had a 'triad of impairment' (Wing, 1996), namely, difficulties with social communication, social interaction and social imagination. The fifth edition of the DSM (APA, 2013) defines the key symptoms of autism as 'persistent deficits in social communication and social interaction across multiple contexts' and 'restricted, repetitive patterns of behaviour, interests, or activities' (APA, 2013:50). These two criteria include references to the difficulties in social communication and interaction but expand on the imaginative domain, indicating that this contributes to restricted ways of living and adherence to repetitive routines.

The restricted social imagination of people with autism means that they have difficulty understanding what someone else might be thinking and feeling. Problems with 'theory of mind' (Baron-Cohen, 2008) can have a significant impact upon teaching and learning for children with autism as they are unlikely to be able to consider the intentions of their parent or teacher; neither are they likely to perform tasks for the social reward of

⁴ Wenn Lawson is an autistic adult who lectures about personal experience of autism, promotes autism awareness and works to support others on the autistic spectrum. See www.mugsy.org/wendy.

knowing they have pleased their parent or teacher, which non-autistic children would often do.

Many people with autism are known to have sensory sensitivities (Bogdashina, 2010) in addition to their difficulties processing social stimuli. They may be hypo- or hypersensitive to a range of smells, textures, tastes, sounds or other sensations. This can also affect the kinds of learning activities and environments which the child with autism may seek, tolerate or try to avoid and thus it may have a big impact upon schooling, as well as other aspects of daily life (Pellicano, 2013).

Autistic features are often apparent in nursery and primary school children by their poor language development and limited joint-attention skills (Mundy, Sigman and Kasari, 1990), both of which are important for successful learning. These children stand out from typically developing peers in that they do not readily share pleasures or interests with others and often may actively avoid interactions with peers, parents and school staff (Sugerman, 1995). They can become very upset when regular routines change (e.g. a change of rooms, topics or activities) and be highly sensitive to environmental changes (e.g. loud noises, bright lights). This mixture of social difficulties, rigidity of thought and sensitivity to various environmental factors makes a typical mainstream school setting very uncomfortable for children with autism (Jones, 2002) and further makes it challenging for parents and teachers to engage fully with these children, to teach them and facilitate learning (MacKenzie, 2008), whether in mainstream or special education.

To view autism in a more positive light, it is suggested that people with autism are less distracted by other people and social rules, enabling them to focus on minute details of objects and systems, retain many facts and recall information with extreme accuracy (Baron-Cohen, 2008; Bogdashina, 2010; Frith, 2003). Teachers have an important role in enabling children with autism to unlock the potential of this particular way of thinking (Vermeulen, 2001).

Patterns of development

It is common for verbal language skills to be significantly delayed or non-existent in children with autism (Charman et al, 2011). It is also known that children with autism who develop spoken language can exhibit a significantly different pattern of language

acquisition to that usually found in non-autistic children. For example, a child with autism may have more expressive language than receptive language (that is, they may say more words than they are able to understand), whereas in neurotypical children spoken language development usually follows receptive language development, with children only able to use words once they understand them (Hudry *et al*, 2010).

An illustration of the 'restricted and repetitive behaviour' (DSM-5, APA, 2013) of children with autism is that their speech is commonly echolalic; that is, they may repeat words or phrases they have heard, sometimes in the same voice as the original speaker, though they may not understand the meaning of the words or phrases they reproduce. An autistic child's use of spoken language may be misleading to parents and educators, giving the impression that s/he is more cognitively able or social aware that s/he actually is (Aarons and Gittens, 1999). Echolalic language may be taken from the television or other media, or from other people with whom the child spends time. From my personal experience, echolalic language is sometimes used for personal pleasure, with the child enjoying repeating the same phrases from favoured programmes or experiences over and over again. Some children use 'mitigated echolalia' (Aarons and Gittens, 1999:65) in more functional ways, saying the phrases they have heard in particular contexts for a desired effect. It may be difficult to discern what the child actually means to convey because the child may use the wrong pronoun and/or ask a question rather than making a statement: for example, they may say 'Do you want a biscuit?' when they want a biscuit themselves. Children who are able to read may do so in echolalic ways, copying voices of others who have read to them and or reading favoured passages repeatedly, refusing to move on to the next part of the text or turn the page.

This 'patchy' skill profile (Wing, 1996) can also be seen in other areas of learning and development. My MoE 1 and MoE2 and IFS (Faulkner, 2013) projects examined the skill patterns of primary school children with autism in their mathematics and science lessons, as exemplified in their assessment files. This scrutiny highlighted teachers' heavy reliance on activities involving visual discrimination, such as the sorting and matching of items of different colours or shapes, as these were skills in which the children often excelled. By contrast, there was a dearth of assessment evidence on experimental enquiry work and reasoning skills. Children with autism find it extremely difficult to plan out a sequence of steps to complete a task and to explain or

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demonstrate to someone else why something happened the way it did (Happé and Frith, 2006). Teachers find it very challenging to find ways to address these areas of learning because of the children's relative weaknesses in imagination, language skills and executive functioning (planning, organising and sustaining attention).

Distinctive pedagogy

It is widely accepted in the field of SEND that early intervention is very important to ensure the best possible outcomes for children with autism (Parsons et al, 2011; Parsons, Lewis and Ellins, 2009; Siller et al, 2014). As many children with autism are diagnosed around two years of age, autism-specific pre-school intervention is ideal where such provision exists (Wilkinson, 2010), hence the nursery at Cherrycroft School. It is less clear what makes the most effective intervention and there are many approaches for parents and educators to choose from (Powell and Jordan, 1997; Wilkinson, 2010). Cherrycroft incorporates a mix of approaches, with many ideas taken from the Treatment and Education of Autistic and Communication Handicapped Children (TEACCH) (Schopler, Mesibov and Hearsey, 1995), the Picture Exchange Communication System (PECS) (Bondy and Frost, 2001) some aspects of Applied Behaviour Analysis (ABA) (Lovaas, 1965), the Social Communication, Emotional Regulation & Transactional Support (SCERTS[®]) Model (Prizant et al, 2007), and techniques from specialist multidisciplinary therapists who work with the children, adapted for the classroom. The school curriculum is based on the Early Years Foundation Stage (DfE, 2014a) and Primary National Curriculums (DfE, 2013) differentiated for the learning levels of the children, with a strong emphasis on the development of language, communication, social skills and flexibility of thought. Each teacher is encouraged to use his or her professional judgement in selecting pedagogical approaches and lesson content to suit the needs of the seven individual children in his/her class.

Teachers and teaching assistants who work with children with autism spend considerable time and effort finding ways to engage the children. These children need to develop the 'learning to learn' skills, such as sitting with someone else, sharing joint-attention, and establishing some basic communication skills so that they can work on the subject-related curriculum (Prizant *et al*, 2007). This was predicted to be a key area in which parents would need to develop skills and understanding before working on

developing reading skills with their children at home. Even children who are able to sit with their teacher and share a book or activity may not do so with a parent until they have been taught to do so by the parent, because of difficulties in generalising their learning from one context to another (Handleman and Harris, 1980).

So, how do teachers (and parents) engage children who struggle to understand others' agendas and often prefer to be solitary? One of the key techniques is to find and use the child's special interest. A common characteristic of those with autism is their deep fascination with one particular subject or item (APA, 2013; Sicile-Kira, 2003; Wing, 1996). Autism education specialists (Jordan and Powell, 1995; Magnusen, 2005) recommend that special interests are used by teachers as a way to engage pupils in learning tasks. For example, a child whose special interest is trains might be motivated to look at Thomas the Tank Engine (Rev. W. Awdry) stories and to engage in structured play activities using associated toys and props. Teachers in autism-specific educational settings often use such motivators to foster the joint attention and social interaction skills necessary for learning (MacKenzie, 2008; Powell and Jordan, 1997). Reading specialists also advocate the use of personal interests to encourage young children's interest in books (Riley, 1996; Waterland, 1988). Cherrycroft School employs handmade 'special interest books', like scrap-books in which pictures of interest are placed with captions written to suit the language level of the child.

Other specialists (e.g., Cowan and Allen, 2007), promote *naturalistic learning* and *incidental teaching*. These require the teacher to intervene in situations where the child is following his or her own agenda in order to teach and reinforce social communication skills. For example, blocking a door handle when a child wants to open the door, to teach or prompt the child to ask; or deliberately putting favoured toys out of reach so that the child must seek adult help to get what s/he wants. In most cases of these autism-specialist teaching approaches, the child's agenda or interest is put at the heart of the learning so that the child sees the benefit to her/himself in complying with the teacher's request (Bondy and Frost, 2001). Over time, as the child grows more accustomed to complying with teacher direction and gains the skills to be able to sit and attend for longer periods, it is usually possible to stretch their interests to other topics and activities of the teacher's choosing, perhaps with the promise of the child's own choice of activity directly following the teacher's (Prizant *et al*, 2007).

Another key area of teaching is in the generalisation of the child's skills from one setting to another (Gulsrud et al, 2007; Hampshire, Butera and Dustin, 2014). 'Children with autism often have difficulty successfully applying newly acquired skills to novel situations' (Cowan and Allen, 2007:701) and need to be taught the same skills in a variety of contexts in order to be able to use them successfully in different settings with different people. This is clear justification for parents to be involved in the education of their autistic children. Without parents (or other carers) helping these children to generalise skills from school to the home setting and the wider community, the children may find it difficult to apply their learning successfully in the outside world and much of their education may be wasted. For some academics, there is debate about whether school should be made to look more like home in order to facilitate transfer of skills (Hampshire, Butera and Dustin, 2014; Hetzroni and Ne'eman, 2013). At Cherrycroft, the children are taught similar skills in a range of settings (e.g. classroom, dining hall, playground, community) and parents are encouraged to do similar things at home via class newsletters, though it is unknown how many parents are able to follow up on suggestions made by teachers.

2.3 Home-school reading

What is reading and how is it taught?

Experts in the teaching of reading (e.g., Cain, 2010; Clay, 1991) describe the purpose of reading as a way of receiving a message. Clay defines reading as a 'message-getting, problem solving activity which increases in power and flexibility the more it is practised' (Clay, 1991:6). The process of learning to read is about learning to decode the message conveyed in text. Cain explains that 'the main challenge for beginning readers is to decode the printed symbols in order to access the meanings of the words they represent' (Cain, 2010:5). This is a 'complex activity, one that involves a range of different skills, processes and types of knowledge' (Cain, 2010:3). It is intertwined with communication and language development in young children (Stainthorp and Hughes, 1999; Vandermaas-Peeler *et al*, 2012; Waterland, 1988) and in which progress is made slowly over time. As young apprentices to their adult carers or older siblings, Waterland (1988) explains that they learn naturally that the language they are acquiring has a printed form; they will begin to recognise common words in the environment and may

enjoy listening to stories being read to them. Typically developing young children are socially orientated and keen to understand the communications of others, either in spoken or printed form; they can often be seen to point to text and ask, 'what does that say?' and are motivated to decode messages in texts for themselves (Waterland, 1988).

Most books and texts have a social communication element to them; they are intended to convey a message from one person (the author) to another (the reader) (Cain, 2010; Clay, 2002). A typically developing child will probably appreciate this without necessarily being taught it explicitly, and be curious to know the message contained in the book (what is going to happen to a particular character, for example). An autistic child, however, may not grasp this immediately, if at all. Those with autism are known to have difficulties extracting meaning from visual stimuli and yet when drawn to specific details they may be attracted to particular visual or tactile features of a book such as certain illustrations or textures of pages, but fail to extract meaning from the text (Happé and Frith, 2006). The motivation to learn to read may well be lower for a child with autism than for a typically developing child because the social reward of decoding another person's message is likely to be lost on them. In addition, the language processing and imaginative difficulties of children with autism would make the task of decoding far more difficult, since they may not recognise words or be able to guess them from contextual cues as readily as children without these difficulties (Happé and Frith, 2006; Rapin and Tuchman, 2008).

The processes of learning to read (decoding the text to find meaning), as described by educators such as Clay (1991) and Cain (2010), assume that the child has already acquired a certain degree of spoken language; that they understand that text is a printed form of language; and that there is a desire to decode the message. These assumptions cannot be made with autistic children, who often have severe language impairments and a lack of understanding of social communication, particularly when they begin nursery or primary school.

Autism and reading skills

In schools such as Cherrycroft, the teaching of reading begins alongside the teaching of all other early learning skills. Books and other texts are used by staff as part of teaching the children to sit with others and share attention. The children often need to learn to give their attention to the teacher and to focus on the resource or prop the teacher is using (e.g. a book or a toy). Story books are extremely effective resources for this purpose (Mucchetti, 2013). Teachers are likely to choose books on themes of special interest to the child in order to have a better chance of engaging them (Jordan and Powell, 1995). The child may not understand that the book can tell him/her anything about the topic, but s/he may be captivated by particular visual features of the book such as a familiar logo, character's image or a small detail in an illustration (Happé and Frith, 2006). Because the child may be drawn in by a particular detail, s/he may be distressed by the teacher turning the page or may lose interest completely. However, the teacher will try to find ways to keep the child positively engaged, as s/he models the reading behaviours of moving through the book, from left to right, page by page. It is important to be flexible and playful with the child (Feiler and Logan, 2007) in order to maintain the balance between keeping the child's interest and pursuing what they need to be taught.

Children with autism are thought to have a natural propensity towards systematizing (Baron-Cohen, 2008) and tend to enjoy tasks which have a clear and repetitive structure. When children at Cherrycroft learn that book reading behaviour follows a particular routine (i.e. turning pages one at a time, following text from left to right, perhaps with the finger as pointer moving along the text), they often enjoy doing these things and are therefore able to take an active part in the book sharing, even though they may not understand the words. They may get distracted by a particular illustration, or the sound of the teacher saying a particular word in an interesting voice; they may also be so keen to perform the repetitive sequence of turning the pages that they do not want to wait for the teacher to read the text. However, incidents such as these are opportunities for engagement with the children and helping them to learn about reading and reading behaviours.

For children with delayed language acquisition, looking at books or texts can aid language development (Wearmouth, Soler and Reid, 2002). Many children at Cherrycroft School are delayed in developing understanding of symbolic communication. They need to learn that people, items and concepts have names (or associated words) and that spoken words are the auditory symbols representing people, items and concepts (Aarons and Gittens, 1999; Robinson, 2008). Spoken words are

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abstract (they rarely sound like an object they represent) and transient (they only exist whilst they are being said). This makes spoken language very difficult to grasp for children who have auditory processing difficulties and who are not socially attuned to listening to other people (Aarons and Gittens, 1999). Autistic people are often thought to be visual learners and are often helped to 'understand the meaning of words through images' (Vermeulen, 2001:33). Cherrycroft uses a total communication approach whereby staff use objects, gestures, Makaton⁵ signs (Makaton, 2012) and symbols alongside speech, so that words have a visual representation as well as an auditory one, to reinforce meaning and aid understanding (Bondy and Frost, 2001). For example, when saying 'It's time for a drink', the teacher may be holding a cup, a picture of a cup, or making a drinking gesture with his/her hand to reinforce the spoken word. If the child wants a drink, s/he may be encouraged to hand an empty cup to the teacher, or give a picture of a cup to the teacher. Objects and pictures are used as concrete symbols of language; easier for the child to understand and use than the abstract spoken word 'drink'. Eventually, the child may learn to say 'drink' verbally if the spoken word is taught and reinforced alongside use of more permanent symbols.

Reading activities at Cherrycroft form an integral part of language development in much the same way as language development is encouraged throughout the school day. Teachers will use real objects (props), pictures from the book (copied illustrations), and pictorial symbols of key words in the text to reinforce the meanings of words they are reading aloud. Gradually, the child may learn, for example, that a toy bear or a picture of a bear represents a bear character in the story illustration; they may be able to match them visually, by holding the toy next to the relevant picture. Next they learn to match the printed word 'bear' to the toy or picture and to distinguish the spoken word 'bear' from other characters by pointing to the bear in response to a verbal instruction. Thus, learning to understand different types of symbols and making connections between them is part of their early reading development. Teachers use books and reading materials as part of developing and reinforcing language acquisition, though many children do not move beyond recognition of single words. Some children at Cherrycroft are very adept at visual word recognition and, if they have verbal language skills, they

⁵ Makaton is a form of sign language, similar to British Sign Language, but simplified and adapted for those with learning difficulties.

can read portions of texts aloud; however, they may not understand what they are reading at whole sentence level. If the child is not yet using phrases or sentences as part of his/her own spoken language, it is unsurprising that s/he will not be able to understand strings of words they read as it is likely to be beyond their 'zone of proximal development' (Vygotsky, 1978), that is, the extent to which learning development would be possible with adult support.

Studies have shown that verbal pupils with autism who learn to read do not necessarily follow the pattern of reading skills acquisition which is typically demonstrated by neurotypical children (Arciuli et al, 2013a; Arciuli et al, 2013b; Hudry et al, 2010), or which the Early Years Foundation Stage framework (DfE, 2014a) and National Curriculum programmes of study (DfE, 2013) assume. Rather, these pupils exhibit a 'patchy' learning profile (Wing, 1996), to which I have previously referred more generally. Some children acquire skills relatively quickly (e.g. recognising whole words which have particular significance to the child) and other skills remain difficult for children to master throughout their schooling (e.g. sharing books socially and comprehension skills). Studies with 14-16 year olds with autism (Jones et al, 2009; Ricketts et al, 2012) have identified that although word recognition skills were often good in these adolescents, reading comprehension was 'discrepantly poor' (Jones et al, 2009:718), associated with their social communication difficulties. Hyperlexia, the precocious ability to read words without prior training in learning to read, is a phenomenon associated with some individuals with autism (Nation et al, 2006; Silberberg and Silberberg, 1967) and has been noticed in a few pupils at Cherrycroft. It is suggested that those with autism have a 'decreased drive for central coherence' (Frith and Happé, 1994), meaning they are able to learn lots of facts but struggle to make sense of them as a coherent whole. In the context of learning to read, this is evident in pupils recognising and reading many individual words but failing to comprehend the meaning of word combinations at sentence level.

Stages of reading development

The literature on learning to read uses various terms for the stages in becoming a reader. Some educators use the terms 'pre-literate' and 'emergent literacy' (Cain, 2010; Fleury *et al*, 2014), with literacy being the ability to match spoken language to printed text. Others talk of children being 'pre-alphabetic', progressing to 'full-alphabetic' (Oakhill and Beard, 1999) as they learn to associate combinations of letter patterns with speech sounds. These terms focus very much upon the ability to decode individual letters and letter patterns and to make meaning from the decoded alphabetic script. Yet they do not describe the typical learning patterns of most pupils with autism at Cherrycroft. Rather, most Cherrycroft pupils tend towards recognising whole words which they may or may not be able to say verbally. Phonic decoding is taught at the school but is much harder for most of the pupils to utilise because they struggle to learn and say sounds of letters and to blend them into recognisable words. I have chosen instead to use the terms 'pre-reader' and 'emerging reader' to describe the two stages of learning which are prevalent at the school (see Section 1.2). To recap, the 'pre-reader' stage is the stage when children begin to learn to handle books and texts, to share them with others, to be read to and to practice reading behaviours such as turning pages, moving their gaze from left to right and so on; they progress to the 'emerging reader' stage when they begin to recognise words and can say them aloud or associate them with other symbols. Emerging readers may be able to read sentences aloud and attempt decoding and pronunciation of unfamiliar words using phonics but they may not yet understand all that they read.

2.4 Working with parents

Parents' involvement in their children's education

It is widely acknowledged that parental involvement in education has highly beneficial consequences for children (e.g. Coleman, 1998; Hewison and Tizard, 1980; Kurani *et al*, 2009), and that the positive effects are 'no longer a subject of debate' (Shim, 2013:18). Parental involvement sends a clear message to their children that they endorse their education and want them to succeed in their learning and development (See and Gorard, 2015).

Parents of children with autism have an important incentive to be involved in their children's education because of the children's generalisation difficulties and the need to help them make sense of their learning in both school and home settings (Cowan and Allen, 2007; Gulsrud *et al*, 2007). In order to make parental involvement effective, the sharing of information between parents and teachers is vital (Samadi and

Mahmoodizedeh, 2014). Focused dialogue is necessary to enable parents and teachers to understand the differences in the ways children behave and function in each other's settings. Through gathering a more complete picture of the child in school and at home, it is possible to tailor educational provision so that parents and teachers can work together to encourage optimal use of the child's skills in both settings (Fletcher, Greenwood and Parkhill, 2009).

Although numerous studies, national SEND policy and the recently revised Code of Practice (DfE, 2011; DfE, 2014b) all advocate parental involvement in children's education (often referred to as 'parent-teacher partnerships' or 'home-school partnerships'), the literature highlights a lack of common understanding of what such partnership should entail (Pinkus, 2003). It is clear that the school has a role in encouraging these partnerships (Benson, Karlof and Siperstein, 2008) but it is less clear precisely *how* teachers and parents should work together (Fylling and Tveit Sandvin, 2006). Epstein and Dauber (1991) list six types of parental involvement with schools, including ventures such as supporting fund-raising events and volunteering to help with class trips or activities, as well as helping their children with homework and learning. There are many ways parents can show their support to a school and their children's education and some parents will be more confident and willing to engage in some things than others.

It is important for the staff at the school to consider how they view parent-participation and what they require from it. The involvement of various professionals in the lives of parents of children with SEND is inevitable (McCloskey, 2010; O'Connor, 2008) because the special needs of the child require specialist support or advice. This can have the unfortunate consequence of belittling the parents. A study of the role of parents in special education in Norway (Fylling and Tveit Sandvin, 2006) found that parents were often seen either as 'implementers' or as 'clients'. Both were considered negative in that the *implementer* parents would be told what to do by the school or other professionals and tasked with the responsibility of carrying it out; *client* parents were seen as part of the child's difficulties and that they needed to be taught how to help and care for their children. Neither of these positions gave parents a sense of empowerment through partnership, which is so important for effective joint working (Dobbins and Abbott, 2010). Asking parents to help teach their children, especially those with autism, might be considered an unrealistic expectation for schools to have; after all, most parents are not trained teachers and even school staff, who are trained, can struggle to engage and teach children with autism at times. However, promoting teaching and learning activities for children with autism and their parents to do together can be a potentially effective way to help parents find a way into their children's worlds. It is known to be particularly hard for parents to accept their autistic child's aloofness and lack of engagement (Glazzard and Overall, 2012; Gray, 2006), and so working together with teachers to explore different ways to engage the children and help them in their educational development can be beneficial for both parties.

Understanding each other and building relationships

The quality of partnerships between teachers and parents is likely to be dependent upon teachers' skills and abilities in engaging parents appropriately (Goddard-Tame, 1986; Wearmouth, 2004). Gaining trust is a common theme in the parent-teacher partnership literature (Hedeen, Moses and Peter, 2011; Laluvein, 2010). Trust can be difficult to build between parents and teachers because of the potentially different cultural understandings and power positions which each occupy (Hedeen, Moses and Peter, 2011). Explorations of these relationships identify that both teachers and parents are experts in their own ways. Parents often want teaching methods explained to them by professionals (Shim, 2013), but at the same time, they are experts on their own children and want their views and knowledge to be valued and taken into account (Dale, 1996). Teachers may feel they have expertise and authority because of their professional training and position, yet they may also feel challenged by parents' questioning (Hartas, 2008) and may feel or appear defensive with parents (Shim, 2013). To see parents as partners is to appreciate that they potentially have a great deal to offer; they know their children well and can share knowledge of how their children behave and engage in different contexts outside of school. Parents can give teachers insight into their children's interests and what makes the children happy or distressed, perhaps influencing the teacher's choice of class topics and stories, which may help the children to be happier, more settled and willing to engage in school.

Epstein and Dauber (1991) highlight the importance of training which enables the participants to acknowledge each other's starting points in partnership work. Partnerships cited to be the most effective are those in which openness and honesty are encouraged as these are the qualities which help to build trust and shared aims (Hedeen, Moses and Peter, 2011; Laluvein, 2010). This influenced my decision to send a questionnaire to all parents as the starting point of the study (September 2013), so that teachers would have access to some of the experiences, views and goals of parents as part of their training on home-school reading (the INSET day planned for October 2013). Parents would, in turn, gain understanding of the teachers' starting points for joint working through the two parent workshops planned for December 2013. Thereafter, a mechanism by which teachers and parents often fail due to lack of 'reciprocal, supportive and open communication' (O'Connor, 2008:263). Videos and bespoke diaries which encouraged sharing of practice, comments and questioning would be used for this, as described later in my account of methodology and methods (Chapter 3).

2.5 Studies of home-school learning programmes

School-based studies have highlighted a correlation between participation in homereading programmes and typical pupils' improved reading attainment (Hewison and Tizard, 1980), improved reading rate test scores (Kelly-Vance and Schreck, 2002) and improved reading fluency (Hindin and Paratore, 2007). Studies have also indicated that parent-child book-sharing can improve parent-child interaction, encourage the development of the child's joint attention and social skills, and enhance language development (Vandermaas-Peeler et al, 2012). Most studies have focused on mainstream nurseries and schools (e.g. Al-Momani, Ihmeideh and Abu Naba'h, 2008; Hewison and Tizard, 1980; McNaughton et al, 2010) and those that included children who were identified as 'underperforming' in reading (e.g. Kelly-Vance and Schreck, 2002) have not mentioned pupils with autism or other special needs in particular. Since autism can have a significant impact on a pupil's ability to learn and on their relationship with parents and teachers (Dillenburger et al, 2010), it is unknown whether the findings of other home-school reading studies should be applicable for children with autism. However, the other studies are useful in providing models for research and identifying practical issues in project organisation.

Several studies undertaken in mainstream schools indicate the importance of what the school does in setting up home-school reading programmes (Fletcher, Greenwood and Parkhill, 2009; Macleod, 1995). Teachers should be clear about what they expect parents to do. This involves providing sufficient initial training and regular liaison with parents so that approaches can be adapted as the children progress or as difficulties are encountered (Al-Momani, Ihmeideh and Abu Naba'h, 2008; Weinberger, 1988). Goddard-Tame (1986) brings to light the potential for deeply embedded attitudes about the roles of home and school in quoting a teacher saying, "I don't mind [parents] hearing reading practice, but basic teaching must be done by an expert" (Goddard-Tame, 1986:88). Two decades later, in a study carried out by McNaughton *et al.* (2010) both teachers and parents saw the parents' role as one of providing support rather than teaching and very little in the way of strategies were shared between home and school. This study would not be about 'hearing reading practice' since very few of the children are at a stage where they can read aloud. More important is generalisation of similar skills and approaches from school to the home setting. Parents would need to use similar activities and teaching strategies as their child's teacher uses and be introduced to these methods at parent workshops and supported to practise these approaches with their children during the programme.

Macleod (1995) makes the important point that teachers should take account of what is important to parents in teaching their children to read. She describes the uniqueness of the parent-child relationship and how parents may value being able to share a mutually pleasurable experience with their child, rather than being concerned with the reading progress which teachers might measure. This is a particularly poignant issue when considering the possible views of parents with children with autism, where the parent-child relationship will be affected by the child's difficulties in social communication and interaction (Glazzard and Overall, 2012; Wing, 1996). Teachers must also consider parents' views regarding the purpose of education for their autistic child (Ivey, 2004) so that learning activities are framed within the context of educational goals that can be agreed by both teachers and parents. Some children with autism may never learn to read or enjoy books. However, they may develop the skills to recognise important words on labels or signs which is an important life-skill, and which parents may value when their child seeks a greater degree of independence in adolescence or adulthood (Wittemeyer *et al*, 2011).

Some studies have highlighted problems relating to resources. McQuillan and Au (2001) studied the effects of access to print, their findings indicating that neurotypical pupils who do not have access to plentiful books or other types of print on topics of interest are less likely to read frequently and their rates of progress in learning to read tend to be lower. In the current study, this is a potential issue in both the home and school environments since families may not have these resources and books are not often left out in classrooms in Cherrycroft School because of the likelihood of them being thrown, torn or chewed by children who do not yet know how to treat them appropriately. Indeed, some families might refuse to have school library books or reading scheme books sent home for fear of them being damaged by their child and having to pay for new ones. In a survey of headteachers carried out by Brent Learning Resources Services (1988), additional wear and tear on books and resources used for home-school reading was considered a negative factor in setting up home-school reading programmes. Given that the potential for damage is greater with children with autism and there will need to be accompanying props and toys as well as books, I considered asking the school's Friends' Association for money towards buying additional resources for the homeschool reading programme should they be needed.

The impact on staff

The time and effort required of staff in implementing a home-school reading programme is another factor which requires consideration (Kelly-Vance and Schreck, 2002). My colleagues in Cherrycroft Senior Leadership Team (SLT) expressed support for the study and gave me permission to present the study proposal to all staff at an INSET day in October 2013. This was to provide teachers and teaching assistants with the background theory, the purposes of the study and an understanding of how it fits into the School Development Plan (SDP). As head of the research study and a member of the SLT, I was aware of the 'differential power relationship' (Oliver, 2003:18) between myself and the participants and the potential for bias in the research because of my position (Dobbins and Abbott, 2010). The study was driven by the SDP and my belief that home-school reading would ultimately be beneficial for all involved (children, parents

and teachers), based on evidence from other work in similar fields. The difference here was that a great deal of work would need to be done by the participants to find their way through unchartered territory. There were no guidelines as to how to make this work successful with children with autism. Not only would they have to persevere in carrying out the work, but they would also have to chart their experiences so that vital data could be produced. I would need to be careful that participants did not feel under pressure to agree to the work simply because I was in position of authority in the school. Oliver (2003) warns that if participants feel they are gaining something from the researcher, they may feel obliged to agree to things so as not to lose favour. Similarly, parents may feel they would win favour of school staff by participating and teachers may feel obliged to work hard on the project to get a 'good name' in the eyes of the SLT. For these reasons, I had to be careful not to enforce any particular rules on programme participants. Instead I issued guidelines such as changing home reading activities on a weekly basis and encouraging adult participants to make short home and school videos in week 1, week 6 and week 12 of the programme. However, if these suggestions were not adhered to, I was happy to accept whatever participants had managed to do. All contributions to the project data were acknowledged gratefully and all efforts would be praised, whether success was evident or not.

2.6 Summary of key points from the literature

Autism affects children's ability to engage in the learning process and to generalise their skills and understanding from one context to another (e.g. school to home). In addition, the patterns of reading development in children with autism are usually different to those of typically developing children, requiring specialist teaching knowledge and approaches. Parents of children with autism can play a key role in helping their children generalise learning through working in partnership with teachers and implementing strategies in the home. Successful partnership work between parents and teachers requires trust to be built through training and honest, focused dialogue, which takes time and effort from both parties. There is no common understanding of what such partnership work should look like, especially in the case of pupils on the autism spectrum. The next chapter outlines the methodology and methods that I used to generate the data for this study.

Chapter 3: Methodology and methods

In this chapter, I explain the methodology of the study and how it built on and differed from previous work by myself and other academics. I also outline the issues relating to validity and the ethical considerations which were relevant to the study. Finally, I describe the methods used in each phase in turn and how the data were analysed.

3.1 Methodology

The study comprised a flexible mixed-methods design (Tashakkori and Teddlie, 2003), which generated qualitative and quantitative primary data (survey, discussion groups, diaries, videos and interviews), as well as drawing on secondary sources (previous teacher surveys, pupil assessment data). Flexibility in the research design was important in order to be able to respond to and incorporate the views and ideas of these participants in a constructivist manner as the project progressed.

Although to my knowledge there have been no previously published studies on homeschool reading for children with autism, there have been a number of studies on the impact of involving parents in reading with their children in mainstream and other special school settings (e.g., Hewison and Tizard, 1980; Kelly-Vance and Schreck, 2002; Loveday and Simmons, 1988). These studies each took a cohort of children of primaryschool age (a class of approximately 30 children at a time) and invited parents to participate in home-school reading activities. Although study participation was selfselected rather than enforced, the study children were matched as far as possible with a control group of other similar children in the school. For those involved in the studies, they followed similar patterns of initial parent training, the supply of materials (books and/or reading games) by the school, regular communication between parents and school staff throughout a specified period and pre- and post-testing of the pupils, to measure impact on pupil progress in reading attainment. These kinds of studies have universally shown a positive correlation between parent involvement in home-school reading and pupil progress.

The present study borrowed some aspects of methodology and methods from this previous work (e.g. sharing information with parents at the start of the project,

demonstrating teaching activities and use of resources, regular communication between parents and teachers throughout the programme period). However, this study differed in significant aspects since the context and aims were entirely new. The aforementioned studies were largely positivist in design, involving a pre-test, a specified intervention programme and a post-test, the results of which were compared with those of a control group of similarly matched children in the same class/year and parents. Whilst these studies enabled the clear positive impact of parent involvement to be demonstrated, they relied on similar measures being equally applicable to all children in the study cohorts. They also required parent participants to be able to learn to use and adhere to similar teaching strategies and activities with their children throughout the various study programmes.

Given the overwhelming positive findings of previous studies in relation to parental involvement in home-school reading, there were no obvious reasons to suspect that a similar positive impact would not be found in the present study setting. From an ethical point of view, I considered that all families in the school should be invited to take part in this study since there was reason to believe that all children might potentially benefit. However, a positive impact on pupil progress would not be discernible using the same methods as other studies. The uniqueness of the present study was largely related to the children at the school representing the 'wide heterogeneity of the autistic population' (Charman, 2007); that is to say the children varied greatly in their autism symptoms, reading abilities and learning styles. Although the impact of the home-school reading on pupil progress was considered as a part of this study (related to my fourth Research Question regarding the impact of home-school reading partnerships), it was not the main focus and could not be measured with standardized pre-testing and posttesting because no standard test would be appropriate for every child. It was also considered that parents' ideas of progress may be different to those of teachers (Billington, McNally and McNally, 2000; Ivey, 2004; Valle, 2009). This study used school assessment data alongside 'softer' progress measures such as teacher and parents comments relating to positive changes they have noticed during the programme, which I describe later in Section 3.4.

No standard teaching strategies, activities or interventions were prescribed or tested for efficacy in this study. Instead, the flexible study design acknowledged that children with

autism need a variety of specialist teaching strategies to engage them and help them learn (Jordan, Jones and Murray, 1998; MacKenzie, 2008). Children with autism do not easily generalise skills across different settings and may work in one way at school and another way at home (Winner, 2011). This study enabled parents to see a range of engagement strategies and activities, pitched at similar levels to where their child was working, and gave them flexibility to explore and decide what might work for them. This built-in flexibility was particularly important to the learning and development of the children because their performance and comprehension across different settings and with different partners can be so inconsistent (Cowan and Allen, 2007; Hudry et al, 2010). Furthermore, it has been suggested that the type of reading work which parents do with their children (e.g. using books or games) does not matter, and that a variety of reading-related activities can have a positive impact (Loveday and Simmons, 1988). It would have been inappropriate and unethical to insist on a specific way of teaching reading. Parents and teachers who participated in the 12-week programme, discussed the individual needs of the child, the parent's skills and the home environment. They worked collaboratively to agree, try and refine tailored teaching and learning strategies and activities suitable for the home.

In this study, it could not be taken for granted that parents would know how to read with their children. As one mother explained, 'You have this idea of how a child's meant to read but when you have an autistic child, all of that goes out the window.' The engagement strategies and teaching approaches for children with autism could be very different to those that parents experienced themselves when at school, or to those they had been using with non-autistic siblings. Additionally, it could not be assumed that teachers would know how to support parents in home-school reading. The teachers were used to using specialist techniques and resources within a specialist school environment but not necessarily familiar with training other adults or thinking about how teaching and learning approaches might be transferred to the home environment. There was a strong case for this methodology to incorporate a constructivist approach in which teachers and parents worked together to learn and develop strategies for home use, constructing their own methods of working.

3.2 Overview of the study design

Phase 1 of the four-phase study took place in September 2013, forming the baseline for the rest of the study. It consisted of a review of a teacher survey which had been conducted by one of the English Coordinators in March 2013 and a new parent questionnaire which I devised and sent to all families at the school.

Phase 2 of the study (October to December, 2013) was a training phase which drew on the responses of the teacher survey and parent questionnaire. It consisted of an inservice training (INSET) day for 52 staff members which focused on the rationale for the study, activities which explored staff attitudes to teaching reading and workshops on teaching techniques for children of differing abilities. Phase 2 also included two parent workshops (one aimed at parents of children who were considered 'pre-readers', one for parents of children who were considered 'emerging readers'), at which there were 18 parent attendees altogether. The workshops were led by myself and the two English Coordinators; they contained parent focus-group discussions, demonstrations of teaching techniques and the sharing of ideas between staff and parents.

Phase 3 of the study was a 12-week home-school reading programme which initially involved 18 children, their parents and nine teachers (13 children and their parents saw the programme through in its entirety). This took place in Spring Term, 2014. The programme utilized videos taken in school and in the home for training and sharing of teaching strategies and bespoke diaries for regular communication between teachers and parents.

Phase 4 took place in Summer Term, 2014, and was an evaluation of the workshops and the 12-week programme, using semi-structured interviews and the children's school assessment data. The four phases of the study are set out in *Table 1* and a fuller description of each phase is set out later in this chapter (Section 3.4).

Phase	Methods	Purpose(s)	Data yielded
1: Teacher survey review & parent questionnaire (Sept. 2013)	 Review of responses 18 item questionnaire to all 85 families at the school (for 92 children) 	 To understand teachers' classroom practice To understand how parents were reading with their children and their attitudes towards home- school reading prior to intervention 	 Summary of practice of teaching reading at Cherrycroft Questionnaire returned for 69 children
2: Staff Training (October 2013)	 Staff workshops and activities on the teaching of reading and attitudes towards parent involvement 	 To ensure staff had the knowledge and skills to devise appropriate programmes for children and were aware of the possible issues in working collaboratively with parents 	 Researcher's session notes 52 activity questionnaires Evaluation feedback forms
Parent workshops (December 2013)	 Parent discussion groups Staff-led talk and demonstration Role play 	 To examine the barriers and enabling factors for parent participation in home-school reading To introduce parents to ways reading is taught in school To enable parents to try 	 4 discussion group audio recordings and transcripts (2 per workshop) Researcher's session notes
	activityWorkshop evaluation form	 strategies To understand how helpful aspects of the workshops were for parents 	Session evaluation feedback
3: 12-week programme (January to	 Teacher and child (school) videos Parent and child (home) videos 	 For teachers and parents to demonstrate and share with each other how they read with and teach the child /children 	 34 school videos 11 home videos
April 2014)	Home-school communication diaries	 To log the reading activities set and done by the teacher and parent with the child and to facilitate parent-teacher dialogue during the 12- week programme 	 14 home- school communication diaries
	 Parent and teacher video viewing and discussion meetings 	 For teachers and parents to watch the videos made at home and school and to discuss them, sharing observations, thoughts and strategies 	 23 audio- recorded parent and teacher video viewing and discussion sessions

Table 1: The four phases of the study (continued overleaf)

4: Evaluation (<i>May to June</i> 2014)	 Semi-structured parent interviews Semi-structured teacher interviews 	 To understand and evaluate the changes which have occurred as a result of the programme 	 9 parent interview transcripts 9 teacher interview transcripts
	 Assessment data analysis 	 To examine the impact of the programme in relation to pupil progress, as measured by school assessments 	 School reading assessment data (from B Squared <i>Connecting</i> <i>Steps</i>)

3.3 Validity and ethical considerations

Epistemologically, the study data were mainly rooted in the individual cases of each child and the parent and teacher relationships that formed around them through the homeschool reading programme. Teachers and parents worked collaboratively as coproducers of knowledge, using their unique perspectives of being with the child and finding ways to combine aspects of home and school through home-school reading. Whilst commonality would be examined in the barriers and enabling factors for homeschool reading, there was no guarantee that the findings and outcomes for one teacher and family would be the same or similar to that found in any other home-school reading partnership. This is particularly pertinent when working with children with autism who span a spectrum of needs and abilities.

As other studies have indicated (Hewison and Tizard, 1980; Kelly-Vance and Schreck, 2002; Loveday and Simmons, 1988), it is not always possible to ensure a matched control group of children not taking part in an intervention programme with those who are, because the parent participants are self-selected in that they volunteer to take part. However, in this case it was possible to identify pupils not taking part in the study with similar characteristics to those in the study, based on children's existing Childhood Autism Rating Scale (CARS) score, academic level in reading from school assessment records and communication level. This provided a matched control group for whom school assessment data could be compared.

The majority of the data were based on participant self-reporting and it was therefore important to be able to substantiate and triangulate findings in one data set with those another, where possible, and to be able to 'address the same aims by different methodological approaches' (Oliver, 2003:140). If during the final interview, for example, a parent reported progress in their child sitting for longer, I would expect to see this in video evidence or in diary entries made during the programme.

Ethical issues were considered in light of the ethical guidelines laid down by BERA (2011). From the outset, I adhered to the ethical principle of complete openness about the purposes of research with all participants (Oliver, 2003:13). All families in the school were sent a briefing letter (see Appendix 1) with the initial parent questionnaire, and I presented the same information to staff during a staff meeting. The research aims were reiterated again for participants at each phase of the study. I stated that homework interventions can be stressful for children with autism and their parents and that all participation would be entirely voluntary; those who agreed to participate would have the right to withdraw at any point without giving a reason. All data generated or used for the study would be stored safely in accordance with the data protection act (1998) and all reasonable steps would be taken to protect the anonymity of participants in reporting. Parents and staff would be asked separately if videos were to be used in study presentations, as these may reveal the identities of the participants if shown to a familiar audience.

Informed consent was important for each aspect of work and it was sought from the adult participants for each stage of the study. Although the study was primarily about teachers and parents working together, the children had a vital role in being the subjects of the home-school reading programmes. The children's willingness to participate in the work was therefore an important consideration. Many children could not give informed consent themselves because of their low levels of language and cognition. It was important that all children were monitored by the adults working with them and that participation was never forced. In situations where children displayed signs of unwillingness, this was respected. An example of this included the videoing of the children; in one case a boy refused to read when the video camera was on, both with his teacher and with his parent; another child took his mother's mobile telephone after she had used it to film him and he deleted the video she had taken. In both of these cases teachers and parents suspected that the children were not happy with being filmed and so stopped this aspect of the study.

With regards to the children's school assessment records (CARS scores, B Squared records and communication assessments) I advertised my intention to use this (anonymised) data in my briefing letter to all parents and I obtained written consent from all teachers and the SLT to access this data for the study.

The impact on parents

When parents read with neurotypical children, they are likely to benefit from the 'reward' of increased social interaction and relationship building between parent and child (Vandermaas-Peeler et al, 2012:3). However, such rewards might not be forthcoming for parents in this study when reading with their autistic children. It is welldocumented that raising a young child with autism can be extremely stressful for parents (Dillenburger et al, 2010; Glazzard and Overall, 2012; Gray, 2006) and that 'homework' of any kind can place further burdens on parents and their children which may be unmanageable (Winner, 2011). This is particularly so in the early stages of a programme, before the children have had the opportunity to develop their compliance and joint attention skills. Parents may well experience rejection and tantrums from their children, particularly when trying to begin new routines and encourage social interaction (Sicile-Kira, 2003). For some children with autism, it may take a considerable time, longer than the programme's intended duration to gain any social engagement benefits because it is so difficult for them to acquire skills in this area (Frith, 2003; Vermeulen, 2001). Furthermore, if progress takes longer than might be expected (Wing, 1996), parents may feel they have failed or that it is not worth the considerable effort needed to succeed when home-life might already be difficult. Although school staff may be sympathetic to these issues and attempt to be supportive towards parents, these kinds of difficulties may cause some parents to drop out of a programme such as this.

Studies have indicated that parents of children with autism often feel isolated and need more help than parents of neurotypical children or children with other special needs (Dabrowska and Pisula, 2010; Tehee, Honan and Hevey, 2009). Parents of autistic children often rely on the school for support with their child (Dillenburger *et al*, 2010; Hodge and Runswick-Cole, 2008; Tehee, Honan and Hevey, 2009). Bearing in mind the stresses and strains the parents may well have been placed under, it was important that the introductory letter for this study outlined the potential benefits to the parents and children (see Appendix 1).

3.4 Methods

In this section, I describe the methods used in each of the four phases in turn, giving rationales for the methods and explaining how the data was collected and analysed.

Phase 1: Understanding the situation prior to intervention

The teacher survey

The teacher survey (March 2013) (see Appendix 2) was designed by one of the English Coordinators at Cherrycroft to provide data about the teaching of reading in the school and practices of sending home reading materials. It was conducted to help the English Coordinators understand the teachers' current practice and to identify areas of potential development with regards to the teaching of reading. It asked questions about how reading is typically taught in the teacher's class, i.e. how often each child has access to books or other reading materials; how often they listen to others read; how often they look at books in a one-to-one session with an adult; what they do typically during a school library visit and so on. It also asked how often books or reading with their child at home. It was completed by 14 teachers. I reviewed this secondary data, specifically the responses to the questions about home-school reading practices, during Phase 1 of this study.

The purpose and design of the parent questionnaire

The parent questionnaire (see Appendix 3) was designed to find out how parents were supporting their children in learning to read prior to the project intervention and to examine some of the factors which might hinder parents in reading with their children at home (partially addressing my first Research Question, i.e. understanding the baseline of current home practice prior to intervention). It was important to understand these issues in order to plan parent workshops which would draw on parent expertise and experience as well as develop their understanding further. It was expected that parents might vary considerably in terms of their understanding and experience but that this could be acknowledged and catered for. The questionnaire also sought to examine parents' attitudes to reading and how they use their reading skills in their own lives since it has been argued that parents' attitudes and practice have an important influence on how their children develop attitudes and skills (Fletcher, Greenwood and Parkhill, 2009). Although interviews and discussion groups would enable these issues to be explored in greater depth, time would not allow the possibility of conducting interviews or group discussions with all the parents and thus the questionnaire was chosen as a way to gain baseline data from as many families as possible.

The questionnaire comprised 18 items, some of which had sub-sets of questions, coded alphabetically under the item number. Apart from the last question which asked parents who do not read with their autistic child to give reasons, all other questions were closed with structured response answers (usually multiple choice). The questionnaire was organised into four sections: 1) Information about the respondent and his or her family (including cultural background, home language and socio-economic status); 2) Adult reading practices in the home and attitudes towards reading; 3) The reading ability of the child with autism (as perceived by the parent); 4) Attitudes towards the teaching of reading and parental involvement, particularly in relation to a child with autism.

The questions were generated through consideration of findings and theories expounded in other similar studies. Research by Mittler (2002), Wearmouth (2004) and Wearmouth, Soler and Reid (2002) highlights the importance of understanding the cultural background, including language use and typical reading behaviours in the home setting so that teaching strategies can be adapted to fit with existing practices and cultural norms. The kinds of reading resources and print access available in the homes may also have a bearing on what the school would need to provide (Kelly-Vance and Schreck, 2002; McNaughton *et al*, 2010; McQuillan and Au, 2001).

The reading experiences which children have at home through witnessing others, sharing with others and independent reading may have an impact on them acquiring their own reading skills and interests, as indicated by Fletcher, Greenwood and Parkhill (2009). However this had not been studied in children with autism. It was important therefore to include questions about reading practices the autistic child witnessed at home and what they might participate in or prefer to do alone.

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It is common for children with autism to compartmentalise different aspects of their lives; they may use certain skills or exhibit particular behaviours only in particular contexts and refuse to do 'school' things at home (Sicile-Kira, 2003; Winner, 2011). It was important therefore to ascertain what children typically do at home and what parents understand of their children's skills (Fletcher, Greenwood and Parkhill, 2009), and a set of questions was designed to explore this.

Similarly, children with autism may communicate differently with parents and school staff. It was known anecdotally (through meetings and discussions with parents) that although most children at the school had been taught to use the Picture Exchange Communication System (PECS) (Bondy and Frost, 2001), many refused to use it at home. PECS was commonly used at Cherrycroft to enable non-verbal children, or those with very limited verbal language, to answer questions about books they were reading (e.g. to make requests; to comment on what has happened or what they can see in books they are looking at; to name characters and items in illustrations; to identify words in texts). Without such a communication tool, it may be difficult for parents to elicit their child's understanding or engagement. Questions were therefore posed about the child's communication at home as this would have an impact on the kinds of activities sent home and the expectations of children and parents in the home learning environment.

Studies by Al-Momani, Ihmeideh and Abu Naba'h (2008) and Hindin and Paratore (2007) highlighted the need for the teachers to understand the parents' aspirations for future ways of working/reading with their child and the potential barriers to this. The questionnaire therefore included questions about parents' confidence in supporting their child to develop reading skills, whether parents would like to be more involved with helping their child to learn to read, and whether they would be prepared to attend parent training workshops. It also posed an open question about the main reasons parents did not read with their autistic child, if applicable. This helped school staff to get a sense of how parents felt about shared working and contribute to the identification of the training needs of parents.

The questionnaire was designed to provide data giving a broad overview of the attitudes of most parents at the school towards helping their children with autism learn to read. It did not provide any insight into what parents actually do when they read with their children. It was a deliberate decision not to ask parents to describe this on the questionnaire for several reasons. First, there are many and varied possibilities of how parents might approach reading with their children; it would be extremely difficult to formulate multiple choice questions which might capture true responses. Second, it might have been very difficult and time-consuming for parents to describe in writing what they do. This kind of questioning was far better suited to focus group discussion or interviews. Both of these opportunities were made available to parents at later stages in the project (Phases 2 and 3). In addition, home-videos provided some evidence of what parents do with their children and these were part of the 12-week home-school reading programme.

Parent questionnaire distribution

Pupils attend Cherrycroft because of their diagnosis of autism rather than the proximity of their home to the school. At the time of the study, they came from all over the suburban borough and represented a variety of socio-economic and ethnic backgrounds. Over half of the children (58%) were brought to Cherrycroft by local authority transport ('school bus'), as is common for children at special schools. Regular contact between staff and parents was therefore often limited to hand-written notes in a home-school book, which went back and forth in each child's bag every day. Thus, the parent questionnaire was sent to the parents of all 92 pupils via their school bags. Where staff were aware that some parents could not read or write English, or had difficulty understanding spoken English (approximately 10% of families), the opportunity to complete the questionnaire with an interpreter was offered.

Collection and analysis of parent questionnaire data

The decision to send out hard copies of the questionnaire (rather than an electronic online version) was made for reasons of accessibility. Some did not have a computer and others were known anecdotally to have difficulty getting their child or children to come off the home computer so that they could use it. Asking for handwritten responses on 'hard' questionnaires allowed for greater flexibility in collecting the data since it could be done anywhere at any time, without the need for specialist equipment. It would also provide me with a hard copy of each questionnaire to refer back to and crosscheck with the computer data entries during the analysis process, if necessary.

Although a closing date for return was stated on the questionnaire (2 weeks after distribution), only half of the returns were returned by this date. Reminder text messages were therefore sent to families who had not responded, and this yielded more returns. In some cases, further copies were given out.

Questionnaires were returned on 69 children (75% of Cherrycroft pupils) over 1 month, although seven were incomplete. Of these, four had significant gaps with sets of questions unanswered (one mother returned the questionnaire only partially completed and three families accidentally received incomplete questionnaires owing to a photocopying error but answered all questions they were given). Five parents who returned the questionnaires have more than one child at the school and completed separate questionnaires for each of their children.

All multiple choice and closed question responses were numerically coded and entered into SPSS (IBM, 2013). This enabled frequencies of response types to be generated easily and put into simple graphs and charts for comparison. I was also able to use the crosstabs facility to look for patterns in the data relating to two variants. For example, I could compare the amount of time parents spent reading for their own purposes with the amount of time they spent reading with their children, to see if there was any correlation. The findings of the analysis are expounded in Chapter 5.

There was little time (only two weeks) between completing the questionnaire gathering and the staff INSET day. Therefore, I chose to do an initial simple analysis of the data, looking for trends and patterns which would be of interest to the school staff on the INSET day and to parents at the workshops (Phase Two). The later, more sophisticated analysis included comparison and triangulation of results with other data sets from further phases in the study. For example, comparing the skills parents had reported their children to be using in the home with skills children demonstrated in videos and those written about in the home-school reading diaries.

The questionnaires were not anonymised because it was important for the data analysis to be able to compare the parents' responses about themselves, their children and their home reading practices with the data from the other phases. For example, it was important to be able to compare the parents' responses in the Phase 4 semi-structured interviews with what they had said in the questionnaires prior to the programme intervention. This contributed to evaluating the successes of the programme. The questionnaires were stored securely and responses treated confidentially so that only I, the researcher, knew the identity of each of the questionnaire respondents. All data was anonymised for reporting.

Phase 2: Training for staff and parents

Staff training

A staff training morning was organised for all classroom staff (14 teachers and 45 teaching assistants) and the SLT. The following programme was covered:

- Presentation on the aims of the research study and the key findings from the parent questionnaire
- Workshops on *The Teaching of Reading for 'pre-readers' and emerging readers'*, led by the English Coordinators (staff attending the workshop most relevant, depending on the children they work with)
- A questionnaire (see Appendix 4) to enable staff to think about their personal experiences of, and attitudes towards:
 - o learning to read
 - o helping children learn to read
 - o parent involvement
- A class reading profile activity (see completed example, Appendix 5), which enabled class staff to consider the characteristics of the children in their class in relation to learning to read.

The 52 questionnaires completed by staff during the INSET day (about their own experiences of learning to read and teaching other children thereafter) were collected and the responses were collated and compared using NVivo 9 (QSR International, 2011). Analysis of the responses included explorations of how staff members themselves learnt to read and personal experiences of parental involvement. The class reading profile activity sheets were analysed in conjunction with parent questionnaire responses to compare how the children might behave and perform differently in relation to reading activities in the school and home settings.

Parent workshops

Parent workshops were a regular part of the school calendar with topics and training offered according to parent survey requests (information about teaching reading had been requested by parents in the latest survey). The reading workshops for the study were organised to fit in with the normal parent workshop programme and advertised in a similar way to any others which the school offered so that the 'social ecology' (Oliver, 2003:84) of the school would be disturbed as little as possible by the study. The invitation letter (see Appendix 6) included information about the study but it was made clear that parents could attend the workshops without contributing to the study if they wished and that explicit consent to be involved in the study would be sought at each of the workshops.

Two workshops were offered, one for parents of children who were at the 'pre-reading' level and one for parents of 'emerging readers' (see Section 1.2 for definitions). Parents were encouraged to choose which workshop they wanted to attend, or both if they wished. All of those who attended the workshops also agreed to participate in the discussion groups for the study.

Parent workshops at Cherrycroft were usually led by the relevant subject coordinator; in this case, led jointly by myself and the two English Coordinators. The workshops were two hours each in duration and held in the Parents' Room (a meeting room with soft furnishings and audio-visual equipment). Both workshops followed the same outline with both coordinators attending both workshops. They acted as facilitators for the parent discussion groups; one Coordinator led the 'pre-reader' input and the other led the 'emerging reader' input.

The outline of each workshop was as follows:

- Presentation of some key findings from the parent questionnaire
- Outline of the research study and the need for specific consent
- Discussion groups and feedback from groups
- Presentation/demonstration of teaching approaches (including from videos)
- Role-play activity, with time for discussion of approaches
- Introduction to the 12-week home-school reading programme

All parents who signed up to participate in the 12-week home-school reading programme attended one or both workshops. Some parents attended both workshops, either because they had two or more children who were at different ability levels in reading, or they were not sure which workshop was more appropriate for their child and wanted to hear both presentations.

Discussion groups

For the discussion groups, the workshop attendees (10 parents per workshop) were divided randomly into two equal groups of five, so that there were sufficient people in each group to foster discussion but sufficiently few that everyone would have a chance to speak. The two discussion groups were chaired by the two English Coordinators, who displayed the questions they were going to ask to generate discussion (the same questions for each group, see *Figure 2*) and then led the discussions by asking each question in turn. The group leaders took some notes as well as audio-recording, so that they were able to recall and feed ideas into the rest of the workshop sessions.

- 1. Do you think it's important for parents to read with their children? Why/why not?
- 2. How have you helped your child/children learn to read?
- 3. What are the successes and difficulties you have encountered when trying to read with your child/children?

Figure 2: Parent workshop discussion group questions

The audio-recorded discussion groups in each workshop enabled parent participants to explain their experiences of reading (or trying to read) with their autistic children. They were asked to describe what they usually do and what they felt went well and/or was difficult. It was important to understand and acknowledge the parents' starting points to enable better-informed training (Epstein and Dauber, 1991). Such focus discussion groups are often used to help to elaborate on and interpret survey results (Bloor, 2001:11) and these groups were helpful in uncovering the details around patterns seen in the parent questionnaire data (for example, why reading sessions typically lasted only 10 minutes and why parents wanted more training). It was acknowledged that intragroup variations might be under-reported (Bloor, 2001:17), as individuals might be drawn to comment on common themes amongst participants, rather than change the conversation to their own issues. However this was not problematic at this stage of the research as teachers would pick up individual issues with programme participants during the 12-week programme.

The discussion groups were purposefully placed before the main session input so that the English Coordinators who were leading both the focus group discussions and the presentations would have an idea of the kinds of issues the parents were facing before they gave their talks and demonstrations. In this way, they would be able to tailor their suggestions, including real examples. The Coordinators and I were aware that the comments that parents made during the discussion groups may be very dependent upon the context and that they may be tempted to say what they thought the session leaders wanted to hear (Smithson, 2000) or that group dynamics may affect what individual parents chose to report in front of each other (Barbour, 2007:31). We also felt, however, that the discussions may be quite typical of 'school gate discussions' amongst the parents and we hoped that parents may realise that they shared common issues and could support each other in ways which school staff or I, the researcher, might not be able to (Barbour, 2007).

The audio recordings from the parent workshop discussion groups were transcribed using NVivo 9 (QSR International, 2011). The discussion group questions provided the structure for the 'structural coding' (Saldaña, 2013:84) of the participants' comments and discussion. For example, the first question (see *Figure 2*) was about why the participants thought it important to read with their autistic children. Therefore, I examined the transcripts of all four of the discussions groups, highlighting all reasons the parents gave as to why they felt it important to read with their autistic children. Continuing in a similar way for each of the question themes (coding for approaches used by parents and successes and difficulties encountered), I was able to collate lists of codes, detailing the many examples given and discussed by the parents during these group conversations (many quotes and themes are presented and discussed in Chapters 5 to 8).

Other elements of the workshops

Following the discussion groups, the English Coordinators gave their presentations of strategies for teaching reading skills to pupils of different levels of ability (see Appendices 7 and 8) and parents were encouraged to try some strategies in role play with each other. It was explained to parents that the demonstrations of teaching strategies during the workshops were a 'taster' of the kinds of approaches used in school for children of different abilities. Parents who would go on to participate in the 12-week programme would work alongside their child's class teacher to find approaches and resources suitable for them and their child.

Workshop evaluation

At the end of each workshop, the standard school evaluation form was given to parents to complete, asking them to rate usefulness of the various components of the workshop on a scale of 1-5. This was useful in identifying ways of presenting information and ideas which were most useful to the parents. It gave insight into the best possible ways to continue working with them and share ideas during the study programme.

Phase 3: 12-week home-school reading programme

The 12-week Spring Term programme was designed to enable parent and teacher participants to find ways to work together on developing reading activities and practice in order to complement and extend existing practice in each of the school and home settings (Wolfendale and Bastiani, 1996). It was important that parents should be seen as partners in the educational process with 'unique knowledge and information', and that professionals would be able to take account of what they said, treating their views as 'intrinsically important' (Bastiani, 1996:64). This meant the programme had to provide plenty of opportunities for teacher and parent dialogue and collaboration. The methods for doing this (detailed diaries, parent-teacher meetings and videos as a focal point for discussion) are described further in this section.

Programme guidelines and expectations of participants

While other studies have had a 6-week programme period (Kelly-Vance and Schreck, 2002), this was considered too short for children with autism as they take time to adjust to new routines and expectations, hence doubling to 12 weeks for this study. The

programme guidelines (see Appendix 7) were shared with all parent and teacher participants. In summary, the guidelines were:

- Books, resources and or activity packs to be sent home for the parent to use with the child on a weekly basis (instructions and objectives to be given in a diary)
- Teachers and parents should use a programme diary (provided) to correspond with each other on a weekly basis
- A short school video and home video to be made of the child reading with the teacher and the parent, once at the start of the project (week 1), once in the middle (week 6) and once at the end (week 12) if possible
- Parent and teacher meetings in weeks 1, 6 and 12, to watch videos together and discuss the work each had been doing with the child and share ideas and strategies (these meetings were audio-recorded)

Books and activities sent home

Teachers were asked to send home whatever resources and/or activities they thought were suitable for the home and which the children would be used to using. In some cases this included reward strategies which might help the parent to engage the child, as other studies have done (Kelly-Vance and Schreck, 2002). It was important that whatever resources or activities were sent home, teachers should provide very clear instructions to the parents on how they should be used, otherwise parents' efforts may be counter-productive (Al-Momani, Ihmeideh and Abu Naba'h, 2008). The initial (and subsequent) video meetings were useful for teachers to demonstrate using the various resources and strategies with individual children.

Parent and teacher meetings

These were held in my office, as a convenient place to meet, where teacher and parent could both come and use my computer to view their videos together and discuss them. I was present at all of the meetings, with permission of all participants. The meetings started with watching either home or school video first, depending upon the preferences of the participants, discussing it, then watching the other video (if available) and discussing that. With consent, I audio-recorded these meetings in their entirety (including whilst videos were playing) to capture comments made by the participants while and after they were watching the videos. Occasionally, I joined in with the discussions to elicit more information from the participants, or when they asked my opinion; however, most of the discussions were led by the participants themselves. These meetings were generally about 30 minutes each in length. At the end of the programme, all the audio recordings of the parent-teacher meetings were analysed. As I listened to these recordings, I made notes of the discussion themes and was able to use this evidence to triangulate with details from the diaries and with what participants said in the final evaluation interviews, to confirm successful aspects of the programme and to chart the progress of the participants.

Videos

In addition to videos being used to prompt participant discussion, as used by Cheeseman and Clarke (2007), the videos were also intended to help track progress in the development of reading skills (children) and teaching skills (parents and teachers). The first school video and home video were to provide evidence of the starting points of the participants, and the subsequent mid-point and end-point videos were intended to demonstrate any changes which the adult participants may describe during their evaluative interviews at the end of the programme. Guidelines were given that videos should be about five minutes long and should try to capture a typical reading related activity session between the adult and child. Teachers could ask another staff member to film them (usually a teaching assistant); some propped a video camera on nearby furniture. Parents were encouraged to film however they could, e.g. asking a family member to help, using their mobile telephone or any other filming device. Although all parent participants said they would try to do this, only nine of thirteen parents managed to make one video and only five parents were able to film more than one reading session. Most teachers managed only a starting-point video and a second one in week 9 or 10 (two videos per child rather than three). Not all parents gave their videos for the data set (usually because of difficulties transferring the footage from mobile devices or forgetting to do so). The videos were very useful as a demonstration tool and stimulus for discussion (Newby, 2010) during parent-teacher meetings (Phase 3) and the evaluation interviews (Phase 4) but the ability to track progress using video evidence was more limited than originally envisaged.

Teachers were able to provide 34 videos (two each for 17 children) but only seven parents were able to supply home videos for analysis (four children were videoed at home twice, in the first few weeks of the programme and again towards the end; two children were home-filmed only once during the first few weeks; one child was homefilmed only once during the last few weeks). The videos were a very useful talking point for the parent-teacher meetings, so that the teaching strategies and the child's learning and level of engagement could be seen and discussed. However, the two school videos of each child varied in content and theme from one occasion to the next (depending on the focus of learning and types of activity) and the home videos were too few to be compared. Analysis of the videos (see examples, Appendix 8) comprised making notes on the environment, arrangement of furniture, strategies being used to teach the children and support their engagement (e.g. whether or not rewards or 'first_ and then_' visual prompts were being used, to tell the child that a reading activity needed to be done first, then a reward would follow). It was possible to see evidence of progress in a few children's levels of attention and engagement over time where suitable videos existed (five children), and also to see specific strategies being used by teachers and adopted by parents in several cases.

Diaries

Other studies had found diary communication particularly useful (Hornby, 2011) because, although regular face-to-face contact was the most desirable (Coleman, 1998), it would not have been practically possible to do this every week. The week 1, week 6 and week 12 parent-teacher video meetings were time consuming (usually about half an hour with each parent) and needed to be conducted in a private space with video playback facilities during school time. When working with parents on similar collaborative endeavours, Hornby (2011) highlighted the benefit of diaries to aid the sharing of information and building of relationships:

When parents do write in the diary, this method of communication generally works very well and makes a significant contribution to strengthening relationships between the parents and teachers concerned (Hornby, 2011:91). At the end of the 12-week programme, the diaries videos and audio-recordings of the parent-teacher video discussions were gathered for analysis. The diaries (see example pages, Appendix 11), were scrutinised for evidence of teacher-parent dialogue and the themes in the dialogue; the kinds of learning objectives which were being set for each child at school and at home (and whether these were the same); the kinds of books, materials and tasks which were being sent home and the written instructions which teachers had provided for the parents.

Phase 4: Programme evaluation

Programme participant interviews

Nine parent interviews (six with mothers, one with a father and two with mother and father couples) and nine teacher interviews were held. The interview questions were designed to enable participants to describe their experiences of being involved in the programme and the impact of their involvement on themselves and the children they worked with.

The questions (see *Figure 3*) related to changes in practice, changes in relationships (particularly parent and teacher), progress seen and any other positive or negative aspects of programme involvement. The questions were phrased in a way which asked the interviewee to answer yes or no in relation to changes that may have occurred as a result of the programme and then to provide more detail. The interviewees were encouraged to raise any difficulties which may have been encountered even if a positive response was given. The interviews served as both an evaluation of the programme as well as contributing to answering research questions 2, 3 and 4.

Parent Interviews

- 1. Did the parent workshop and teachers' advice during the 12-week Programme help you to develop your practice in reading with your child at home? If so, how?
- 2. Has participation in this study changed what you do when you read with your child at home and/or your attitude towards reading with your child? If yes, how? If no, why not?
- 3. What changes/progress have you noticed in your child, if any?
- 4. How has your relationship with your child's teacher changed, if at all?
- 5. Would you like to continue with a home-school reading programme? Why/Why not?

Teacher Interviews

- 1. Has involvement in this project changed your classroom practice (particularly your teaching of reading)? If so, how?
- 2. Has involvement in this project changed your understanding of the issues parents face in supporting their children at home? If so, how?
- 3. Has involvement in this project changed the way you work with parents and/or your attitude towards working with parents? If so, how?
- 4. A) What do you think are the positive aspects of home-school reading?B) What do you think are the negative aspects of home-school reading?

Figure 3: Evaluative interview questions

The interview process

The interview questions were included in the invitation letter sent to the programme participants. This gave interviewees the opportunity to consider what they were being asked and to prepare their responses. Teacher interviews were arranged at a mutually convenient time (usually at the end of the school day). Parent interviews were held following the final parent-teacher video discussion meeting, after the teacher had left. Permission was sought from all interviewees to allow audio-recording of the interview to enable later transcription and analysis, and for me to focus on questioning and listening during the interview itself. All interviewees granted permission. Several teachers brought the questions with their hand-written notes to the interview but no parents did so. I had been involved with several previous discussions with each of the interviewees (e.g. workshop discussions, parent-teacher video meetings), and was familiar with the individual case histories of each of them. It was important to allow time and space for the interviewee to give their responses in their own way but also to reflect that I had shared some of the experiences and had been involved in previous discussions about some of the issues. It gave me an opportunity to identify with them, helping to reduce the power inequalities inherent in the research relationship (Conolly and Parkes, 2011). Occasionally, a comment made by an interviewee triggered a memory of an example I had seen or heard them discuss at one of the workshops or parent-teacher video meetings and I would mention this to prompt further examples or discussion. The interviews were semi-structured, with each of the set questions asked in turn but with opportunities to discuss and elaborate on examples. At the end, the interviewee was asked if there was anything else they wanted to add.

I was aware of the possibility of researcher bias (Malone, 2003; Smyth and Holian, 2008) and that the interviewees may have been tempted to give responses which they thought I wanted to hear (Robson, 2002), given that I was interviewing them about the successes and weaknesses of my own project. I was also aware of the potential criticism that I may have influenced the data from the parent-teacher meetings and interviews by becoming involved with the discussion and prompting the recall of experiences. This might have been avoided by me not being present at the meetings and asking a third person to conduct the interviews. This could be considered in future work. However, my presence and involvement made it particularly important to seek real examples and verification of the points made (e.g. referring to videoed examples or quotes from the home-school diaries), which could back up the opinions given. The structure of the project as whole meant that the individual cases became very familiar and individual themes and progress of adults and children could be tracked through the project. For example, when asked about whether their child had made any progress during the programme, parents typically said, "Yes, he used to...but now he is able to..." These kinds of comments were often related to the problems the parents first expressed in the initial workshop discussions, the subsequent learning objective planned and documented in the diaries and the progress seen in the later videos.

Interview data collection and analysis

The audio-recordings of the interviews were transcribed, and the typed responses were analysed using a thematic approach (Braun and Clarke, 2006; Saldaña, 2013). There were two strands to the coding and analysis of themes. My first method was 'inductive' coding (Braun and Clarke, 2006:12), in which I 'mined' the data (Brinkmann and Kvale, 2015:55) for key words and ideas in an open way, rather than looking for codes to fit to a pre-existing structure. I chose to use this method first so that the data might yield unexpected *post priori* themes as well as more expected ones from the background theory which informed the interview questions. I thought this to be particularly important because the area of research was new and unchartered; there was a possibility that unexpected ideas would be evident in the data and these should not be missed by searching solely for themes from existing literature, or which may have been 'forced' by the interview and/or research questions (Sapsford and Jupp, 1996: 256).

The next stage was to compile lists of codes under the headings of each interview question. For the teachers, each long list was organised into family themes; the main themes which were apparent in response to each question. For example, when asked about changes to classroom practice, some teachers gave examples relating to the parent liaison aspects of their practice, others spoke about new professional development opportunities and some mentioned changes relating to their planning and the teaching and learning in their classes. Thus, numerous individual codes were grouped within these three family themes. For a full list of codes under family themes in relation to each interview question, see Appendix 9. For parents, the codes were more diverse in nature so they were not grouped into families (see Appendix 10 for the codes identified in responses to the parent interview questions).

In addition to coding and organising aspects of the interview responses in relation to the interview question themes, I also used my research questions 2, 3 and 4 (see Section 1.5) as a basis for 'structural coding' (Saldaña, 2013:84). I looked for codes in the data which related specifically to Research Question 2: barriers; Research Question 3: enabling factors; Research Question 4: impact on participants and practice. This second grouping method gave me clear pointers for answering some aspects of the over-archingr, which could be triangulated with data from other research methods (for example, the home-school diaries and the parent teacher meeting discussions). This

was useful for reporting, as I chose to report my findings as four separate chapters, one addressing each of the four research questions, which I explain and justify in Chapter 4. Using several methods of grouping the interview data codes (by *post priori* themes, by interview question and by Research Question) enabled me to use the data both for programme evaluation and also for triangulating with findings from other phases of the study, adding weight to the findings of the study overall.

I intended to use as many quotes from participants as possible when reporting the findings. As Braun and Clarke (2006:10) remind us, 'a theme captures something important in the text which relates to the research questions'. It does not matter how many times each theme is mentioned or by how many participants, what is important is that a theme or idea was mentioned by someone and that it was important to them. It was likely that experiences would be diverse in this study since each Home-school Reading Programme was unique. Participants needed the opportunity to tell their own stories despite me having the 'monopoly on interpretation' (Brinkmann and Kvale, 2015:37).

Assessment and evaluation of pupil progress

In evaluating the impact on pupil progress, use of the school's reading assessment data (*Connecting Steps*, B Squared, 2013) did enable some basic comparison of pupil progress before and after the study period and between children whose families took part with that of those who did not. However, this was not intended to match the scientific rigour of the pre- and post-testing in other studies; rather it was used alongside 'softer' measures of progress such as anecdotal reports from parents and teachers, some exemplified by video evidence.

The *Connecting Steps* assessment data and home videos enabled the identification of types of skills in which the children had progressed during the 12-week home-school reading programme and to compare teacher and parent perceptions of these skills. As the *Connecting Steps* P scale assessments were reading-specific, they did not capture progress in more generic learning skills, thus, anecdotal and video evidence and diary notes were particularly useful in charting impact.

3.5 Summary and conclusion of methodology and methods

The four-phase structure of the study provided a robust framework, within which mixed methods of data collection and analysis could be utilised, to meet the aims: to understand the baseline from which the participants were starting; to explore the factors that would hinder and enable home-school reading practices to be developed; and to evaluate the impact of the home-school reading work. The epistemology of the study was constructivist in that each phase built on the knowledge and understanding gained in the previous phase/phases and each parent-teacher partnership worked together through the Phase 3 12-week programme, within given guidelines, to construct their own programme of home-school reading to develop their own practice and help their individual child/children make progress.

A detailed account of the findings of the data analysis is to be found in Chapters 4, 5, 6, 7 and 8. The quantity and diversity of data collected throughout the four phases required choices to be made about how to present and discuss my findings of the study. Chapter 4, therefore, explains my decisions and justification for the way I have reported the findings and looks at the characteristics of the participants who took part in each phase of the study. Chapters 5 to 8 describe and discuss results in relation to each of the four research questions respectively. Within these four chapters of findings and discussion, the data is largely organised and presented under sub-headings relating to *post priori* themes found in the data sets across the study.

Chapter 4: Explanation of the reporting and discussion of findings and introduction to participants

4.1 Reporting and discussion of findings

This chapter explains and justifies the way I have chosen to present and discuss the findings of this study. It is clear from Chapter 3 (Methodology and Methods) that many methods of data collection were employed over the course of the study, from September 2013 to July 2014. This began with the Phase 1 data (surveys of teachers and parents) being mainly quantitative in nature. Phase 2, the training phase, generated a mixture of quantitative and qualitative data from activities, questionnaires and discussion groups. Phase 3 (the 12-week programme) generated a variety of qualitative data through audio-recorded parent and teacher discussions, weekly diary entries, and video clips of teachers and parents doing reading activities with their children. Phase 4 (the evaluation through interviews with participant and scrutiny of children's reading assessment records) generated both qualitative and quantitative data on experiences of the participants and the impact and outcomes of the study.

Not only did the types of data vary throughout the study, so too did the numbers of participants in each phase. Sixty-three parents completed the initial parent questionnaire (Phase 1); 15 parents came to the training workshops (Phase 2); 11 families (mother and/or father) participated in the 12-week programme and 10 parents participated in the evaluative interviews. Similarly, Cherrycroft staff numbers varied in each phase of the study with 14 teachers completing the initial teacher survey (Phase 1); 52 staff members (teachers, teaching assistants and SLT members) took part in the training session (Phase 2) and 9 teachers took part in the 12-week programme and interviews (Phases 3 and 4).

With such a variety and quantity of data sets, it was necessary to be selective in the way they were analysed, used and reported within the confines of the study and this 45,000 word thesis. This selection process was guided by the overarching aims of the study and the research questions (see section 1.2). In short, I wanted to know what teacher and parent attitudes were to home-school partnerships at Cherrycroft, what experience they had of doing reading activities with their autistic children, either jointly or separately and what they felt was successful or difficult about this work (Research Question 1). This information could then be used as a starting point from which to develop home-school reading practices. The training and 12-week programme were the vehicles for joint working, through which barriers and enabling factors would be highlighted and explored by the participants (research questions 2 and 3) so that I could use this participants' expertise to construct a model of home-school reading which would work for different teachers, parents and children. Finally, I wanted to know about the impact of the study on those who had taken part (Research Question 4) and to enable the teachers and parents to confirm what they felt had worked well and what had been difficult during the partnership work of the home-school reading programme.

The four-phase structure of the study was useful as a project-management tool, demarcating four separate periods of activity throughout the year, all of which were necessary to answer the research questions. However, the answers to each of the research questions were found in the data across the phases, with findings from one data set triangulating with those of another phase in many cases. For example, the barriers which influence the participation of parents and teachers in home-school reading (Research Question 2), were evident in different ways throughout the data from Phases 1, 2, 3 and 4, with some barriers remaining constant throughout the study, others emerging or decreasing as the study progressed, so it was important to be able to identify key themes across phases.

I decided, therefore, to report the findings within the framework of the research questions (Chapters 5 to 8, corresponding to research questions 1 to 4 respectively), rather than phase by phase. I chose to work within a constructivist paradigm, through which I sought to 'understand the multiple social constructions of meaning and knowledge' (Robson, 2002:27) revealed by the participants through their conversations, videos, writings and recollections during the study. A researcher working within a more positivist paradigm would have used a more structured format and might have analysed and presented the data from each method (e.g. diaries, videos etc.) separately to highlight the relative strength of each of them. However, this would have required greater standardisation in the use of each method and I was keen that the participants were able to use them flexibly, within the project framework (see Figure 9 in Chapter 9, Section 9.4), to construct their own ways of working together and with their children.

It must be remembered that each of the teacher and parent partnerships worked on different objectives and used different activities with the children and that this study was about constructing a common framework within which individual relationships could flourish and activities could vary and develop depending upon individual needs and circumstances. This study was not designed to specify, measure or quantify particular tasks or outcomes for the participants.

In the reporting of the study findings (Chapters 5 to 8), I sought to do three things: a) to draw the key themes together from each of the phases to answer the research questions; b) to understand and illuminate the data in the light of extant literature; c) to tell the story behind the construction of the home-school reading model.

4.2 The participants

It is important for the reader to be introduced to the participants who took part and contributed to the data in each phase of the study. This demographic data was largely gathered during the data collection of each phase. Yet, because of my decision to avoid phase-by-phase reporting of findings, this information does not easily fit in the forthcoming findings and discussion chapters (Chapters 5 to 8). Therefore, I present it here in this chapter.

Teacher participants

All class teachers (n=14) took part in the teacher's survey (March 2013, Phase 1) and nine of them took part in the 12-week programme (Spring 2013, Phase 3) and the evaluative interviews (Summer 2013, Phase 4). Their levels of experience of teaching children with autism varied with three being at Cherrycroft (or a similar setting) for more than 10 years and two being newly qualified teachers (NQTs). The largest group of teachers (nine) had between five and nine years' experience, and those who took part in the 12-week programme and interviews (nine of 14) were broadly representative of teachers across the school in terms of teaching experience. It was common at Cherrycroft for teachers to change classes each year so that over time they taught a wide range of pupils across the autistic spectrum, and across the Nursery and Primary School age-range (3 to 11 years). *Figure 4* provides the profile of the teachers in terms of their numbers and levels of experience teaching autistic children.

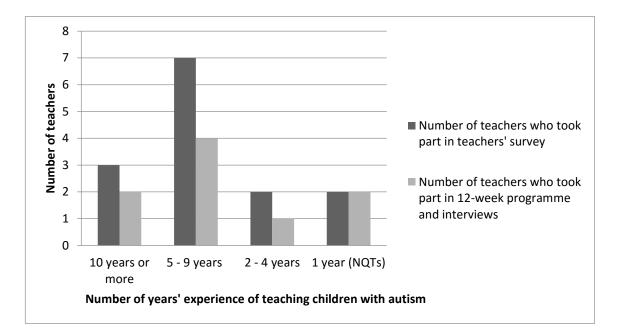


Figure 4: Profile of teacher participants

The training phase of the study (Phase 2) involved all SLT members, teachers and teaching assistants (n=52) as it was part of the school's training programme to develop confidence in the teaching of reading across the school to inform staff about initiatives, such as this study, which were taking place in school.

The nine teachers who took part in the 12-week home-school reading programme did so because they were the teachers of the children whose parents opted into the study.

Parent participants: the parent questionnaire (Phase 1)

Sixty-three of the school's 84 families (75%) returned questionnaires. The returns represented 69 of Cherrycroft's 92 pupils. This was a remarkably high response rate, yielding data on the home reading practices of the majority of families in the school. The profile of parents who responded and their children is summarised in *Table 2*.

Number of parent participants		63, representing 69 children (75% of school population)		
Proportion of school represented		All 14 classes from Nursery – Yr6 (3–11yrs)		
nge	Range of levels in Reading	 Children in Early Years (YrN and YrR) ranged from 8 months to 26 months in Literacy assessments Children in Key Stages 1 and 2 (Yr1-Yr6) ranged from Level 3i to National Curriculum Level 2 in Reading assessments 		
Children's ability range	Communication Levels	 Picture Exchange Communication System (PECS) users (all levels) Verbal pupils Makaton sign language users 		
ildr	Childhood Autism Rating Scale	Score range = 30 – 50		
ъ	(CARS) score	(indicative of mild to severe autism)		
	Home language(s)	37 English speaking (59%)		
	(of 63 families)	11 English and one other language (17%)		
		15 Language other than English (24%)		
	Parental highest level of	7 with no qualifications (11%)		
6	qualification	21 with GCSEs or Level 1-2 equivalent ⁶ (33%)		
pui	(of parent completing	17 with A levels or Level 3 equivalent (27%)		
grou	questionnaire, n=63)	18 with higher qualifications or Level 4-9 equivalent (29%)		
Family backgrounds	Parental employment status	5 Employed P/T (8%)		
	(of parent completing	13 Employed F/T (21%)		
mil	questionnaire, n=63)	28 Unemployed (44%)		
Fa		17 Economically inactive (27%)		

Table 2: Parent questionnaire participants

Although the response rate was high, it was notable that a higher number of returns came from parents who visit the school every day to drop off and collect their children than from those whose children are transported by local authority school bus, as illustrated in *Figure 5*. This was the first indication that regular face-to-face contact with school staff may encourage higher levels of parental engagement.

⁶ Levels refer to the Regulated Qualifications Framework (Ofqual, 2015).

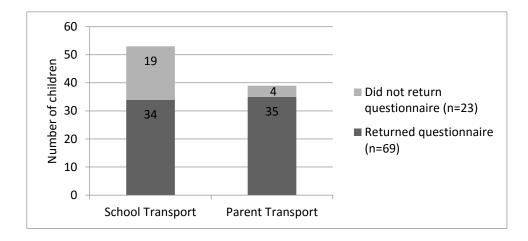


Figure 5: Comparison of questionnaire returns with children who use school transport and those who come with parents

Fifty-three mothers or female caregivers, nine fathers or male caregivers and one aunt completed the questionnaire (n=63). The total number of questionnaires returned was 69 (five parents had two or more children with autism who attend Cherrycroft and they filled in a separate questionnaire for each child).

In nearly all cases, the person who completed the questionnaire was the person who usually reads with the autistic child at home (51 mothers or female care-givers, nine fathers or male care-givers and three others, two of whom were older siblings and one was the aunt). Other parent-child reading studies (e.g., Arciuli *et al*, 2013b; Swain, Cara and Mallows, 2014, in press) have similarly shown mothers to be the predominant readers. In cases where siblings usually read with the child, it was because this family member has a particularly good relationship with the autistic child and/or a better understanding of English than the parents. The aunt who completed the questionnaire did so because the parents could not speak, read or write English and so she usually interprets for them and speaks with the children of the family in English, helping them with homework and so on. Hereafter, I refer to the questionnaire respondents as *parents* (including the aunt) for simplicity.

All parents responded to the questions about education and employment status. Interestingly, over half of the parents (52%) were educated to at least A level standard (Level 3) or equivalent, yet 74% of parents were not in employment. The questionnaire did not ask the reasons for lack of employment, although it is well-documented that caring for a child with special needs, particularly autism, can be extremely stressful for parents and prohibitive in other aspects of their lives (Glazzard and Overall, 2012; Gray, 2006; Woodgate, Ateah and Secco, 2008).

Given the known ethnic diversity of pupils at Cherrycroft, it is reasonable to consider that a language barrier might have prevented some parents engaging with the homeschool reading study. Using school records and questionnaire data together, it was possible to ascertain that of the 23 children for whom no questionnaire was returned, 15 (65%) of them were from families who did not speak English. Forty-eight families (76%) who completed questionnaires were English speaking. Consultation of school records indicated that 14 different languages were used regularly in the homes of Cherrycroft children as primary tongues. The diversity of languages, many of which were spoken only by one family, or only a few, would have made it prohibitively costly to offer support in terms of translating documents and training sessions and so, inevitably, some families would have been unable to engage with the programme unless they had their own means of support such as a relative or friend who could help.

Of the families who completed the parents' questionnaire, the majority of children had siblings, as *Table 3* illustrates. This was found to be an influence on some parents' motivations to participate as they wanted their autistic child/ren to have the similar 'homework' opportunities and routines as their non-autistic sibling(s).

Child or children in the home	Numbers
Child with autism is an only-child	10
Child with autism has non-autistic sibling(s)	45
Child with autism has sibling(s) with autism who also attend the school	11
Child with autism has sibling(s) with autism who attend other schools	3

Table 3: Children in the homes of parents who completed the questionnaire (n=69)

Parents who attended the workshops and participated in the 12-week programme

The parents who attended the workshops all agreed to take part in the audio-recorded discussion groups for the study and also expressed an interest in taking part in the 12-week programme. *Table 4* provides information on the attendees of the two workshops and information relating to their children's characteristics and attainment. Four of the parents came to both workshops because three of them had two children each of differing ability levels; the fourth parent had only one child but felt she would benefit from taking part in both workshops. Although the sample was opportunistic in that it was self-selecting, the parents who signed up to participate in the 12-week home-school reading programme and their children were nevertheless still broadly representative of the school population in general. The children were a spread of ages and came from classes throughout the school population, as did their positioning on the autism spectrum, as measured by the Childhood Autism Rating Scale (CARS) (2nd Ed., Schopler and Van Bourgondien, 2010).

		Pre-reader Parent Workshop	Emerging reader Parent	
			Workshop	
Number of parent		10 parents (of 11 children)	9 parents (of 9 children)	
participants				
Number of classes and age		8 out of 14 classes	7 out of 14 classes	
range of the participants'		from Nursery – Yr6	from Reception – Yr6	
children		(3–11yrs)	(4–11yrs)	
	Range of levels in	8 – 26 months (Early Years	P Level 6 – National	
	Reading	Foundation Stage children)	Curriculum Level 1b	
		P Level 3i – P Level 6	(Key Stage 1 and Key Stage 2	
		(Key Stage 1 and Key Stage 2	children)	
nge		children)		
/ rai	Communication	Non-verbal PECS users	Mainly verbal pupils and	
ility	Level	PECS/symbol supported	PECS supported verbal	
Children's ability range		verbal pupils	pupils	
	Childhood Autism	Score range = 30 – 50	Score range = 30 – 50	
	Rating Scale (CARS)	(indicative of mild to severe	(indicative of mild to severe	
<u></u>	score	autism)	autism)	

All but one parent who responded to the parent questionnaire agreed with the notion that parents and school staff should work together to help their autistic children learn to read. Yet less than a quarter of these parents attended the workshops and signed up for the 12-week programme. *Table 5* summarises the families who signed up for the 12-week programme. The reasons for non-engagement were not sought, but it is interesting to note that the parents who engaged with the workshops and programme had slightly higher qualification levels than those across the school in general (as indicated by the parent questionnaire responses). Apart from one father who could not attend the workshops but did engage with the 12-week programme, all the other parent participants were out of employment owing to their parenting commitments. One hypothesis is that these factors may support engagement in home-school learning as they indicate that these parents have a commitment to education and that their time and energy is not constrained by paid work. However, this could only be verified by further enquiry, which was beyond the remit of this study.

Parent participants who		7 mothers		
completed the 12-week		1 father		
programme with their children		2 mother and father couples*		
		Notes:		
		*both couples had two children at Cherrycroft; of one		
		of the couples, both came to the workshops; of the		
		other, only the mother attended the workshops as the		
		father worked but he was involved with the programme		
		delivery		
Number	of children participants	Initially 16 (including 3 sets of 2 siblings, and 1 set of 3		
		siblings, therefore 11 families); 13 children and their		
		families completed the programme.		
Proportio	on of school	10 out of 14 classes from YrN – Yr6		
represen	ted	(3–11yrs)		
	Range of levels in	• 2 Early Years Foundation Stage children working at		
	Reading	between 8 and 26 months		
		• 11 Key Stage 1 and Key Stage 2 children working		
		between P Level 3i and National Curriculum Level		
		1b		
	Communication Level	2 Non-verbal PECS users		
nge		• 5 pupils who regularly used PECS/communication		
/ rai		symbols to support verbal language		
illity		• 4 verbal pupils who occasionally used symbol		
s ab		support		
Children's ability range	Childhood Autism	Score range = 30 – 50		
nildr	Rating Scale (CARS)	(indicative of mild to severe autism)		
Ċ	score			
	Home language(s) of	7 English speaking		
	the 10 participant	2 English and one other language		
	families	1 Language other than English		
pur	Qualification levels of	1 with no qualifications		
grou	the 12 participant	2 with GCSEs or equivalent		
ackį	parents	3 with A levels		
Children's background		6 with Higher qualifications		
ren	Employment status of	3 Unemployed		
hild	the 12 participant	9 Economically inactive		
ΰ	parents	1 Employed		

Table 5: The 12-week home-school reading programme participants

At the start of the 12-week programme, one more mother who had been to one of the workshops signed up with her three children (all pupils at Cherrycroft and of differing ages and abilities). Unfortunately, owing to her own ill health and the demands of bring

up three children with special needs, she was unable to continue with the project after the first few weeks. This is discussed at greater length in Chapter 6 on barriers to participation. All other families, as detailed in *Table 5*, continued with the 12-week programme throughout and 11 of the twelve parents were interviewed as part of the Phase 4 evaluations (one was unable to be interviewed because of health complications).

The following four chapters provide the findings, interspersed with discussion, regarding the starting points of the participants (Research Question 1, Chapter 5); the barriers to home-school reading for parents and teachers of children with autism (Research Question 2, Chapter 6); the factors which enabled home-school reading for parents and teachers of children with autism (Research Question 3, Chapter 7); and the project evaluation, including the impact of the project on parents, teachers and children (Research Question 4, Chapter 8).

Chapter 5: Experiences and attitudes of participants prior to intervention

Research Question 1 related to the parents' and teachers' experiences of reading, carrying out reading-related activities with their autistic children, and their attitudes towards home-school reading partnerships prior to the study intervention. I sought to address this question by reviewing the responses to a teachers' survey (pre-study, March 2013; see Appendix 2) and conducting a parent questionnaire (September 2014; Appendix 3). The parent questionnaire data were embellished and exemplified through the parent discussion groups which were held at the start of the parent workshops (December 2014, Phase 2). Staff views and experiences were further explored through a personal questionnaire and a class profile activity during the staff INSET day (October 2014, Phase 2; see Appendices 4 and 5). It should be noted that not all parents answered all questions on the parent questionnaire, but total response numbers are cited where applicable.

5.1 Practices in the home and school prior to intervention

In the parent questionnaire, parents were asked whether, and how often, they tried to read/share books with their autistic child. They were also asked how long they usually spent on each occasion. All but one parent who answered these questions said they did try to read with their child/children and gave details of the frequency and length of sessions. The results are shown in *Figure 6* and *Figure 7*.

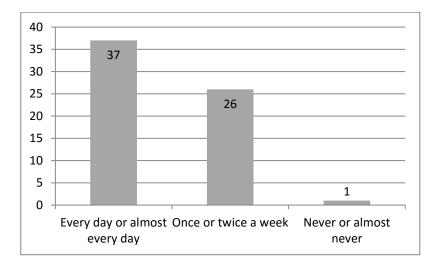
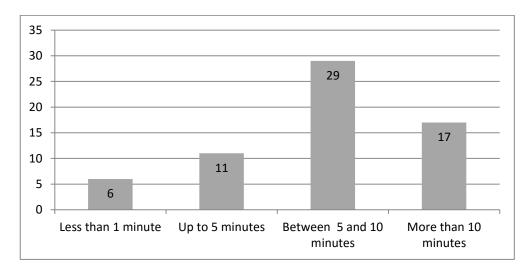
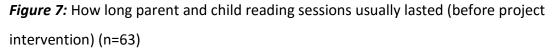


Figure 6: How often parents read with their autistic child (n=64)

Thirty-seven of 64 parents (58%) said they read with their autistic child every day or almost every day, and 26 of 64 parents (41%) read once or twice a week. All but one of the parents who responded to the questionnaire reported reading with their autistic child/children at least weekly and most parents did so more frequently. These figures are very similar to those found in relation to the much larger sample (19,000 children) of the Millennium Cohort Study (MCS, 2000), in which 94% of mothers of three year olds (MCS Wave 2, 2004) and 90% of mothers of seven year olds (MCS Wave 4, 2008) reported that they read with their children every day or several times per week. Comparable findings were cited by the National Research and Development Centre for adult literacy and numeracy (Swain, Cara and Mallows, 2014, in press), who also noted that mothers, rather than fathers, were the predominant readers, as in the present study. These studies measured parent-and-child reading frequency for all participants, where the majority of children would be neuro-typical. This indicates that despite the inherent difficulties in reading with children with autism, the parents at Cherrycroft were similar to other parents nationally in trying to read with their children regularly. The one parent in this study who stated that she never read with her autistic child also commented that this was because the child refused to read with her and that this had caused tension in the past so she no longer attempts it, though the child did read regularly on his own. The length of time which the majority of parents spent reading with their autistic children (between five and 10 minutes being the most common; see Figure 8) matched the time teachers and teaching assistants would usually spend working with individual children on reading activities in school, either daily or several times per week, as indicated in classroom planning (and later seen in the school videos in Phase 3).





My personal knowledge of the children at Cherrycroft (and confirmed in many of the school videos, Phase 3) is that they did not have the joint-attention skills, concentration span or motivation to sit and engage with an adult-led reading activity for more than ten minutes owing to their autism and a-typically lower developmental levels (Fleury *et al*, 2014).

Questionnaire data revealed that at home children accessed a range of texts and favoured reading materials including books, electronic texts and games. It was usually the mother who tried to engage with the child in reading-related activities. It was apparent from parent comments on the questionnaire that when parents had tried to join in with something reading-related their child had already been doing it was often unsuccessful as many of the children prefer to do things alone, as is common in children with autism (Frith, 2003; Wing, 1996).

The teachers' survey (Phase 1, March 2013) provided information on the limited homeschool reading practices promoted by the school prior to the study intervention. The survey responses indicated that only 47% of pupils (43 of 92) took books home from the school library on a weekly basis, and only 37% of these (16 of the 43 pupils) returned the books with comments from parents written in the accompanying reading diary. When teachers were asked again at the INSET session eight months later, the situation had improved a little. According to responses on the class profile activity sheet (see sample, Appendix 5), teachers reported that all pupils were taking books home regularly by this point, but only 50% (46 pupils) were bringing any written evidence from parents that these books were being read at home. Some teachers commented that when parents did provide written comments, they were limited and often negative, such as *'[child] wouldn't share'*, or *'book not appropriate'*. A couple of teachers mentioned parents writing brief comments, which were nominally positive, such as, *'[child] enjoyed this book'* or *'read with his sister'*. Three teachers commented on how book returns were inconsistent for some children in the class and that other children always brought their books back but that the teachers were, *'not sure if the books ha[d] even been taken out of the children's bags'*, as they were in the bags every day. From the point of view of the teachers, the reality of home-school reading at Cherrycroft appeared quite bleak at this early stage of the study.

The data from the parents' and teachers' survey responses in Phase 1 suggested that, although many parents were making attempts at reading with their autistic children at home, this was rarely being communicated to school staff and that home and school reading practices appeared largely to be independent of each other.

5.2 Parents' confidence and use of strategies

The results from various parts of the parent questionnaire indicated clearly that, although parents were willing and trying to read or engage with reading-related activities with their children at home, they did not necessarily feel confident in doing so or know how to support their children. Sixty-two percent of parents (39 of 63 parents) stated that they understood how their child was taught reading in school. Yet 30% (19 of parents) admitted they did not know and 8% (five of parents) did not answer this question. Even if parents were aware of strategies used by the school staff, they might not know how to transfer these to the home setting and would likely require training and support to do so.

The parents who attended the parent workshops (Phase 2) were able to cite examples of strategies they employed when reading with their autistic children. The list (below) provides insight in to some of the ways parents would try to gain their child's attention and give them a reading experience, even if their child would not sit with them. Strategies parents reported using when reading with their autistic children:

- Tape-recording themselves or their child reading a favoured text so that the same bit of the text/book could be listened to repeatedly
- Sitting with book angled so that the child could still see it even if he was wandering around
- Keeping the door shut so the child could not leave the room where the parent was reading aloud*
- Parent reading in a 'funny voice' to attract attention*
- If the child preferred drawing, the parent would write words under drawings rather than reading books*
- Using books with CDs
- Creating atmosphere conducive to reading and getting the child's attention (calm lighting, reducing distractions such as turning off the television)*
- Using educational programmes on a tablet, computer or DVD, e.g. Mr Tumble, which appeared to improve the child's concentration
- Reading at bedtime when the child is calmer
- Finding books which can be explored more physically (textured/board books/books with flaps etc.)*
- Labelling things around the house*
- Having books around and being ready to 'catch the moment'
- Telling the child the word they're stuck on when reading and noticing they will retain it/remember it thereafter*

*Marked strategies were similar to ones teachers used in school

This list (above) highlights the creative ways some parents addressed their autistic children's strengths, difficulties and preferences. It is a common characteristic of autism to engage in repetitive behaviour (APA, 2013) and a parent's choice to tape-record books so that the child could replay them without the parent having to read the same passage repeatedly was arguably a sensible way to make book sharing more bearable for the parent. Some parents noticed that their children demonstrate prolonged concentration when using electronic devices such as tablets or computers, so had chosen to use these tools to share books; others appreciated that their children

benefitted from a more sensory approach and provided 'touchy-feely' books with a tactile element to engage the child at a lower developmental level in book exploration.

When asked, as part of the focus group discussions at the workshops, parents were able to express their difficulties around reading with their autistic child. One mother articulated a common theme in admitting that she was 'not sure what 'reading' means, especially when my child is non-verbal and at earliest stages of learning.' Other parents mentioned spending lots of time trying to find the right strategies to engage their children and one acknowledged that this must be similar for teachers, saying, 'you've got 90 kids; you need 90 techniques'. One parent expressed her frustration that her verbal child did not want to read with her. She explained that she did not give him the choice; she would set a time aside and make sure he did it; however, he would rush to get it over with. There was a keenness amongst the parents to learn the 'tools' that school staff use.

5.3 Children's attitudes to reading at home and school prior to intervention

In the parent questionnaire, parents were asked to use a Likert scale to report the frequency of children's reading behaviours (for example, *show an interest in a range of books, look at favoured reading material on their own, share reading material with someone else* and *read aloud*) ranging from 'a lot' to 'never'. Examination of the relationship between the frequency of children's reading behaviours and time spent reading with parents revealed that children who showed an interest in a range of books, and liked to look at books, on their own also tended to read more frequently with parents and spent longer reading with parents. The majority of children who were willing to share a book with someone else did this 'a bit' rather than 'a lot', as reported by parents, suggesting that solitary reading was preferable for these children but that they would allow their parents to look at books with them for a little while on most days.

Where parents were asked to give reasons why they did not do reading activities with their children or comment on any difficulties they faced in reading with their child, nine parents mentioned problems in trying to join in with their child who already had an interest in looking at books by him/herself, as their comments illustrate: [My son] will look at one book for 2-3 weeks. He doesn't want to join in with [mum].

[My daughter] loves books but doesn't like to share with mum or brother. She will leave if you try to read with her.

My son is not interested in reading with me. I always try but he cries and refuses. He prefers to read on his own.

We try every day to read with [son]. It depends if he wants to.

[My son] doesn't want me to read. He grabs the book and takes it into the corner.

We read but not for long. [My son] enjoys looking through books on his own in his own space.

Dad doesn't know how to help him as our child can't speak and isn't interested. Best thing to do is to teach parents how to do those kinds of activities.

Every day, [my son] looks at books himself.

I try to read with my daughter but she is not interested.

As outlined in my literature review (Chapter 2), it is well known that children with autism often prefer solitary pursuits and may try actively to avoid doing things with other people (Frith, 2003; MacKenzie, 2008; Wing, 1996). This is very evident in the quotes of parents above. To understand whether teachers also experienced difficulties in this area, they were asked to rate the attitudes of each child in their class towards reading with staff and reading on their own, for comparison (part of the class profile activity on the INSET day). According to the teachers (see Table 6), many more children were happy to read with staff than were unhappy to do so; furthermore, a greater number of children were unhappy reading on their own (19) than the number unhappy reading with an adult (only eight) according to teacher report.

Table 6: Attitudes of the children towards reading with staff and on their own in school, as reported by teachers (92 children; 14 teachers)

	\odot		$\overline{\mathfrak{S}}$
	Нарру	Neither happy	Unhappy
		nor unhappy	
Children's attitude towards reading with	47 children	37 children	8 children
staff	(51%)	(40%)	(9%)
Children's attitude towards reading on	41 children	32 children	19 children
their own (looking at books by	(44%)	(35%)	(21%)
themselves)			

These relatively high levels of children's happiness in relation to shared reading in school, reported by the teachers, were unexpected. This raised questions for me about the methods teachers used to encourage compliance in the children. It was not yet known whether teachers had strategies for making shared reading sessions more enticing for the children, or whether the children were more compliant with adults at school because of an underlying expectation that they will cooperate with tasks they are asked to do in the school setting. These possibilities would need to be explored further (see Chapter 6 on enabling factors) so that any teachers' strategies to encourage compliance might be shared with parents for home-reading sessions as part of the programme intervention.

I examined data from the parent questionnaire to determine how parents' own attitudes towards reading and their personal reading practice might influence the reading they do with their children. Of the parents who answered the attitude-related questions, most (49 of 60 parents) agreed that they liked to spend their spare time reading (or would like to if they had time to do so) and most parents (54 out of 62) agreed with the statement *'reading is important to me'*. There was some evidence to suggest that their personal reading practice might have an influence on how much they read with their child. Of the 37 parents who said they spend five hours or less per week doing their own personal reading, 18 (49%) claimed to read with their child every day and 18 (49%) read with their child only once or twice per week. In contrast, 19 (73%) of the 26 parents who claimed to read personally for 6 hours or more per week stated they also read with their child every day. The questionnaire did not ask specifically about the types of reading undertaken, or types of text and so may have included the reading of books (factual, fiction or both), newspapers, magazines, electronic texts and so on.

Comparing parent questionnaire responses with school assessment records (children's records of progress and class teachers' notes), it was possible to identify that a very low proportion of children used the communication skills and strategies at home which they had learnt to use in school. Only five of 65 children regularly used the Picture Exchange Communication System (PECS) at home according to parent report, whereas at least 52 of the children had been taught to use PECS to sentence level in school and many of them would use PECS regularly to answer questions and make comments when reading with school staff. It should be noted, however, that the primary purpose of PECS is for

children to communicate requests spontaneously (Bondy and Frost, 2001). Some children move on to develop the ability to comment spontaneously using PECS sentences. The use of PECS for commenting during structured reading activities, as at Cherrycroft, is a development encouraged by teachers to help the children communicate about books, and not necessarily something parents should expect to use with their children at home without training.

Parental responses indicated that only around a quarter of children (16 out of 63) read aloud at home, whereas my own knowledge of the children was that approximately 40% of these same children would read aloud in school regularly. Some children were largely or completely non-verbal, yet a few of these would indicate their knowledge of printed words by using Makaton sign language, using a sign or gesture for each word, as they 'read' the text. No parents mentioned explicitly that their children used this skill and awareness of Makaton signing amongst parents was lowest of all the forms of communication enquired about. Lower levels of communication at home than at school would place the children and their parents at a disadvantage in terms of accessing reading tasks, so this also needed to be addressed in Phases 2 and 3 of the study.

5.4 Willingness to engage in home-school reading partnerships

Strikingly, almost all of the parent questionnaire responses (68 of 69) indicated agreement with the statement: 'I would like to be more involved with the school in supporting my autistic child to learn to read'. The one parent who disagreed with the statement gave the reason that her child was difficult to engage at home and she did not know how to work with him, therefore she wished the school to teach him instead. At the parent workshops, the participants in the discussion group elaborated on reasons why they thought it was important for parents to help their children learn to read. The reasons they cited are listed in *Table 7*, and I have grouped them by theme.

Table 7: Reasons parents gave for wanting to help their autistic children learn to read (parents' wording retained as far as possible)

easons related to developing the child's skills	
Hope for the future	
Helping them achieve their potential	
Belief that my child is taking something in, even if they appear not to be	
Extending school interests into the home	
You never know what the child is capable of/what outcome might be achieved	
To give my child more language/vocabulary	
To build my child's joint-attention skills	
Reading is a life-skill and a complement to life	
easons related to equality with other children/siblings	
Equal opportunities with other children	
I want my child to do more academic work (like siblings in mainstream schools)	
easons related to the child's pleasure and interests	
Enabling the children to learn more about their 'special' interests	
Trying to widen my child's interests	
I know it's important for children with autism to have regular routines	
Reasons related to parent-child bonding	
Doing something with the children on their terms, particularly if they enjoy books	
Engaging with them and 'getting into their world'	
Wanting to share in new skills my child has developed at school	
Part of a bedtime routine	

The reader might consider that some reasons cited in *Table 7* belong to more than one theme. For example, a parent wanting to share in the new skills the child has learnt at school is likely to help develop and consolidate those skills as well as to delight in the child's achievement and bond with the child through sharing an activity in which the skills are used. The themes were not intended to be in discrete categories and many overlap; rather they are an analytical devices to illustrate the variety of reasons why the parents at the workshops felt it important to help their autistic children learn to read, and why they were keen to engage with a home-school reading programme.

The 52 staff INSET questionnaire returns (Phase 2) were equally as positive as the parents' in support of home-school reading, with all but one responding 'yes' to the statement: 'I think teaching a child to read should be shared between school staff and parents'. The one staff member who responded 'no' changed the statement to 'can be shared' rather than 'should be shared', indicating that perhaps some parents may not be able to do this work but that the opportunity should be available to them. The majority of staff members (48 of 52) themselves learned to read with their parents as well as with school staff and that three-quarters (39 of 52) remembered having books and learning materials sent home by their school to help them learn to read with their parents. Home-school reading was certainly a concept with which the staff identified and they were keen to explore ways to promote this activity with the Cherrycroft parents.

At the INSET day, it was very important to be able to share with the teachers some of the findings from the parent questionnaire that had just been completed. This data source revealed a side to the story that was largely unknown to the teachers at this point. It helped to redress any negativity amongst staff, which might have been caused by the dearth of communication with parents on the topic up to that point.

5.5 Summary of experiences and attitudes of participants prior to intervention

In addressing Research Question 1, it was evident that parent and teachers were equally keen to work together on home-school reading. Teachers seemed to find it easier than parents to engage the children with reading tasks, although parents gave verbal evidence that they made many attempts to do so, using a range of strategies to try to engage the children. In general, the children appeared to be demonstrating fewer communication skills at home than at school and were less inclined to share books and reading activities with family members than they were with teachers. There was a lack of communication between parents and teachers about reading at home which meant teachers did not know much about what parents were trying to do and parents were not accessing support to improve their practice. It was apparent that a home-school

reading programme would need to include training for parents on approaches used in school (Phase 2: parent workshops) and offer a means of ongoing support to help them put strategies into place (Phase 3: 12-week home-school reading programme). In order to facilitate joint working, there was a need to create opportunities for regular communication between parents and teachers (Phase 3: parent and teacher meetings and use of the bespoke diary).

Chapter 6: Barriers to home-school reading for children with autism

Chapter 5 has already highlighted some of the barriers to home-school reading, as reported by parents and teachers, including the children's preference for solitary activities at home and limited engagement with parents during reading activities; the children's limited generalisation of communication skills to the home setting, meaning that many children were not communicating with parents as well as with teachers during reading activities; the parents' partial knowledge of strategies used by teachers and feelings of low confidence of whether the strategies they were trying to use were the 'right' ones; and the lack of structured communication between parents and teachers to enable sharing of strategies and building of home-school relationships.

In this chapter, the aforementioned barriers, which were initially apparent in the Phase 1 and Phase 2 data, will be discussed in greater depth and further barriers that became apparent as the study progressed through Phase 3 and Phase 4 will also be illustrated and examined. Some barriers became apparent at different stages as the study progressed (e.g. the difficulties of putting new routines into place in the home) and others were in evidence throughout (e.g. the autistic child's preference for following his or her own agenda). All the barriers to home-school reading that I identified in the various data throughout the study have been categorised into four themes based upon *post priori* analysis of all the data. These four key themes in the findings are the headings for the sub-sections of this chapter: 6.1 *The characteristics and skills of the children*; 6.2 *The skills, confidence and motivation of the parents*; 6.3 *Communication between parents and teachers*; 6.4 *Teachers' concerns*. Relevant findings from the data of all phases of the study are brought together under these theme headings and integrated with discussion in relation to the extant literature.

6.1 The characteristics and skills of the children

Engagement difficulties

The characteristic 'aloofness' (Frith, 2003; Wing, 1996) associated with autism was cited as a key barrier to parents reading with their autistic child/children at home both prior to intervention in the Phase 1 parent questionnaire (comments from which were cited in Chapter 5, Section 5.3) and in the Phase 2 discussion groups at the parent workshops, particularly at the first workshop for parents of '*pre-readers*'. Five parents at the '*prereader*' parent workshop spoke about how their children would '*wander off*' after only a minute or two of looking at a book with their parent, sometimes to return briefly if something caught their attention again. One mother described the need to '*catch the moment when they*'*re receptive*'; another mother spoke of having books around the house so that she could '*pick the moment and do it*' whenever the child seemed willing. Some parents also indicated that their children's attention span was very short and it was difficult to keep them interested, although the children seemed to concentrate for much longer when looking at stories or playing reading games on electronic devices.

Amongst the parents of the 'emerging reader' children, two parents described how their sons appeared to be very interested in educational games and programmes on the computer, tablet device and television; a father had seen his son making 'lots and lots of progress very fast' and a mother noted that 'they do seem to pick up a lot from the television'. These parents seemed confident that their children were learning and making progress but that, as parents, they were finding it difficult to get involved with the learning apart from providing means for the children to do it alone.

During the 12-week home-school reading programme (Phase 3), the children's engagement difficulties continued to be apparent in both the home and school videos and in the diary comments. Of the 15 initial school videos (of 15 individual children reading or taking part in reading activities with their teachers at the start of the programme), five children exhibited challenging behaviour relating to unwillingness to participate with the teacher. These behaviours included crying and trying to close the book or push it away; trying to leave the reading table; fiddling with resources and grabbing the teacher's hands, hair and clothing. A further seven children participated well but with the teacher using additional behaviour support strategies (e.g. the promise of a reward when finished such as a few minutes on the computer or a small piece of chocolate). Only three of the 15 children were seen to participate fully with no other engagement strategies being used.

Similarly, in five of the seven early home videos, engagement difficulties were apparent, with one child completely refusing to read and the other four very distracted by things which interested them more than the reading task (e.g. grabbing and fiddling with other items; the television on in the background). During the parent and teacher meetings in which the videos were watched and discussed, the child's engagement difficulties were mentioned by 10 of the parents and lots of the discussions were around what the child likes to do and how this could be incorporated into shared reading activities. It was very noticeable in the later videos, taken towards the end of the programme (both home and school), that difficulties with engagement had reduced considerably. Fewer teachers were seen to be using additional motivation strategies and some parents were using techniques they had learned from teachers to encourage their children's compliance. The details of the enabling strategies and progress made in this area will be discussed further in Chapter 7 (on enabling factors) and Chapter 8 (on the impact of the programme).

Communication skills

The reduction in communication skills that the children used at home compared to those they used at school (outlined in Chapter 5, Section 5.3), was another significant factor in the children's lack of engagement with reading home. Reading requires using and understanding receptive and expressive language (Stainthorp and Hughes, 1999) and the school videos made it apparent how much the teachers supported the children's communication and helped them to understand and comply with instructions and respond to questions. The Phase 1 parent questionnaire responses indicated that children were not using their skills to the best of their ability in the home setting so it could be reasoned that their ability to engage in reading activities with parents was significantly reduced. The Phase 3 school videos provided many examples of the teachers using simplified and repetitive language, augmented with gestures and physical prompts. For example, teachers would often ask the same question repeatedly about different pictures in the book ('What do you see?' or 'where is the [item]?'), supported by Makaton signs or pointing to the item/character they were asking about. The child would be given time to make a verbal response, use PECS symbols or use their own gestures, depending upon their level of communication. In contrast, the five initial home

videos showed that parents did not tend to have the same expectation of their children to communicate about a text, particularly in the early stages of the programme. Parents would sometimes make comments themselves (e.g. 'Look! There's the ball.') or would ask and answer their own questions without waiting for or expecting the child to respond. In general, to begin with, parents expected their children (especially nonverbal children, or those with very limited speech) to look and listen whereas teachers created opportunities for children to develop and use communication skills. This was something that changed over time during Phase 3, with parents becoming more accustomed to using simple repetitive phrases and waiting for the child to respond, imitating what they had seen in the initial school videos. Several parents mentioned in the Phase 4 interviews that they had become more patient with their children after seeing the teachers' approaches.

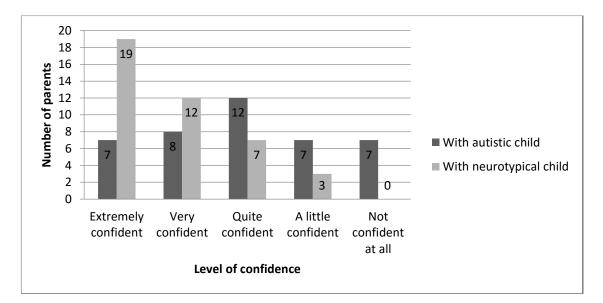
Rigidity of thought

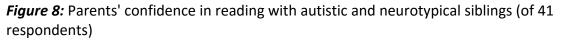
The data revealed various instances of the children's autistic rigid insistence on sameness (APA, 2013; Vermeulen, 2001; Wing, 1996), which affected their ability to engage in home-school reading. One mother talked of how her child would continually say, for example, '*A is for apple*', or '*M is for Mary*' when she tried to help him learn letter sounds and he would not seem to accept that the letters could be used to begin, or form part of, other words too. Several parents commented on buying books on their child's favoured theme (e.g. trains, dinosaurs or Disney), to the exclusion of all other topics. They worried that this meant they were limiting their children's experiences but they felt that reading something was better than nothing and if the child was engaged by a particular sort of book, they would use this as the primary text and would try to widen the choices later. A surprising finding of the study was that the programme appeared to help widen the children's book choices, as will be discussed further in Chapter 8 on the impact and evaluation of the study.

During all nine interviews (Phase 4), parents mentioned difficulties in finding the right time to initiate work with their child/children. Changing the routine of a child with autism can be stressful for the child and for those implementing the change (Powell and Jordan, 1997; Sicile-Kira, 2003). Two parents made comments in the programme diaries about difficulties in changing the home routine to incorporate home-school reading. This was partly owing to the parents' organisational considerations of fitting in with other family commitments and normal daily activities such as mealtimes and bathing, but it was also considerably affected by the autistic children's resistant to change. One boy was used to going for a walk with a parent each evening as well as having dinner, a bath and a bedtime story. Fitting in home-school reading meant shortening or cutting out the walk on some days of the week, which caused frustration for the child and made it difficult for the parent to settle him to complete the reading task.

6.2 The parents' skills, confidence and motivation

The atypical learning patterns of many of the Cherrycroft children meant that it could be difficult for parents (and perhaps less experienced teachers) to know how to teach them best. Parents who had both autistic and neurotypical children were asked in the Phase 1 parent questionnaire to rate their levels of confidence in helping each of their children learn to read (in the context of home-school reading). 41 of 45 parents with both autistic and neurotypical children completed these questions and it was striking that parents rated their own confidence levels with their autistic children lower than their confidence with their neurotypical children, as illustrated in *Figure 6*:





At the Phase 2 workshops, parents spoke of difficulties in finding the right approaches to engage their autistic children and help them learn, as summarised by one father:

I do sometimes talk to normal children and it's natural and you can teach them things but with [autistic] children you have to think so hard to find a way and then you don't know and you're spending a lot of the time just trying to find which is the right channel, whether it's the picture or the flashcard...I spend too much time just trying to find which way you can transmit the basics.

The struggle to find the 'right' teaching methods appeared to contribute to lower confidence amongst parents than they claimed to have when reading with their neurotypical children. This, combined with the rejection which the children sometimes demonstrated towards their parents' efforts also reduced parent motivation prior to intervention. In eight out of nine parent interviews, comments were made about the child/children's lack of social interest and unwillingness to share reading activities with the parent. The stresses of raising a child with autism and the difficulties in forming a parent-child bond because of the social impairment in the child (Glazzard and Overall, 2012; Gray, 2006) mean that parents may be reluctant to push their children to do anything which may cause aggravation in a delicate relationship, even though there are potential long-term gains.

In an attempt to share and practise teaching strategies, a role-play activity had been built into the parent workshops. This involved two parents working together, one taking the role of the child and the other the parent. The 'child' was to act as their child typically would with the role-play 'parent' attempting to use strategies which had been demonstrated by the Cherrycroft English Coordinators (workshop leaders). In the workshop evaluation feedback, this activity was deemed by parents to be the least helpful as it seemed too far removed from their own very unique experiences with their own child/children at home; the role-play 'child' could not act in the same way as the parent's real child and parents found it difficult to think about how general strategies could be applied in their own situations. The school and home videos (Phase 3) were particularly useful in overcoming this difficulty as they featured each parent's own child and the actual strategies used. This will be addressed further in Chapter 7 (Enabling factors).

Understanding learning styles

Some parents admitted struggling with understanding how children with autism typically learn. To remind the reader, one parent described it thus: 'You have this idea of how a child's meant to read but when you have an autistic child, all of that goes out the window.' This backed up theory found in other studies, that children with autism do not tend to read in 'typical' ways (Nation *et al*, 2006; Ricketts *et al*, 2012) and that different, adapted strategies are often needed (Mucchetti, 2013). As another mother commented, 'I used to try to teach him in the way you would work with a typical child, like with my daughter, but it didn't work.' Parents conveyed that they could not rely on using methods remembered from their own childhood or those they has gleaned from mainstreams schools which their other children attended. This made it difficult for them to judge the level at which their children were, what the next steps should be and how to help them.

Some parents acknowledged that their children seemed to read by recognising whole words and one father described how he believed his son saw words like pictures ('like Chinese') rather than understanding that words were made of individual letters put together. It was commonly recognised amongst the parents that their children could identify environmental logos important to them such as shop names or favourite food brands. Parents were not sure if this meant their children could read or whether they were simply recognising these words like pictures. Theory on early reading behaviours indicates that children in the 'pre-alphabetic' (Oakhill and Beard, 1999) phase of learning will begin to recognise environmental logos and whole words which are of significance to them before they understand that these words are made of individual letters (Cain, 2010; Waterland, 1988). Children with autism appear to continue to learn to read in this way, memorising whole new words as they come across them and learn them (Nation et al, 2006). In conversation with me, one mother backed up this theory by describing how her young autistic son often asked her what words said in his favourite dinosaur books. Once he had been told, he would remember those words perfectly thereafter and be able to read them in other contexts but he could not decode unknown words himself and would become frustrated if encouraged to try. During the workshop discussions, two parents separately raised the issue that their children appeared to have memorised the texts of favourite books and could recite them whilst looking at the

pages. Discussion ensued about whether perhaps the children were not really *reading* if they knew text by heart and whether or not it was good to allow them to do this because the children would then sometimes get stuck in a rut of continually wanting to read the same book over and over again, demonstrating the restricted and repetitive behaviour associated with autism (APA, 2013). That children were sometimes reluctant to explore new texts in favour of repeating familiar ones, or resistant learning to decode new words for themselves, were considered to be barriers to their reading development by parents.

During the 12-week programme (Phase 3), there were a couple of instances where parents felt the objectives being set by the teacher were too low, particularly where children had a good sight vocabulary and were able to recognise and read longer words which were of interest to them (e.g. 'trampoline', 'dinosaur', 'umbrella'). For children who found it easy to memorise whole words, the teachers' goals were often for the child to tackle their decoding difficulties and to learn to break words down into their phonic components so that they might develop the skills to decode unfamiliar words, a skill that children with autism can find difficult to grasp (Nation *et al*, 2006). This often meant breaking down simple words like 'cat' and 'dog', words which the children already knew by sight, into the separate letter sounds and then blending them back together. This was to teach that these words consisted of the separate sounds, c-a-t and d-o-g and that other less familiar words could be broken down and blended in the same way. Teachers therefore needed to explain to parents why children were being taught to do this, despite words seeming 'too easy'.

6.3 Communication between parents and teachers

The need for regular dialogue between parents and teachers was considered very important by participants in this study, as also highlighted in papers of other studies on home-school reading intervention (Hindin and Paratore, 2007; Kelly-Vance and Schreck, 2002; McNaughton *et al*, 2010). Related to this, I reiterate the apparent association between lack of regular face-to-face engagement between teachers and parents at Cherrycroft and lack of home-school reading related engagement by families, as indicated by fewer questionnaire returns and less workshop and programme participation amongst parents who did not come to the school regularly.

In the interviews (Phase 4), several teachers commented on the disappointment and difficulty they faced in supporting a couple of parents who did not write in the diary regularly and/or did not provide videos of home-practice. Without a 'two-way' sharing relationship, it was difficult for teachers to know whether their advice had been acted upon and whether activities were successful in the home. They did not know what to provide next or whether support should be increased or decreased. Teachers felt that they were able to mentor the parents better when they could read parents' comments or queries in the diary or see (via video) how things were going.

Four teachers expressed awareness of their own professional training and their use of specialist techniques and vocabulary in school, which might seem, as one teacher put it, *'totally foreign'* to parents. They expressed concern about the parents' possible lack of understanding and skills with regards to teaching reading and considered how they might convey strategies in ways parents would understand. As one teacher stated:

I did think quite hard about what I sent home and how I worded instructions to make it accessible for parents, not using jargon words. Words like 'physically prompt' they might not know. I might have to say, 'Take his hand and do it with him' or something like that.

Several teachers expressed anxiety about how to talk to parents about home-school reading and how to pitch their advice and explanations appropriately (e.g. reducing educational jargon yet avoiding being patronising through over-simplification). The face-to-face meetings and diary exchanges were very important in helping them judge this and they were concerned in instances where this two-way exchange was not forthcoming.

We can speculate that another potential barrier in relation to communications between parents and teachers might be a language barrier. In this study, all parents who attended the workshops and took part in the 12-week programme were able to speak, read and write English sufficiently well to engage in all aspects. However, as described in Chapter 4, Section 4.2, a high proportion of families who did not engage with any aspects of this study spoke a language other than English as their primary home language. For this barrier to be overcome in schools such as Cherrycroft, translation and/or interpretation facilities would need to be provided in a range of languages, which would add a significant cost to such a project.

6.4 The teachers' concerns

Gaining an insight into the home-lives of the families presented a challenge to the teachers on a number of levels. During the interviews (Phase 4), all nine teachers commented on how different the home environment was to school and how the differences could affect implementation of school strategies. One pointed out a lack of 'distraction-free space' and another mentioned the lack of staff (other adults) and resources on which teachers rely. Some commented on less tangible differences such as the lack of structured routine and difficulties parents might have in *'finding the time'* to devote to the work, *'especially if there are siblings'* and/or other family commitments. Teachers also expressed an awareness of how different the child could be at home and at school in terms of behaviour and attitude towards work, although they did not know the extent of this in each case until it was discussed during the programme and witnessed via home-video clips in some cases. The opportunity for liaison with parents was extremely important in relation to this, as I shall discuss later in Chapter 7.

Teachers seemed very aware of the possible constraints of the home-situation and concerned about how parents would cope with implementation of home-school reading. Six of the nine teachers were not parents themselves but all of them tried to think of themselves in the parents' positions when planning activities, as is evident in these quotes from the interviews:

It's made me think about them as a parent. They can't sit and do a 20 minute lesson, so what can they do in 5 minutes while they're brushing their teeth, or whatever?

I think I've always realised how difficult it is for parents who have more than one child and for single parents, some of whom have more than one child with autism. It's difficult for them to sit down and do what you suggest.

Despite these concerns, all but one of the families (10 out of 11) in the study were able to do the home-school reading activities on a regular basis and see the 12-week programme through, as the teachers acknowledged.

The success of the families who were able to carry out home-school reading activities with their autistic children appears partly due to the thorough thought, planning and preparation which went into the reading packs which were sent home. Five of the nine teachers spoke negatively of the time it took to create activity packs, which were tailored to the children's levels and parents' skills. Most packs included a book and matched resources such as toy props or laminated pictures, as well as a task related to the story, such as vocabulary flashcards or a matching game, or magnetic letters with a whiteboard and pen. There were also clear instructions written in the diary with the main objectives for the activities. As well as sending home a pack once a week, teachers would also respond to any comments which came back from parents during the week, or take time to demonstrate to parents if there was any misunderstanding. This level of input was not felt to be sustainable in the longer term or if more families were to take part, as the following comments illustrate:

The negative thing is if you did it for your whole class, it would be a lot of resourcing. But if you did it for them all as an ongoing thing, you would do it differently (for example, make multiple copies of things). If you did it for seven children, you'd have to think about it. You would probably have to cut down on the writing aspect.

I made the mistake of making elaborate resources and by week six I was worn out. I had a high ambition! In retrospect, I would only change resources every two weeks and encourage them to make their own flashcards etc.

The time and resourcing commitments needed by staff to carry out the programme effectively were evidently constraining factors, although the teachers kept to their commitment for the duration of the study as they were keen to be part of the research and knew it was only to be for a fixed duration. It was clear that future work would need to take these concerns seriously.

6.5 Summary of barriers to participation in home-school reading

To summarise, the barriers to home-school reading through parent-teacher partnerships encountered in this study were many and varied. Some related to difficulties concerning the children's autistic characteristics, affecting parent-child engagement and making the changing of home routines problematic. Other barriers were related to parents' lack of confidence and uncertainty about how to proceed in reading with their children. Teachers were keen to share knowledge and skills but appreciated the many differences between the classroom and home settings and faced personal challenges in adapting strategies and communicating them to parents. Maintaining the parent-teacher partnership through regular contact and dialogue was something which took considerable time and effort on both sides but lack of regular two-way communication was a real barrier to progress. The next chapter, Chapter 7, examines the factors that enabled the participants to break through some of the barriers and overcome the difficulties outlined in this chapter. It is organised in a similar way, drawing on data, which exemplifies the enabling factors and discussing their relevance to the study, with references to the literature in the field.

Chapter 7: The enabling factors for home-school reading for children with autism through parent-teacher partnerships

This chapter delineates the factors that helped participants overcome many of the barriers to home-school reading with their autistic children and enable effective generalisation of practice across the school and home settings. This was done through the building of productive and successful parent-teacher partnerships, which were centred on the home-school reading practice and the children with whom the reading activities were done.

Some factors that had a positive influence on building parent-teacher relationships have already been mentioned in previous chapters, and appear to have been fundamental to parent-teacher shared work at Cherrycroft prior to the intensive home-school relationship building during the 12-week programme. These factors are summarised thus:

- the ability of parents to understand and use English sufficiently to access training and engage in dialogue with staff, or to have their own support to be able to do so; a high proportion of parents without this resource did not return the parent questionnaire and had very limited liaison with school staff in general;
- parents having the time to be able to participate in a home-school programme; none who were involved in the home-school programme were in employment at the time of the study (apart from one employed father, who took part alongside his wife who was not working);
- the parents' apparent investment in education and willingness to learn; those who took part in the programme were mostly well-educated themselves, were prepared to be open-minded, and were keen for their children to achieve as much as possible;

In addition to the factors cited above, various other enabling factors related to the ways in which the barriers (Chapter 6) were overcome and trusting relationships between parents and teachers were built and sustained throughout the programme. This chapter will draw on analysis of the study data from across the four phases to describe these enabling factors. Section 7.1 describes the importance of parents and teachers understanding the differences between the home and school environments and how individual children differed in each context, as well as parents and teachers acknowledging the differences in their own skills and experiences. Section 7.2 outlines how trusting relationships were built between parents and teachers, partly through mutual acknowledgement that the implementation of home-school reading might be difficult and problematic. Section 7.3 explains the importance of appropriate provision of resources to help ensure success. Section 7.4 outlines the factors which sustained the partnership work throughout the 12-week home-school reading programme.

7.1 Understanding the differences between home and school

The physical environment

During Phase 3, understanding the physical differences between the school and home reading areas was important, particularly for teachers, as they tried to work out how school strategies might be applied in the home. In 11 of the 15 initial school videos, teachers worked one-to-one with a child in a small separate room, away from the busy classroom. The other four school videos showed the teacher and child in a corner of the classroom. It was notable that these reading areas were plainly decorated and relatively quiet. All teacher and child videos showed them working at a table, with eight pairs sitting face-to-face across the table, six sitting side-by-side at the table and one teacher sitting partially behind a small child, supporting him to stay seated and focus on the task in front of him. In contrast, the five initial home videos showed three children sitting with their parents side-by-side at dining tables, one child sitting with their father on the sofa and one boy sitting at a 'reading table' opposite his mother in his bedroom.

Handleman and Harris (1980) suggested that it was important to teach skills to children with autism in a range of different environments so that they were better able to generalise their skills across settings; however they also advised that classrooms should be set out more like homes so that children would be more likely to use skills learned at school in their homes too. To replicate features of each setting in the other, it was important for parents and teachers to be able to see how they were each organised. Thus the videos were vital as time and resources did not allow for home and classroom visits. In this study, there was very little evidence to suggest that teachers changed their classroom environments, although some later videos showed more 'busy' backgrounds with children's artwork on walls that had previously been plain. Parents, however, found it particularly useful to see the school videos and how the teacher arranged the workspace and some tried to copy what they saw this. As the mother of the boy with the bedroom reading table explained:

I used to sit with him on the bed but now we do it like he does at school. We have a table and I sit opposite him at the table and I find he reads better; it's a more structured approach.

Similarly, two other home videos of two siblings, which were taken half-way through the 12-week programme, also showed use of a small 'reading table' in the family kitchen which had been put in place following the parents seeing the school videos of classroom practice.

Some parents chose not to copy the school layout but to adapt existing reading times and spaces. Three parents spoke of how their children were more relaxed during, and straight after, bath time, so they chose this as the time for reading (with one boy actually reading in the bath!). In contrast, several other parents mentioned that their children were too relaxed after baths and at bed time (the time they always used to look at books) and so they moved home-school reading to an earlier time in the day, keeping bedtime for listening to stories. Some parents made a distinction between the expectations of the child at the different reading times. During home-school reading time, the expectation was on the child to read, or to participate in some way *with* the parent (using props, turning pages or doing the activities, for example), whereas bedtime reading was a time for parents to read *to* the child, *'listening time'* as one parent couple called it.

The potential for distraction in the home settings was very evident. Three home videos featured a television on in the background and three videos showed children reading with their parents whilst siblings were otherwise engaged with noisy motivating activities nearby. It is perhaps understandable that the home-reading environments were not as plainly furnished or as quiet as the classroom reading environments but teachers saw this as an added level of challenge for the parent. Not only did the parent

have to change the child's routine to incorporate the shared reading, but they were also expecting their child to settle with more environmental distractions than at school.

There was limited evidence that some parents managed to reduce distractions over time. Only five families were able to provide two home videos for comparison, with one filmed at the start of the programme and one a much later in the programme, but it was noticeable that one family had the television on in background in the first video but not in the second; another showed a sibling helping with the reading alongside the parent in the second video, whereas in the first, the sibling was playing noisily in the background. Another set of videos showed that the parent had changed seats with their child so that the child was sitting nearer to a plain wall, reducing space to wander off and limiting access to household distractions.

Some parents mentioned in the interviews (Phase 4) that they found changes to home routines happened gradually as the child began to realise that the parent was using similar techniques and resources as the teacher and therefore became more interested in what the parent was doing, almost lured in by familiarity with the texts, tasks and expectations. Other parents found it helpful to adopt reward strategies, which were being used in school alongside work tasks, to encourage their children to participate. In these cases, the teachers also sent home sticker charts or showed parents how to reward achievements by giving a small piece of chocolate button each time the child matched flash-cards correctly, for example (evident in the school videos for one of the pupils in the study, then subsequently seen in the parent's video). In these ways, the children learned that doing work tasks with their parent was very similar to doing them at school: i.e. they were comfortable, familiar and rewarding. Scrutiny of the diaries indicated that the parents of at least four children took on reward strategies from school (such as sticker charts or 'Let's Make a Deal'⁷ (Bondy and Frost, 2001)), alongside reading activities, their comments indicating that these were new to them.

⁷ Let's Make a Deal is a reward system in which the child chooses a reward that they will receive in exchange for a specified number of tokens. The number of tokens is agreed between child and adult at the start and tokens are earned through good work and/or compliance with a set task or rule.

Children's behaviour and performance in different settings

Through the videos in Phase 3, teachers and parents were given their first insight into how the children behaved and performed in each setting. In some cases, this sharing was important so that parents could understand the level of challenge inherent in the learning objectives set by the teacher. For example, whilst watching the class video of her son with his teacher, one mother exclaimed, '*Wow! He's sitting! He's actually sitting and looking for a long time!*' At home, this young boy rarely sat with anyone for more than a minute or two, so it was difficult for his mother to understand how the set reading tasks would be possible. Similarly, a father said, '*Very impressive!*' on seeing his son read through a reading scheme book with very little distraction. In the father's home video, his son was seen to be fiddling with pipe-cleaners and getting agitated when his father tried to encourage him to '*keep going*' through a similar book. One teacher described the home videos as 'a big eye-opener,' whilst another expressed her surprise and interest in how different the child was at home:

It was just something that was never said, so it was very helpful actually...with [the child] throwing the books on the floor and just screaming...and I had no idea that she just wasn't reading at home. And mum said, "Oh, I thought she was doing that at school!" so that was very interesting.

Thus, appreciation of the differences in the two settings helped parents to understand the learning objectives which teachers had set, as well as helping teachers to understand what might be possible in the homes and whether learning objectives for the classroom needed to be adapted for home-school reading. It could be seen in half (six of 12) of the home-school reading diaries that learning objectives for the home were different to those the children were working on in school. This may be explained by the differences in circumstances of the home and school settings and the parents needing to begin at a different stage to that which the teacher was working on with the child in school.

Parent and staff expertise

Appreciation of the differences in expertise of parents and teachers also benefitted the participants of the study. Rudney (2005) describes how a parent's insight helps the professional to know about the child as an individual and a professional's insight helps the parent to know about children in general (e.g. how they interact and learn). Both sources of knowledge are important in creating optimum learning opportunities for each

child. During the evaluative interviews (Phase 4), all parents and teachers spoke of how the project had helped them get to know the children better through insight into each other's knowledge and experience and that this helped them to improve their practice in working with the children. Teachers were able to 'give true professional help by placing their knowledge and skill at the disposal of the children and the parents' (Rudney, 2005:50) and all 11 parents who were interviewed agreed that teachers had helped them develop their home practice. Comments made by several teachers during the interviews also resonated with this theme. One teacher spoke of working with the parent as *'like working with another professional'* and another teacher described the parent's comments and feedback as *'another set of hands to help me work out what's right [for the child]'*.

7.2 The building of trusting parent-teacher relationships

When interviewed about whether their attitude to working with parents had changed through the 12-week home-school reading programme, three different teachers mentioned trust. One said that her relationship with the parent was such that she could 'work with them and trust them'; another teacher said, 'I think [the mother's] got a lot of trust in us'; the third teacher's comment was, 'parents were really open to what I was doing and I think they really trusted me, that I know what I'm talking about'. The interviews also yielded several references to openness in working together and a sense of mutual understanding. The parents made references to similar themes when they were interviewed. Although teachers had a clear role in demonstrating teaching and learning techniques and setting objectives for the parents to work on, it was clear from the responses in the interviews, that parents did not feel they were 'being told what to do'. The following statement came from a mother with two boys, working with two different teachers:

It was very useful for me to know I could talk about whatever was going on and if there were any problems or struggles we could look at a different route to take. I didn't feel like I was doing it on my own or that I'd got to do it their way. If it didn't work, we were all willing to try something else.

Another mother with two autistic children in the study reflected:

There's a very direct interchange, whereas there just isn't normally, especially now that [the children] are getting bigger...There's a real sense of working together with them. The video has been very helpful and it feels very special, like my children are being looked after on one-to-one.

As all the videos were of one-to-one teaching sessions with the teacher and child, parents were given the sense that their child really mattered to the teacher and was given special focused attention. This helped to foster the sense of trust that the parent had in the teacher; that the teacher really knew what was right for the child and could help the family develop similar skills at home.

Several parents commented on the use of the diary to aid dialogue throughout the programme:

I get to read what he's done at school and I can try it at home and write back to [the teacher]. When something wasn't working, she gave me a few pointers because we would have the same book for the week and I could go back and try and give a summary at the end of the week.

It's brought [the teacher and me] closer because we've been doing the same thing and talking about it, saying how it's going. She's been giving me ideas and I hope we can continue this. We've been talking and keeping notes in the diary.

Although the teachers had been concerned about 'getting the tone right' with parents (discussed in Chapter 6), it appeared that parents did not share these concerns and were impressed with the teachers' efforts. Parents' comments related to how clear and helpful the teachers' advice and suggestions were; perhaps a reflection on how careful the teachers actually were in taking into account home constraints and in explaining and demonstrating approaches clearly.

7.3 Provision of appropriate resources

For children who are at the earliest stages of symbolic understanding, it is very important for links between objects and pictures to be as clear as possible (Bondy and Frost, 2001). The school was able to provide a far wider range of appropriate matched resources than a parent could be expected to find or buy. One mother in particular appreciated that the props sent from school were carefully chosen to match the illustrations in the text and that she would have difficulty in finding similar toys at home:

What has helped is having the particular props for the particular book. At home I can get a car and a book but it might not [match] the exact picture or the exact colour whereas the props from school match and he can relate the object to the picture so it works better. He's at a level where the objects mean more to him than the book.

Nine of the 11 parents interviewed mentioned the usefulness of the activities and props that the school provided. Where children were reluctant to read aloud, or were unable to do so, having the activities to do (e.g. word matching, finding magnetic letters to build a word, matching pictures to illustrations in the book and so on) made the reading sessions more purposeful for the child. These would usually be very familiar activities, which the child was used to doing in school, so the child was comfortable with the expectations. The child made progress by doing the tasks in a very different context and with their parent rather than with their teacher in school. Although initially, some parents thought the tasks to be too easy for their child, they began to appreciate that generalisation of learned skills to a variety of contexts is an important learning step for children with autism (Winner, 2011).

Scrutiny of the home-school reading diaries revealed the range of tasks and activities which were sent home as part of the programme. All children took books home. In addition,

- Seven children had vocabulary-related activities (e.g. whole word learning tasks; flashcards; worksheets)
- Six children had phonic-related activities (e.g. magnetic letters on a board, with which to form words from the text)
- Six children had matching tasks (e.g. toys, symbols, copies of pictures, or words to match to corresponding text or illustrations)
- Four children had communication aids related to the book (e.g. PECS symbols for commenting and labelling)
- Four children had reward strategies (e.g. star charts/ 'Let's Make a Deal' cards etc.)

The combination of books/texts and activities varied from child to child and from week to week. In most cases, the choice of resources which were sent home was linked to the kinds of resources and activities each child had encountered in school during the previous week. Thus, the texts and activities that were sent home were familiar to the child. When interviewed about changes to classroom practice, all nine teachers spoke about preparation for the home-school programme with the children. As well as the time spent on the creating the reading activity packs based on individual children's learning needs and preferences, some teachers explained that they spent more time doing oneto-one reading work with the children in the study, and in some cases, with all the children in their class (up to seven children), even though they were not all involved in the programme. One teacher explained that before the study, she was doing lots of whole class phonics games but since some of her children joined the programme, she changed the class timetable to spend more time on individual reading activities with one child at a time. In her case (and with other teachers), this was done to test strategies and activities so that teachers had the knowledge and experience to foresee any problems which might occur at home and so that they were more confident in their judgements about children's levels of working and advice they were giving to parents. As another teacher said, 'We'd try it with the child and if it worked we'd tell the parents and say, 'why don't you try it?'. All teachers said they practised reading the texts and doing the tasks with the children before they sent them home as they felt this familiarisation would promote the child's interest and willingness to engage with the work at home and thus it would help to make the home experience more successful.

7.4 Sustaining the partnership work

The partnership work between parents and teachers (Phase 3) was sustained through two key methods of liaison: a) face-to-face meetings for discussion and video-sharing, and b) dialogue in the home-school reading diaries. The audio-recordings of the parentteacher meetings and the diaries, which were collected at the end of the programme, were important sources of data through which evidence of partnership growth and maintenance could be found. Parents and teachers also discussed how useful they found the meetings and diaries when they were interviewed in Phase 4. This section therefore contains insight from all three data sources.

Parent and teacher video meetings

Most parent and teacher pairs had two face-to-face meetings of about 30 minutes duration; one within the first two weeks of the programme and one towards the end, between weeks 10 and 12. At these meetings, a school video was observed and

discussed and, in some cases, a home video was also shared if the parent had been able to make one. I was present at all the meetings as well as audio-recording them. This enabled comparison of the two meetings for each pair of participants and identification of the differences in the dialogic themes at the start and towards the end of the 12-week programme. It was very noticeable how many of the same topics of conversation arose at each of the two meetings and how understanding of the issues had progressed over time and how parents and teachers had worked together to problem-solve and affect positive change, particularly in home-reading practice. *Table 9* outlines the themes which were commonly addressed in the parent-teacher meetings.

Table 8: Key discussion themes in parent and teacher meetings, with number of meetings in
which they arose

	Key themes	No. of meetings in which	
		theme arose	
	Child's lack of engagement	10 of 13 meetings	
Sgr	What the child likes to do	8 of 13 meetings	
1 st meetings	Tasks and activities other than book	7 of 13 meetings	
3	reading/sharing	12 - [12	
1	Teacher explanation and shared discussion of engagement and teaching strategies	13 of 13 meetings	
	Increased compliance and attention span of child at	9 of 12 meetings	
S	home		
	What the child likes to do	7 of 12 meetings	
ting	Tasks and activities other than book	7 of 12 meetings	
2 nd meetings	reading/sharing		
	Increase in child's skills	7 of 12 meetings	
	Strategies used, including parents' own suggestions	6 of 12 meetings	
	Praise of children	6 of 12 meetings	
	Understanding of the child's level of development	5 of 12 meetings	

In the first meetings, the child's lack of engagement was typically brought up as a concern of the parents. This was often followed by a discussion of what the child liked to do, rather than read with his or her parent! However, as one of the teachers explained during his interview,

[T]he school videos helped with that, definitely, because the parents can see what you're doing and that empowers them really. They can see that the child won't sit for very long with the teacher either and that kind of validates their experience and stops them feeling like they've failed the child.

In the second meetings, most of the parents reported that their child's compliance had increased and that their child would sit with them for longer to read or do activities; some parents referred to an increase in their child's attention span. As with the first meetings, over half (seven of 12) of the second meetings featured discussion about what the child liked to do but, in the meantime, parents and teachers had worked together to incorporate the child's preferences into the reading routine, to aid the child's engagement rather than to allow the child to be distracted. In some cases this was done by using books and activities on themes which appealed to the child. In other cases, the child learned to earn a preferred home activity by doing a parent-led task first. Something, which many parents saw as a barrier initially, was turned into a useful aid to engagement.

By the time of the second meetings, the parents of six children had gained confidence in exploring their own ways of doing things and were able to share their own strategies with the teacher. Several parents spoke specifically during their interviews about how they needed to find their own ways to teach. One father commented,

I don't have the teaching skills to replicate what happens in school...I've got to do it in my own style, but there are many things we can incorporate in what we do.

A mother explained how the videos helped her to see what her son was able to tolerate in terms of adult intervention and this enabled her to '*push it a bit further*' in what she did with him at home. It was very evident through Phase 3 and Phase 4 that teachers were able to show and explain techniques to the parents but that parents were free to explore ways of working for themselves and supported to do this rather than being forced to do things in a particular way. Parents' confidence in their own abilities grew as they saw their children's interest grow and progress being made. It was possible to see a distinct shift in the parents from their initial positions of worry and low confidence. They had become comfortable with working alongside the teachers; they had gained knowledge of strategies and practised their skills; and they had seen progress in their children. It was very positive that the parents of six of the children were praising their children's home achievements during the second meeting with the teacher. During their interviews, the parents expressed the view that they welcomed the video meetings as an opportunity to discuss specific issues in a way that they felt had not been done before. In doing this, parents felt that the teacher really knew their child and was putting a lot of effort into helping them make progress. Through the videos, parents were able to see exactly what the teacher meant by specific techniques and how their child responded to these ways of teaching.

Home-school reading diaries

Analysis of the comments in the home-school reading diaries revealed similar themes to those explored in the parent and teacher meetings; they were as follows (in no particular order).

Key themes in diaries:

- Engagement strategies and drawing on 'autistic strengths' in activities sent home – sight vocabulary and matching tasks
- The additional learning needs of the children, calling for communication aids and reward strategies to enable better engagement
- Encouragement of the parent by the teacher
- Shared pleasure in parent and child achievements
- Reassurance of the parent by the teacher
- Parents asking for suggestions to tackle difficulties
- Joint problem-solving between teacher and parent

Teachers and parents agreed (in interview), that regular dialogue was key to maintaining a productive partnership. Teachers stated that the comments and questions which parents wrote in the diaries helped them to understand what was happening at home and also challenged them on occasions. Teachers talked of the joint problem-solving which parents also mentioned, with one describing the diary comments as a *'functional conversation.'* Two teachers spoke of how they gained ideas for engaging the pupils in school activities because of feedback from the parents about how they had engaged their children at home, e.g. using songs or props in particular ways. The diaries also provided a platform for shared experiences, enabling teachers and parents to identify with each other, another common theme. The supportiveness of teachers towards parents was very evident in the diaries, with teachers encouraging, reassuring and praising parents' efforts. This perhaps contributed to the sense of trust in the partnerships, mentioned during the interviews.

As parents gained confidence, some teachers were able to hand over some of the resource-making to the parents, e.g. encouraging them to make their own flashcards for word-matching activities. Some teachers found other ways to ease the burden of preparation, such as sending home books and resources which had been used in school and finished with the previous week, so that they did not have to duplicate things for use in school and at home at the same. These strategies made facilitation of the programme slightly more manageable for teachers over time.

7.5 Summary of enabling factors for home-school reading participation

In this chapter, I have demonstrated how it was important for both parents and teachers to have the time and inclination to work together to ensure the success of the project. Both parties put considerable effort into maintaining a regular and ongoing dialogue about practice throughout the 12-week programme and this was vital to building professional and parental confidence, and to develop trusting relationships, through which effective problem-solving could take place. As the programme continued, parents were able to see their children make progress at home and teachers benefitted from the realisation that their input had had a positive impact on both the parents and children. The work was successful for 10 families because these parents were able to carry out reading activities in the home with their autistic children, which the teacher had provided, and they had been able to report back on the progress and difficulties encountered. This enabled refinement of further advice and activities and continuation of the home-school reading programme. In Chapter 8, I provide the findings and discussion in relation to the evaluation and impact of the study.

Chapter 8: The impact of the home-school reading intervention

The development of home-school partnerships, which centred on home-school reading for children with autism, had wide-ranging impact on the parents, teachers and children. The impact was evident in different data sets generated during Phases 2 to 4. The main sources of impact-related data were the parent and teacher meetings (audio-recorded), during which home and school videos were watched and discussed; the reading study diaries which were exchanged and written in by parents and teachers weekly throughout the 12-week programme; the individual parent and teacher evaluation interviews, and the children's school assessment records.

Owing to the individual nature of each parent and teacher partnership, and the homeschool reading programme they developed for each child, the project impacted in many and varied ways. It was possible to list the various types of impact which were evidenced through Phases 2 to 4, and to group them by the participant groups (parents; teachers; children), under the *a priori* (Taylor and Gibbs, 2010) family codes of 'impact on participants', 'impact on relationships' and 'impact on practice' (from Research Question 4). However, the different kinds of impact were so numerous for each of the participant groups (parents, teachers and children) that I sub-divided and re-grouped the codes under *post-priori* family themes of: 'impact on knowledge and understanding'; 'impact on skills and progress'; 'impact on practice'; and 'emotional impact'. It was possible to find examples of impact in each of these four areas for, as detailed in *Table 9* below.

Table 9: Impact on participants, listed by theme
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Area of Impact	Impact on Parents	Impact on Teachers	Impact on Children		
Impact on knowledge and understan ding	 Realisation of differences in child at school and at home Identification with teachers' experiences Learning more strategies to engage and read with child Getting to know child better 	 Understanding home- life pressures Identification with parents' experiences of reading with children Understanding parents' views Getting to know children better Seeing children's progress Reflection on practice 	 Greater interest in reading Interest in a wider range of books and texts Learning that a parent can support their reading 		
Impact on skills and progress	 New reading strategies Increasing confidence Higher expectations of child 	 Validation of professional skills Use of videos for reflection on practice and development 	 Better joint attention skills Using books as reading materials rather than toys Clarity of speech improved Improved reading behaviours Greater progress Transfer of skills to different contexts 		
Impact on practice	 Opening of dialogue with teachers Changing home routines Using wider range of books and activities 	 Changing classroom practice to facilitate home-school reading (testing activities; writing to parents; videoing) Finding best ways to be helpful/supportive 	 Wider skill development Consistency between home and school Longer attention span More reading with staff & Parents More structured activities at home Initiating reading with parent More active participation 		
Emotional Impact	 Bonding with child Appreciation of supportiveness of teachers Admiration for teachers – recognition of professional skills Pride in child's progress Enjoying child's pleasure 	 Challenging judgemental attitudes Admiration of parents recognition of challenges faced Feel-good factor of working together with parents Feeling trusted by parents 	 Bonding with parent(s) More positive attitude to reading at home Able to accept greater challenges 		

This chapter is divided into four sections, looking at each impact theme in turn (8.1 Impact on knowledge and understanding; 8.2 Impact on skills and progress; 8.3 Impact on practice; 8.4 Emotional impact) and related findings, including statistics and quotes, from the various data sets are provided and discussed.

8.1 Impact on knowledge and understanding

Beginning in Phase 2 (the training phase), all adult participants were seen to extend their knowledge and understanding. Teachers learned about the views and experiences of parents from the parent questionnaire feedback and parents began to learn more about the teaching of reading skills to their children through the parent workshops. The development of knowledge and understanding continued through Phase 3 (the 12-week programme) as the teachers and parents worked together to share practice and problem-solve together. This also led to a development in the children's knowledge and understanding, as they were encouraged to transfer their learning and skills to the home and to participate in similar activities with their parent(s) as with their teacher.

Parents' and teachers' perspectives

When the nine teachers were asked how the study had changed their understanding of the issues parents face in supporting their children at home (interview question 2), each teacher cited different examples of their new knowledge and understanding. To give some illustrations, one spoke of a realisation that parents had different goals for their children, which needed to be borne in mind when planning joint work. Several teachers mentioned an increased awareness of the space and time pressures on families and that the home-school reading needed to be squeezed into a busier and more chaotic environment in the home than at school. In relation to this, one teacher saw a homevideo taken during the programme in which the mother was carrying out a reading activity with her autistic son and his sibling came and joined in, causing the autistic child to get up and walk away. The teacher commented that this would not happen in school because she would be working individually with the child in a separate little room where other children could not interrupt or distract. Two teachers felt their assumptions had been challenged because, prior to the study, they had believed their pupils to behave similarly at home as at school and they were surprised to learn that these children were actually very resistant to sitting with their parents as they would with staff in school.

Three teachers had been interested to learn about the level of understanding of the parents and the need to tailor their advice and suggestions accordingly. From this selection of examples, it can be seen that there was a diversity of knowledge and understanding gained by teachers depending upon the individual parents and children with whom they participated in the study.

In two thirds (12 of 18) of the parent and teacher interviews, the school and home videos were cited as a powerful tool in the sharing of knowledge and understanding between participants. They helped with the realisation of differences between the children in the two settings. Parents gained and valued the insight into how their children acted and performed at school, particularly through use of video and several were surprised at how well their children appeared to be doing. As has been discussed in the literature review (Chapter 2), it is known that children with autism can struggle to generalise skills so that although they are able to do something in one setting they are not able to do so in another (Prizant *et al*, 2007; Winner, 2011). This was acknowledged by a parent in her interview:

...when he's at school he does things which he wouldn't do at home and for me to know what he's doing in school means I can see what works and I can try to copy it for him to recognise it....And to realise what he's capable of doing, and vice versa. There were things he was doing at home which they didn't know at school, so we were able to share that.

The videos helped with this transfer of skills, as the parent could see exactly what the teacher meant in the written diary instructions and how activities were set up and conducted, enabling replication of school tasks in the home.

Throughout the interviews, teachers spoke of the impact of the project on their professional development. They mentioned the questioning of their skills and judgement, and trying to apply their knowledge in new ways (e.g. adapting their classroom practice for the home environment). Two teachers with very different pupils spoke of how they had previously taken their own skills for granted and the project had made them reflect on how they teach in order to explain to the parent what to do:

It sounds silly, but sometimes you just forget that we're trained to know how to get [the child] to be engaged in reading, and even though his mum knows him really well and he's her child, she may not know about those things.

I've had to refer back to the basics of good reading behaviour myself in order to explain to parents.

Children's knowledge and understanding

It was clear that most of the children began to learn and accept that the parent was able to read and do activities with them in a similar way to their teacher. This was a significant development in the generalisation of their knowledge and understanding, requiring them to recognise similarities and differences in the two settings and come to apply similar skills and behaviours in the home with their parent as at school with their teacher. Although only five families were able to provide both early and late home videos during the 12-week programme, all five children could be seen to be more accepting of their parents' engagement with them in the second video and were seen to be able to perform reading tasks and activities to a similar level at home as at school, whereas, in contrast, the performances in the first home videos were far more erratic and the children more fractious.

An unexpected finding was that, in a few cases, the children's interest in books increased during the project with some children enjoying a wider range of texts than previously. Prior to the project, some children had fixed interests in certain types of books and refused all others, a typically autistic trait (APA, 2013). However, as the project progressed, parents were able to suggest different books and the children were more accepting of this, as comments from two mothers illustrate:

The range of books has increased. We'll look at more story books, not just Disney or dinosaurs.

It used to just always be the Maisie book but now when I suggest a different book, he accepts that now.

It appeared that the teacher played a vital role in the widening of the children's knowledge and interests and their acceptance of new texts. This was mentioned not only in the interviews, but also occurred in the parent discussion groups which took place during the Phase 2 workshops. Parents spoke of popular children's books (e.g. 'The Gruffalo' by Julia Donaldson) they had had at home for many years with their children showing no interest, yet when these same books were used during school lessons, the children became very keen on them and would begin to look at them repeatedly at home. This indicated that teachers were able to engage children in new ideas and resources in a way that parents struggled to do and that this was one of the key skills that teachers needed to help parents develop.

To summarise, it was clear from the analysis of the various data sets that as teachers and parents found out more about each other, their ways of working and about each other's' environments; they also gained a deeper understanding of the children. This enabled them to work together to assess and extend the children's knowledge and understanding. The father of two children in the study made the following poignant comment, which summed up the awareness that the study promoted:

The myth that one day they might be able to read has dissipated because now we know they actually can! It's very encouraging.

8.2 Impact on the development of skills and progress

Teachers' and parents' skills and progress

In section 8.1, I described how the study had encouraged teachers to reflect on their practice and refresh their knowledge of the theory of teaching reading. This led to several teachers doing more reading activities with individual children, to *'test things out'* and see what might work in the home setting. These teachers felt that the additional emphasis on the teaching of reading made them better at teaching it and it also had a positive impact on the children's reading progress, though these claims were participant-reported and not specifically tested or verified during the study. Teachers also felt that their skills in working with parents had increased in that they understood the needs of the parents better and felt more able to meet these needs during the programme, as several teachers testified during their interviews.

Impact on teachers' professional development was also evident in problem-solving together with parents, as mentioned in section 7.1 in relation to *parent and staff expertise*. Teachers spoke of how they tried out different approaches in school to solve home problems and their own practice benefitted from this investigation. One teacher who had two participating families explained:

I was able to get an idea of how to engage them more in school because of what the parents said. For example, with one child, his parents said they found it difficult to use [laminated] symbols with him because he kept mouthing the symbols, so I had to see if I could find other ways to access that story without using symbols. Changing a few bits and pieces helped me to develop my own practice. Teachers seemed to enjoy this professional challenge and one of the few negative aspects of the study for teachers was when parents did not give feedback or ask questions.

Parents made claims during the interviews that participation in the programme had given them new ideas and helped them feel more confident in carrying out reading activities with their children. Several parents mentioned that teachers and teaching assistants had taught them to be more patient with their children and have higher expectations by, for example, waiting for them to respond to questions and work out words for themselves.

To be able to analyse how parents' skills had changed during the programme, it would have been useful to have two home videos from each family (one taken the start and one near the end of the 12-week programme). This was not possible for most families but the five sets of two videos obtained did show some changes over time in what the parents were doing and how they were supporting their children. One father was seen in the first video to be pointing to words as the child attempted to read them; in the second video, the child was encouraged to point for himself (as at school) and the child appeared less frustrated and more fluent in his reading. One mother was heard in the first video to be reading almost every word in the text, with her child copying her; in the second video, she waited for the child to attempt each word himself first and she only read for him if he was stuck or made a mistake. Another parent had filmed a reading activity involving word-matching flashcards for the second video, rather than just book sharing, which she had filmed at first; she commented that the activities were new to her and had given her a new way of working with her son.

Children's skills and progress

Numerous other studies have indicated that parent involvement in the teaching of reading has a positive impact on children's progress in reading (e.g. Hewison and Tizard, 1980; Hindin and Paratore, 2007; Kelly-Vance and Schreck, 2002) and so it was hypothesised that enhanced progress was to be expected for the children in this study. The children's reading assessment data on Connecting Steps (B Squared, 2013) was scrutinised for the period of the 12-week programme, in comparison with other pupils matched by age, P scale level, language level and CARS score. This enabled some

validation of the claim that the children in the study had made better progress than other matched children. Of the 13 children in the study:

- Six achieved more reading assessment points (*Connecting Steps*, B Squared) than all matched children
- Four achieved the same number of assessment points as matched children or more than at least one matched child but fewer than (an)other(s)
- Three achieved fewer B Squared reading assessment points than all matched children

So, although not all children in the study achieved more assessment points than matched peers, the majority of them did out-perform their peers during the 12-week programme. Even so, 12 weeks is a relatively short period in which to expect to see different rates of progress between the two groups.

There were seven children in the study who had comparable B Squared assessment data for two consecutive academic years (2012-13, the year before the study, and for 2013-14, the year of the study)⁸. These data were compared to see whether these pupils made more progress in various related areas of assessment during the study year than in the year before. In the B squared *Connecting Steps* assessment program, progress is calculated by the percentage of each level achieved; as pupils achieve each 'assessment point' within a level, the percentage of the level achieved goes up. I looked at the data for all the strands of English (reading, writing, listening and speaking) and I also included analysis of the Personal, Social and Health Education (PSHE) and Citizenship data because these areas of assessment include social skills and skills in cooperation with others, both of which were important in the study. *Table 11* shows that six of the seven pupils made better progress in a least half of the subject areas during the study year than in the other areas, though five of the seven pupils also made better progress in reading and listening during the study year.

Table 10: Comparison of progress made during study year with previous year

Reading Writing Listening Speaking	g PSHE	Citizenship
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⁸ The other pupils did not have comparable data for two consecutive years, either because they were new to the school in 2012 or they were in a year group below Year 2 at the time of the study.

Pupil 1	✓	\checkmark	✓	✓	-	✓	
Pupil 2	✓	Х	✓	✓	-	-	
Pupil 3	-	Х	-	-	-	Х	
Pupil 4	Х	✓	Х	✓	✓	✓	
Pupil 5	✓	-	✓	✓	Х	-	
Pupil 6	✓	✓	✓	✓	Х	Х	
Pupil 7	✓	✓	✓	\checkmark	-	Х	

Key: ✓ More progress made in study year than in previous year (>10% more)

- Similar progress made in study year as in previous year (within 10%)

X Less progress made in study year than in previous year (>10% less)

Although most pupils did not make better progress in PSHE or citizenship during the study year, this is likely to be because the skills of joint attention, sharing with others, cooperation and interaction, were skills which the children had been working on in school for a long time and that their progress in these areas had already been recognised in school assessments prior to the year of the study. After all, the early school videos showed most of these children were already quite accomplished at sitting and sharing reading activities with their teachers. However, the parent questionnaire responses and early home videos highlighted that these skills had not been demonstrated so well by many of the children in the home setting, prior to intervention. The 12-week programme enabled the generalisation of these skills to the home setting. Thus, parents reported an increase in these skills at home during the study period but this progress was not captured in school assessment data of the same period.

The difference in the skills the children demonstrated at home as a result of the programme could be seen through comparison of parents' rating of their children's skills prior to the programme (Questions 9 and 11 of the parent questionnaire in Phase 1) with the skills seen and discussed in the parent and teacher video meetings and mentioned by parents anecdotally during their interviews. Of the initial 16 children who began the 12-week programme with their parents, 14 were seen to demonstrate more skills in the school videos than parents had seen at home before the programme. All home videos showed children doing more in terms of demonstrating reading-related skills than parents had initially indicated they were capable of in their questionnaire responses. It is most likely that the children already had many of these skills and were using them in school but that parents were unaware of this prior to the study and had

therefore not encouraged generalisation of the skills to the home before working on the programme. It was striking that 10 of the 16 parent questionnaires indicated that the children rarely, if ever, shared books or reading material with someone else prior to the study. In addition, seven parents had indicated that their children either never read aloud at home, or did so 'not very well'. By contrast the school videos (and home videos, where available) taken during the study showed all of these children sharing books and activities and reading small portions of text aloud. There were several other instances of individual children demonstrating skills during the programme, such as word and picture matching, which parents did not know their children could do prior to the intervention. The programme was clearly important in raising awareness of children's attainment amongst parents and in facilitating generalisation of skills across settings.

The majority (nine of 11) of parents, when interviewed, said their children would sit with them for longer and demonstrated better joint-attention following the programme. One parent spoke of how she felt the work had improved her son's speech and another parent commented on how his child was using books more functionally (holding them the right way up and turning pages), whereas previously books had been treated much like toys.

To summarise, the impact of the study intervention on skills and progress, the most striking change was in the generalisation of the children's skills from school to home through parents assimilating school practices, which encouraged the children to be more engaged. Impact on skills and progress was largely measured through participant reports and verification through limited video footage and diary entries. The school's reading assessment records were useful to identify some areas where children in the study had succeeded in comparison to non-participating children. However, these records were not compiled specifically for the study and there were no controls on how these records were completed during the 12-week study period, before or after, and so this data cannot be relied upon as scientifically rigorous.

8.3 Impact on practice

Communication and sharing

As discussed in the preceding chapter, a significant impact on practice for both teachers and parents was the changing of daily routines in order to accommodate and facilitate the home-school reading programme. To begin with, the methods by which practice was shared and changed were changes to practice in themselves. Prior to the study, neither teachers nor parents made videos of one-to-one reading sessions with their children to share with one another. The diaries, in which focused dialogue about practice took place, were also a new commitment. Finding the time to devote to these methods of sharing required a change to practice for the participants themselves.

Daily routines and reading practice

Carrying out the actual reading activities with the children required changes to practice and daily routines. Teachers spent more time doing one-to-one work with the children. Many parents had to fit the home-school reading time into their evening or weekend routines, which they had not done previously, or they had to change existing bedtime story sessions into 'home-school reading' sessions. These changes to routines naturally had an impact on the adults' expectations of the children, with each child spending more time individually working with the teacher, and doing 'new' or different things with a parent that they had not been expected to do before.

Prior to the intervention, the evidence from the parent questionnaire, early school videos and children's school assessment data indicated that the children were engaging more with adult-led reading activities in school than at home. In addition, they were using verbal language and/or alternative augmentative communication aids to read and respond to adult questioning at school whereas, according to parent reports, language skills demonstrated at home were far fewer. On learning what the children were capable of, parents were largely keen to adopt the same strategies used at school, as these were evidently working. This is not to say that school strategies were the only ways, or the 'right' ways, to do things, but simply that teachers had found ways to engage the children with reading tasks and demonstrated their efficacy to parents, thus parents wanted to emulate the teachers as far as possible to try to achieve the same results.

Parents' practice changed in order to incorporate ideas which were seen to be working in school. As one mother explained:

The activities we were given are new -1 wasn't really doing anything like that at home. He responds well to that. I've learnt a lot about him, that he can build sentences and match words to the sentences.

The literature supports the notion of using the same strategies consistently in different contexts to promote the generalisation of skills of children with autism (Hetzroni and Ne'eman, 2013; Schopler, Mesibov and Hearsey, 1995). This may also be regarded as an example of greater 'parent-school alignment' (See and Gorard, 2015:13), in which the expectations of behaviour and communication in the home are similar to those encountered in school. This was noted to be extremely effective in promoting children's academic progress and attainment in a systematic review of more than 77 studies of the impact of parent involvement in education (See and Gorard, 2015).

As the children became more interested in the reading activities and more tolerant of sharing with their parents (and siblings in one case), parents found the experience far more positive and were more motivated to continue working with their children. Over time, the length and frequency of home reading sessions increased in many cases, according to parent reports. This was an area of significant change during the course of the 12-week programme, as highlighted by the following parent comments made during interviews

He is sitting with me more.

I know when he is ready and now, when I ask him, he will come

Once he became comfortable with the book, I was able to come in and join him with it and he allowed me to come in. It was on his terms at first and slowly I was able to move it along to where I was able to bring the book along.

He will now sit and look at books with his sister.

...now he'll take the initiative. Our attitude towards reading with the children is more positive. We do not take it for granted. It's more of a bonding thing.

This last quote, in which a parent referred to the reading work as a 'bonding' opportunity with her child, leads me to the final area I will discuss relating to the impact of the study: the emotional impact. This was an area which was not particularly anticipated but which came through strongly in the *post priori* coding of the evaluation data. It was evident

that the work of the study had a profound impact on the feelings of the parent and teacher participants and the children with whom they worked.

8.4 Emotional impact

Emotional impact on parents and teachers

Something which emerged strongly through the parent and teacher interview data very strongly was a notion that I termed the 'feel-good factor' of parents and teachers working together. This was expressed in different ways by different participants, but often in terms of admiration and appreciation of each other's efforts and sharing the pleasure of progress they had seen and experienced during the 12-week programme. To give an example, there was a sense among the teachers that parents had a harder job in reading with their children because they did not have a specialist building with quiet, distraction-free spaces, or lots of resources, or a regular timetable with structured work expectations, neither did they have professional training. This led teachers to admire and respect the parents and appreciate the effort they had put in, as summed up by the following quotation:

I think it's really positive for us to see that even though it is really difficult, a lot of our parents do actually try to do these things and it's important for us to recognise that.

Both parents and teachers expressed their pleasure and satisfaction in seeing the children achieve during the programme and teachers also congratulated parents for successes when they met face-to-face, as well as in writing. There were several examples in the home-school reading diaries of participants writing '*Well done!* ⁽³⁾' after a comment about something a child had done successfully.

It was clear that increased parent-child engagement had a significant impact on parentchild bonding through the work of the study. Parents were evidently delighted by their autistic child/children engaging with them more, through shared reading activities. This phenomenon was mentioned by five families in the Phase 4 interviews. The 'reward' of increased social interaction and relationship building between parent and child is normal and to be expected when parents read with their neuro-typical children (Vandermaas-Peeler *et al*, 2012:3), however, it is far more elusive when working with children with autism (Frith, 2003; Vermeulen, 2001), so this development was particularly encouraging.

In this study, it was evident that shared activities (not just book-reading alone) between parent and child helped to increase the parent-child engagement, as several parents commented on this being particularly successful. This also echoed findings in a study by Mucchetti (2013) on adapted shared-reading with four minimally-verbal five- to sixyear-old pupils with autism, where the engagement and comprehension levels of all four pupils were increased during story sessions through the teacher's use of motivating props, visual support symbols and simplified texts.

Emotional impact on children

The data yielded some examples of emotional impact on the children in the study. One mother spoke of her son's increased emotional resilience through the programme; that he was able to tolerate more '*pushing*' than previously:

I can see exactly which bits he likes and what he doesn't like and also what he's able to tolerate now. Before, as far as I knew, he was not able to tolerate lots of things. Now, I know he can tolerate someone sitting behind him, turning the pages and pointing things out, I can push it a bit further.

In a similar vein, another child was seen in her first home video to protest strongly to reading with her father. She shouted loudly in protest, put the book back in the bag and walked off. However, she showed significant progress in her tolerance of shared activities in the second home video, nearly two months later, and was seen to stay seated while her father read a whole book to her.

Another example of emotional impact on the children came from one teacher who spoke of how the boys in her class who were taking part in the programme seemed to 'have a little more eagerness about doing the activities and also about doing the work with mummy' than the others in the class. She also commented that she felt it made a difference to the boys taking part in the programme to know that their teacher also knew what they were doing at home, though this was not verified in any other way.

8.5 Summary of impact

In this chapter, I have outlined the various forms of impact which the study had on participants, including the children. Examples from the data (particularly Phase 3; the

diaries, videos and parent and teacher meeting discussions, and Phase 4; the parent and teacher interviews and children's assessment data) provided in this chapter indicate that the work of the study had significant impact on four key areas: 1) the knowledge and understanding of the participants in relation to joint working and the teaching of reading skills to children with autism; 2) the development of skills and children's progress whilst participating in the home-school reading programme, particularly through the opportunities for generalisation of skills which the programme encouraged; 3) the practice in both school and home settings, to accommodate home-school reading preparation and practice; and 4) the emotions of the participants. Although the emotional impact was the least anticipated of all forms of impact, it was seen as vital to aiding the commitment of participants to the programme, through the building of positive relationships and the rewarding of efforts. In the next and final chapter, I will summarise the key findings outlined in this and the previous three chapters, discuss the study's contribution to knowledge, the possibility of extending the programme framework to other settings, and expound the implications of this research on my professional practice.

Chapter 9: Summary, conclusion and implications for professional practice

In this final chapter, I evaluate how successful the study was in meeting its aims, describe how the methodology addressed each of the research questions and outline the key findings from this unique study and its contribution to knowledge. I will also discuss the generalisability of the study and implications for further work in the field of autism education and for my own professional practice.

9.1 Meeting the aims of the study

To recap the purpose of the study, my main objective was to develop a framework for home-school learning, so that teachers and parents at Cherrycroft School could work together to further extend the skills and understanding of their autistic children. Prior to this study intervention, teachers at Cherrycroft were struggling to facilitate and support parents in reading with their children. Neither teachers nor parents really understood the strategies and practices which the other used to engage the children and help them learn to read; neither did they have much knowledge or understanding of each other's contexts. There was a home-school divide in which each environment and its practices were distinct and opaque, and in which the children behaved and performed differently. This study successfully sought to understand the differences of the home and school contexts and the expertise and practices of the participants in each setting. It then encouraged teachers and parents to form partnerships through which they could work together to find ways to enable the children to overcome their homeschool differences and to be able to sit and participate in reading activities with their parents at home as well as they did with their teachers in school. This work was sustained through regular, multimodal methods of communication and sharing of practice between home and school, which not only helped the children to progress in generalising their skills across the two settings but also facilitated the building of trusting relationships between parents and teachers.

In short, the study provided a thorough understanding of the issues involved in implementing home-school reading for young children with autism at Cherrycroft. It revealed the constraining factors (barriers), which needed to be overcome in order to implement a successful programme of home-school reading, and provided a framework for the building of parent-teacher relationships to develop effective home-school learning practices for children with autism. Although reading was the focus of this work, I hypothesise that any other area of learning (number work or writing, for example) is likely to have worked equally as well in enabling the children to generalise their skills from school to home and in encouraging the development of the parent-child relationship through shared school work, which, I argue, turned out to be the real achievement of the study.

9.2 The strengths and limitations of the methodology and methods

In many ways, this was an extremely ambitious study which generated many forms of data over an academic year. The mixed-methods chosen for each phase were very powerful in aiding the participants and me to understand the factors which were important to the next stage of the work. The Phase 1 teacher survey and parent questionnaire provided the baseline data from which the Phase 2 training could be planned. The separate staff and parent discussions and activities at their respective training sessions enabled a deeper understanding of the barriers which needed to be overcome so that Phase 3 (the 12-week programme) was successful. The multimodal methods of communication and sharing (videos, meetings and diaries) which were used throughout Phase 3 enabled the development of strong and trusting partnerships between parents and teachers, joint problem-solving and facilitation of strategies which supported successful home-school reading. The interviews in Phase 4 showed that the work of the programme had indeed helped to tackle some of the difficulties inherent in home-school learning with autistic children, namely the overcoming of some of the social communication difficulties which make parent-child engagement problematic and the rigidity of thought, which fosters the home-school divide for many children with autism. These were overcome through the sharing of communication aids alongside reading activities and use of the same strategies (including behaviour and reward strategies) in the school and at home, helping the child to recognise similarities in each setting, and so to respond to parents in the same way as to teachers. There is some evidence to suggest that the home-school reading programme did improve the reading skills of the children in the study, when compared to matched pupils; however, the greatest achievement was in the development of greater parent-child engagement at home, through the bespoke reading activities which were developed and shared by the teacher and parent working together in partnership.

I regard the 12-week home-school reading programme to have been successful because 10 of the 11 families who took part in it were able to introduce and work on reading activities in the home with their autistic children, under the guidance of the children's teachers. All of these parents reported that they had formed trusting relationships with the teachers, through which they were able to report back on the progress and difficulties encountered. These parents and teachers were able to work together to problem-solve, refine practice and continue with a variety of home-school reading tasks throughout the 12-week period of the programme. The study changed the practice of the participants and also increased the confidence of the adults and children in developing and consolidating skills within the context of home-school reading. It was evident through parent report that the home-school reading activities had also enabled the parents to enjoy greater shared-attention opportunities with their children and to build better relationships through this.

Most forms of data collection throughout the study were completed as planned. The videoing was the only aspect that was not completed to the extent of the original proposal and request. Several parents said they would definitely try to make their own videos after seeing the benefit of the initial school videos of their children. However, six of the families were not able to make videos at all and only five families made two videos (one near the start and one near the end), which was disappointing for staff and resulted in a lack of opportunity to develop understanding of the home context and help the parent to refine their practice. Owing to this limitation, charting the development of parents' skills and the children's progress at home was largely dependent upon the parents' self-reporting in interview, apart from the few videoed examples provided.

From the participants' point of view (as reported in the Phase 4 interviews), the creation of resources and the multimodal communication methods employed during the 12week programme were reported to be very time-consuming, and teachers in particular felt they would not be able to sustain the work for longer than a fixed period (the 12week of the programme was manageable but any longer may have been prohibitive). This presents a dilemma for future research because I consider the programme methods (multimodal forms of communication and sharing and provision of bespoke resources for the home) to be vital to the success of the programme, though I acknowledge that this may be unsustainable in the longer term. It seems feasible to suggest that future programmes should be limited in length but of similar scope and intensity to yield the benefits of focused relationship-building and practice development.

Though it has not been verified at the time of writing, I consider it reasonable to speculate that some of the positive impacts of this study will have endured for the participants beyond the end of the project, such as: the teachers' and parents' confidence in relationship-building and liaison; parents' insights into their children's skills and ways of engaging with them through home-school learning tasks; changes to home and school routines to facilitate shared learning activities. It is worth noting that all parents (11) who were interviewed in Phase 4 of the study agreed that they would like to continue this kind of work in future.

Had it been possible to provide language translation for families who did not speak fluent English, this may have yielded a wider range of participants, more representative of the ethnic mix of Cherrycroft. However, such resources are costly and limited, presenting an on-going challenge for schools such as Cherrycroft to cross language barriers and engage families from a range of ethnicities in home-school learning.

9.3 Contribution to knowledge, key findings and generalisability

This study differs from other research in its scope (a year-long, four-phase, mixedmethods study) and its particular setting. Other studies have looked at discrete aspects of teaching children with autism to read, such as typical patterns of learning to read (Nation *et al*, 2006), how to adapt reading for children with autism (Mucchetti, 2013) and how mothers read with their autistic children (Arciuli *et al*, 2013b). Other studies have demonstrated the benefits of parent involvement in the teaching of reading, such as accelerated progress (Hewison and Tizard, 1980; Kelly-Vance and Schreck, 2002; Loveday and Simmons, 1988) and in supporting the development of the parent-child bond (Vandermaas-Peeler *et al*, 2012). This study took this accumulated knowledge into account and established a framework for facilitating collaborative work between parents and teachers to achieve effective home-school reading practice with children with autism; children who often have atypical patterns of learning and skill generalisation and with whom parents and teachers can find it very difficult to engage. A framework model is provided and explained in the next section (see Section 9.4 and *Figure 9*). I argue that this study makes a contribution to knowledge in the fields of autism and home-school partnerships in the following ways:

1. The study identifies that considerable effort is needed by families and teachers for a model (or programme) of this type to succeed; this requires regular multimodal sharing of practice;

2. Using this model it is possible for schools to support changes in relationships, practices, and behaviours for families who have children with autism, to help the children generalise learning and skills from school to home;

3. The model can be replicated and used by colleagues and families in other similar schools;

4. The research showed that there was progress in wider skills (e.g. shared attention, interest in a wider range of books, concentration span, parent-child relationship building), and these brought considerable pleasure to the families involved.

This study did not find any differences in outcomes of sub-groups (age, gender, ability, severity of autism) of children participating. However, the numbers of children taking part in the 12-week programme in each sub-group were small. For example, there was only one girl and twelve boys (the ratio at Cherrycroft was 10 girls to 82 boys) and the spread of ages, abilities and autism severity were fairly evenly spread across the group.

The model of collaborative working which was developed in this study (see *Figure 9*) is intended to be helpful for use by colleagues and parents in other similar schools, encouraging them, as my Cherrycroft colleagues and I did, to explore and understand the starting points of all participants before working together to develop shared strategies and implement them across settings, maintaining multimodal forms of dialogue and practice sharing throughout, and problem-solving difficulties together as they arise. Other schools may have their own forms of academic assessment with which they might track progress in reading skills (or any other academic area they choose to work on with parents). However, in the current study, academic progress was not

tracked rigorously and analysis of the children's reading assessment data (naturalistic school data) was not sufficient to be conclusive in confirming the benefits of parental involvement in the development of reading skills. Despite this, parents and teachers' reports of progress in wider skills (e.g. shared attention, interest in a wider range of books, concentration span, parent-child relationship building) were supported by video data and diary entries. These forms of progress evidently brought real pleasure and benefits to the adults and children who took part and such forms of progress should be equally attainable in other settings where effort is put into understanding, develop and sustaining parent-teacher relationships for collaborative home-school learning for children with autism. I would encourage greater use of video throughout any future programmes, not just for the sharing of strategies, which was extremely useful, but also for the tracking of progress, which may have added further to the findings of this study if more filming had been possible.

9.4 Model framework for home-school learning partnerships

Experience of the 12-week programme, and comments from parents and teachers during evaluative interviews confirmed the process of this home-school learning programme and the important factors in its success. These have been distilled into the following diagram (*Figure 9*), which outlines the roles, actions, and centrally, the dialogue between the parents and teachers throughout:

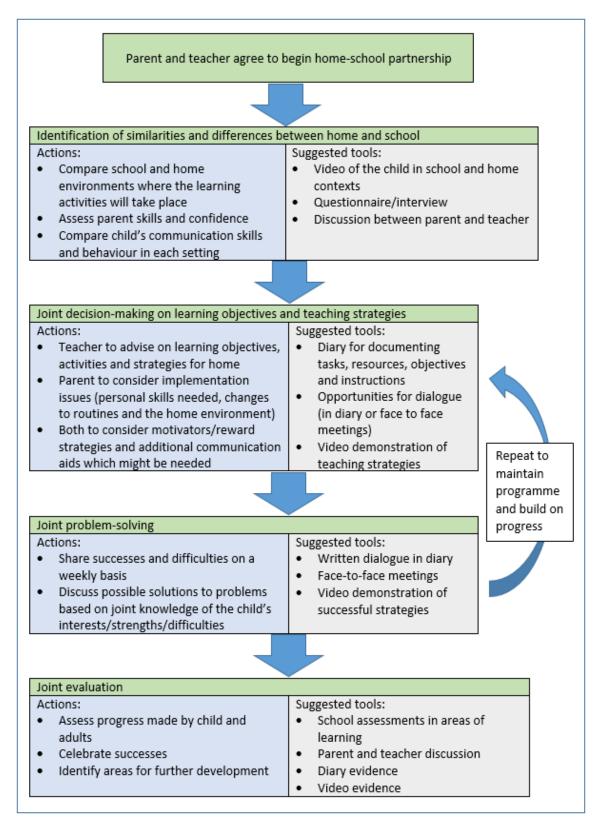


Figure 9: Model framework for the home-school reading partnership programme

In my literature searching, I was unable to find any similar models for home-school reading with which to compare and contrast mine. I speculate that this is because of the

special context of my study. My work suggests that home-school learning for children with autism requires particular scaffolding in order to plan for and work through issues that might arise because of the children's social communication impairments, difficulties in generalising and transferring skills from one context to another and changing routines. I suggest that these issues are less likely to be problematic when doing homeschool reading with neurotypical children, or children with other special educational needs, and thus the need for such a model might not be so great in other contexts. However, I argue that this model would be beneficial to colleagues and families in any educational setting and easily adaptable for any area of home-school learning, not just reading.

Future work in home-school learning partnerships for children with autism will need to explore how the support and resourcing of such a programme can be managed in a way which is less time-intensive without diminishing the quality of the resources, activities and relationship-building. This may enable such a rewarding programme to be run for longer and have capacity to involve more families. Although, even if a school was to work in this way with just a small selection of parents and children, this model would still bring successes and benefits to the participants.

9.5 Implications for personal professional practice

Working in a special school naturally involves using many types of information from multi-disciplinary sources to understand the needs of the children and how best to support them. Having spent a decade in this complex working environment, I feel I have an affinity with mixed-methods constructivist research; it not only helps me work with the children but it also enables me to problem-solve with colleagues as part of the leadership team, to find ways of moving the school forward and developing practice. This project (and my EdD studies in general) has been a significant part of this development, both for me as a researcher and for Cherrycroft School.

This EdD thesis project has enabled me to develop and apply a variety of qualitative and quantitative research skills over a sustained period. I have benefited from designing and leading a unique, year-long study involving a range of stakeholders (colleagues, parents and children). I have also used a range of data analysis tools to explore and interpret the data of each of the four phases and used the findings of each phase to inform the next stage of the work. I have developed my skills in literature searching, vital for informed enquiry, and have used specialist analysis software (NVivo and SPSS).

This study has confirmed my view that it is vital for parents and school staff to work together to educate children, particularly autistic children. Schools have a duty to prepare children to live in society, giving them the skills they need to be as independent as possible (Althusser, 1977). However, as this study has highlighted, children with autism struggle to adapt their in-school learning to life outside school, and thus parents have a key role to play in this extension of learning. This study has demonstrated how specialist teachers in schools such as Cherrycroft can provide structure, incentives and models of engagement for learning which support the specific needs of children with autism. These strategies can be transferred to the home, helping parents to compensate for the difficulties which can hinder autistic children in the development of their understanding and a generalisation of their skills beyond the school gates.

A project such as this gives parents some tools and empowers them to develop confidence in their ability to support their children's learning, which will hopefully go far beyond the limited time of the intensive programme. A father who took part in this study echoed this sentiment:

For me the project has just kick-started a process which is going to take...forever! But it's been very useful for that. Sometimes you need a little nudge or a big nudge from the outside to get you going. You get into a routine and it can be difficult to change it without influence from school giving you the reason to change.

This quote is poignant because it indicates the power of a project such as this to '*nudge*' parents to realise the important role they have in supporting their children's learning beyond the time and space of school, encouraging them to make a commitment to this work. I was also touched by several parents participating in this study who admitted that they did not know their children could do so much until they saw the school videos. This was an extremely powerful reminder that schools have a duty to share children's learning with parents in ways parents can understand. Similarly, parents need the opportunity to share their knowledge and understanding of the children with staff. Without this sharing, neither can fully understand the children's potential and work towards it.

9.6 Further work

During the year that I have been writing this thesis (2014-15), I have been privileged to share some of the study outcomes with colleagues at Cherrycroft, and further afield (presenting at two poster conferences and at the UCL IOE and Beijing Normal University International Conference). I also intend to disseminate my findings to other autismspecific school colleagues through the Pan London Autism Schools Network (PLASN).

Sharing and discussing my findings has given me the opportunity to reflect on my learning and to be involved with further home-school learning development work at Cherrycroft. Owing to the time and resourcing pressures which teachers reported in this study, my SLT colleagues and I decided to give teachers freedom thereafter to choose areas of learning to focus on for home-school work with individual families. This meant they could work on something for which they might already have resources prepared in school and which they were used to working on with the children. We also gave teachers the freedom to choose how they communicated with parents during the course of the work (e.g. telephone calls, in writing, meetings, videos etc.). However, early indications are that this subsequent work has not been as successful as the home-school reading study was. There could be any number of different factors at play which have affected the success of this follow-up work and these have not yet been explored fully. However, early indications are that a more relaxed approach to communication between teachers and parents has been detrimental, confirming that structured, regular dialogue with multimodal forms of sharing are vital in any programme that aims to take into account the complexities of transferring work from school to home for children with autism.

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Appendices

Appendix 1: Text of briefing letter to parents (Phase 1)

Dear Parents and Carers,

I am writing to invite you to take part in a study about home-school reading for children with autism.

I am particularly interested in finding out what families at Cherrycroft School currently do in supporting their children to learn to read. I also want to develop some training materials and resources to help you read with your child/children at home and I need your help to do this.

This study will take place during autumn 2013, spring and summer 2014 and will have four parts:

- 1) A parent questionnaire (early autumn)
- 2) Parent workshops (late autumn)
- 3) A home-school reading trial project (spring)
- 4) Evaluation interviews (late spring/early summer)



You can take part in as much or a little as you want to. I very much hope you and your child/children would like to take part.

Who is conducting this study?

Me, Rachel Walker (Doctoral Student Researcher), under the supervison of Dr xxxxxx and Dr zzzzz at the Institute of Education, University of London. Cherrycroft School has given permission for this study to take place.

What will happen if I take part?

The first part of the study is the questionnaire (attached). I would be very grateful if you could take the time to fill it in and return it to me by Wednesday 18th September 2013. This will help me to plan parent workshops and staff training. Your responses will be stored securely and your answers will be made anonymous before the information is presented to anyone else. If you need help to fill in the questionnaire, please contact me at the school.

If you would like to attend parent workshops about home-school reading (later in the autumn) and/or take part in the home-school reading trial project (in the spring term), you would be very welcome to do so. More information will be given about these nearer the time.

What will happen to the results of the project?

The study will be written up as a Doctoral Thesis, as part of my Doctor in Education degree. The study will also benefit the school and its pupils through helping staff to understand the best ways to work with and support parents with home-school reading activities. At the completion of the study, I will send you a newsletter regarding the findings from the study. Contributions from individual participants will be made anonymous. The information I collect will be kept strictly confidential. All information and results will be kept on a secure computer and in a locked filing cabinet and destroyed after the study has been written up.

Do I have to take part?

It is up to you whether or not you want to take part. If you fill in and return the questionnaire, it will be assumed that you are happy for your responses to be used for the study. You are still free to withdraw at any time, without giving a reason, and request that I do not include your responses. A decision to withdraw at any time, or a decision not to take part, will not affect your child's education or access to services in any way.

I understand that parenting a child with autism can be difficult and that home life can be stressful at times. If you feel you cannot take part in this study, your decision will be respected.

What should I do next?

Thank you for taking the time to consider being involved in the home-school reading study. It is only through the support of people like you and your child that we can develop our understanding of the issues which affect children with autism and how we can best help them to learn.

If you would like to discuss this study with me beforehand (or if you have questions at any time), please do not hesitate to contact me.

Kewalker

Rachel Walker

rfaulkner@ioe.ac.uk | (school phone number)

This study is has been reviewed and approved by the Faculty of Policy and Society's Research Ethics Committee, Institute of Education. Thank you for your interest in my research.

Appendix 2: Teacher survey (Phase 1)

Reading Survey for Teachers: March 2013

The purpose of this survey is to find out about the range of approaches used by teachers at Cherrycroft School to teach reading and to understand the issues faced by teachers when teaching pupils with autism to read. The responses to this survey will help the literacy coordinators to plan staff training on the teaching of reading.

1. Please tell us about your current class

- a. Age range: ______ to _____years old
- b. Ability range of pupils in reading (EYFS levels/P scale/NC levels): ______to _____
- c. How many times per week do you (or a team member) read books to the class? _____
- d. How many times per week do you (or a team member) read books with small groups?_____
- e. How many times per week do individual pupils read or look at a book with an adult in your class? ______
- f. What other reading activities are on offer in your class? (please list)
- g. How many pupils in your class read at home regularly?_____
- h. Do their parents write comments in the Reading Record?_____
- i. Which kinds of books do the children in your class prefer? (please list)
- j. Describe what you and your class usually do during your class library slot

2. Please tell us about you

a. Please rate how confident you are in the listed areas by circling the appropriate number.

	1 = not	t confi	dent a	t all	6 =	very o	confident
Teaching pre-reading skills		1	2	3	4	5	6
Teaching reading behaviours (e.g. holding to book correctly, turning pages etc.)		1	2	3	4	5	6
Teaching letter recognition		1	2	3	4	5	6
Teaching decoding skills: Phonics		1	2	3	4	5	6
Teaching decoding skills: Use of contextual cues		1	2	3	4	5	6

Teaching decoding skills: Use of pictorial cues	1	2	3	4	5	6	
Teaching grammar and punctuation	1	2	3	4	5	6	
Teaching comprehension skills	1	2	3	4	5	6	
Facilitating independent reading skills	1	2	3	4	5	6	
Assessing your pupils' reading abilities	1	2	3	4	5	6	

b. Which of the following ASD/SEN approaches do you incorporate into the teaching of reading in your class?

	please tick
The Picture Exchange Communication system (PECS)	
Use of symbols (not PECS)	
Objects of reference/props/sensory resources	
Makaton signing	
Colourful Semantics	
Audio and visual ICT resources	
Other (please specify)	

- c. Are there any problems you encounter in teaching reading?
- d. Are there any problems you encounter in assessing reading?
- e. What resources (including books) would you like to have to help you with teaching reading?
- f. What training would you like to have related to teaching reading?
- g. Any other comments?

Appendix 3: Parent questionnaire (Phase 1)

Home-School Reading Study Parent Questionnaire

Thank you for considering doing this questionnaire. It should only take you about 10 minutes to complete and your answers will be extremely useful. They will help me to understand how you support your child's learning at home and what the school can do to help you further. If you have any questions or concerns about this questionnaire, or would like help to fill it in, please contact me via the school office.

Thank you, Rachel Walker (Doctoral Student Researcher and Senior Assistant Head, Cherrycroft School)

Section 1: Information about you and your family

1. Parent/carer's name (the person who is filling in this questionnaire) and relationship to child:

	 Mother, stepmother or female guardian Father, stepfather or male guardian Other (please specify) Name: 	
2.	Name of child who attends School:	
3.	Do any other children live in your house? Yes No [please circle]	
	If Yes, how many? What are the ages of the children?	
4.	What is the main language that you speak with your child / children?	
	English Another language [please specify]	
5.	Your employment status: [please tick one box only]	
	 Employed for more than 20 hours a week Employed for 20 hours a week or less Unemployed 	
	Economically inactive (looking after family, student, disabled retired, etc.)	
6.	What is your highest educational qualification? [please tick one box only]	
	No educational qualifications	
	GCSEs or 'O' levels (D, or E) or BTEC Introductory Diploma GCSEs or 'O' Levels (C grade or above) or BTEC First Diploma; C&G	
	Level 2	
	'A' or 'AS' levels or BTEC National Diploma or Extended Certificate	
	Certificate of Higher education	
	Diploma of Higher Education or Foundation degree Bachelor degrees, graduate certificates and diplomas; BTEC Advanced	
	Professional Diplomas, Certificates and Awards	
	MA, PhD, PGCE or Advanced professional awards, certificates and diplomas	
	Other (please specify)	

Section 2: Reading experiences in your home

7. In a typical week, how much time do you usually spend reading for yourself at home, including books, e-books, magazines, newspapers, religious texts and materials for work?

Less than one hour a week
1 – 5 hours a week
6 – 10 hours a week
More than 10 hours a week

8. Please indicate how much you agree with the following statements about reading: [please tick one box per row]

	Strongly Agree	Agree a little	Disagree a little	Strongly Disagree	Too hard to say
I read only if I have to					
I like talking about books with other people					
I like to spend my spare time reading					
I read only if I need information					
Reading is an important activity in my home					

Section 3: Your child with autism's reading (or pre-reading) ability

9. How often does your child with autism do the following? [please tick one box per row]

	A lot	A bit	Hardly ever	Never	Too hard to say
Notice or look at printed words in the					,
environment					
Watch others reading					
Listen to an audiobook or story read aloud					
Show an interest in a range of books					
Show an interest in specific books (e.g. picture books, information books, story books)					
Look at favoured book or reading material on					
their own					
Look at digital texts (e.g. on the computer, on a tablet, on a phone)					
Read aloud (either individual words, phrases or whole sentences) to someone else					
Look at a book or other reading material with someone else (sharing)					
Try to join in with well-known					
stories/rhymes/songs					
Look for specific words or images in books or					
reading material					
Play word or reading related games (with game pieces or on the computer)					

10. How often does your child with autism use the following to communicate with you at home? [please tick one box per row]

	A lot	A bit	Hardly ever	Never	Too hard to
					say
Verbal language					
(single words and short phrases)					
Verbal language					
(longer phrases and sentences)					
Verbal sounds and approximations of words					
Picture Exchange Communication System					
(PECS): single symbol level					
Picture Exchange Communication System					
(PECS): sentence level					
Makaton signs					
Gesture and physical interaction					
Other [please specify]					

11. How well does your autistic child know or do the following? [please tick one box per row]

	Very well	Quite well	Not very well	Not at all	Too hard to say
Recognise symbols/pictures that are important to him/her					
Recognise letters or words that are important to him/her					
Match some words to pictures					
Find words/pictures when asked					
Read some familiar words aloud					
Read phrases or sentences aloud					
Know the sounds of the letters					
Use phonics (letter sounds) to work out unknown words					
Break words into smaller chunks to help work out unknown words					
Use pictures to work out unknown words					
Understand/ make sense of what s/he had read					
Follow a story/information which someone else reads to him/her					
Treat books appropriately/with care					
Hold books/reading devices the right way up					
Turn pages correctly					

- 12. If someone in the home does reading activities with your autistic child, who is it on most occasions? [please tick one]
 - Mother, stepmother or female guardian
 - Father, stepfather or male guardian
 - Other (please specify)

- 13. How often does the main reader do reading activities (e.g. looking at books together and/or reading words) with your autistic child? [please tick one]
 - Every day or almost every day
 - Once or twice a week
 - Once or twice a month
 - Never or almost never
- 14. When the main reader is engaged with your autistic child, how long do they spend reading together?
 - Less than 1 minute
 Less than 5 minutes
 Between 5 10 minutes
 - More than 10 minutes

Section 4: Your feelings about reading with your child/children

- 15. How confident do you feel in supporting your autistic child to learn to read? [please tick one]
 - Extremely confident
 - Very confident
 - Quite confident
 - A little confident
 - Not confident at all
- 16. If you have other non-autistic children, how confident do/did you feel in supporting them to learn to read?
 - Extremely confident
 - Very confident
 - Quite confident
 - A little confident
 - Not confident at all
- 17. What do you think of your autistic child's school?

	Strongly	Agree a	Disagree	Strongly	Too hard
	Agree	little	a little	Disagree	to say
School includes me in my child's education					
School should make a greater effort to					
include me in my child's education					
School cares about my child's progress in					
school					
School does a good job in helping my child					
become better in reading					
I understand how my autistic child is taught					
reading at School					

18. How do you feel about supporting your child with autism to learn to read? [please tick one box]

	Strongly Agree	Agree a little	Disagree a little	Strongly Disagree	Too hard to
	U			0	say
Teaching my autistic child to read should be					
done entirely by the school					
Teaching my autistic child to read should be					
shared between teachers and parents					
I try to support my autistic child in					
developing reading skills at home					
I would like to be more involved with the					
school in learning more about supporting my					
autistic child in their reading					

19. If you do not do reading activities with your autistic child, what are the main reasons?

Thank you for taking the time to complete this questionnaire. Your responses will be treated confidentially.

Please return to Rachel Walker, Senior Assistant Headteacher, by Wednesday 18th September, 2013

Appendix 4: Staff activity questionnaire (Phase 2)

My experiences of reading and learning to read

My parent(s)/caregivers read with me when I was a child	Yes 🗆	No 🗆	Can't remember 🛛		
My school sent home resources to help me learn to read	Yes 🗆	No 🗆	Can't remember 🛛		
If yes, those resources were:					
What I remember most about learning to rea					
I think teaching a child to read should be shared between school staff and parents/carers					

Yes 🗖	No 🗖	Don't know 🗖

When I was a child, my favourite books/reading materials were ______

Now, outside of work, I read for the following purposes (please tick the appropriate column)

	Daily	Weekly	Monthly	Rarely or
				Never
Pleasure (e.g. books, magazines etc.)				
Information (e.g. instructions, recipes, manuals)				
News (e.g. newspapers, magazines, internet news				
sites)				
Social (e.g. letters, text messages, social networking)				
Religious (e.g. Bible, Qu'ran, prayer books etc.)				
Other (please state):				

I have experience of reading with a child/children outside of school Yes No

If Yes, please describe what you usually do.

Why do you read with the	Pleasure 🛛	School/Homework 🛛 Other:
child?		
When do you read? (how		
often, time in the day etc.)		
Where you read?		
(specific room/place?)		
What do you read?		
(types of books/reading		
material)		
How long do you spend each		
time?		
Do you enjoy it?	Yes 🛛 🛛 N	Io □ Sometimes □
	Why?	

Any other comments/memories about learning to read:

Your responses will be stored securely and kept anonymous. They are a valuable part of Rachel's Home–School Reading Research Study. Thank you very much!

Please circle the re: Do you send school	books/reading books/reading support from material activities home? parents/carers?	Brown Bear Ves No Ves No inconsistent But varies (Ves No Ves No inconsistent	Diversity (res) No (res) No Nich facused	TECORES YES NO YES	Yes No Yes No	Thernes beeks yes No (ves No depends on meed)	Yes No Yes No	Yes No Yes No Net Check to Vead.	Yes No Yes No
-	to reading with to reading on staff							C C C C C C C C C C C C C C C C C C C	©) ©)

Appendix 5: Class reading profile activity sheet sample (Phase 2)

Appendix 6: Text of parent workshop invitation letter (Phase 2)

Dear Parents and Carers,

19th November 2013

Home-School Reading Study & Parent Workshops on Reading

Part 1 of the Home-school Reading Study (the Parent Questionnaire) has now been completed. It has been very interesting to look at and compare all the responses. I was able to share some of the findings with our staff at the INSET Day on 25th October and I hope to share them with parents too very soon. Our English Coordinators are working with me to plan two parent workshops:

Parent Workshops on Teaching Reading and Home-School Reading Strategies for Children with Autism

Workshop for parents of children who are pre-readers

Tuesday 3rd December, 9.30am – 11.30am

'Pre-readers' are those children who are at the earliest stages of learning and who are beginning to explore symbols, words and books but are not yet able to read. They may have trouble sharing books and activities with others and may not know how to use books yet.

Workshop for parents of children who are emerging readers

Thursday 5th December, 9.30am – 11.30am

'Emerging readers' are those children who are able to read some words, phrases and sentences but may struggle with unfamiliar words. These children may find it hard to make sense of what they have read or to answer questions about what they have read. They may still prefer to look at books on their own rather than share them with others.

At both workshops, we will demonstrate some of the teaching methods we use in school and share strategies and ideas you can use when reading with your child or children at home. We very much hope that you can come to one of the workshops. Please choose according to the level you think your child is at.

These workshops are part of the Home-School Reading Study which I am undertaking as part of my Doctoral degree with the Institute of Education, University of London. If you attend one of the workshops, you will be asked whether or not you would like to contribute to this study by taking part in the workshop discussions and allowing me to collect your comments and suggestions (either in writing or by audio-recording). All reasonable steps will be taken to ensure that contributions for the study will be made anonymous before they are used for research study purposes. *You are very welcome to attend the workshops, even if you do not wish to take part in the study. If you do not wish for your comments to be included, your wishes will be respected.*

Please use the form attached to indicate whether or not you wish to attend one of the parent workshops. If you cannot make the day/time or cannot attend for another reason but would like to be involved in the future, please let me know.

Thank you and I hope to see you there.

Rachel Walker Senior Assistant Headteacher

Appendix 7: 12-week programme guidelines set out in the front of the diary (Phase 3)

The Home-School Reading Study Guidelines

This Home-School Reading Programme has been designed as part of a research study which is being led by Rachel Walker. It aims to examine how school staff and parents can work together to help children with autism learn to read and to develop home-reading practices. It also aims to measure the impact of home-school reading on pupil progress.

Reading Books, Resources and/or Activities

The Home-School Reading Programme will last for 12 weeks. During this time, your child's class teacher will work with you to provide reading activities and advice to help you read with your child at home. The choice of books or activities will be dependent upon what is suitable for you and your child. The books/resources will be changed weekly. Please try to do each reading activity with your child at least three times (three reading sessions with the same book/resources **each week**).

Note-keeping

We would like you to use this diary to keep a record of how you have been getting on and to tell your child's class teacher about what is going well and what isn't, so that they can understand how best to help you and your child.

Using Video to Monitor Changes Skills and Progress

It would be very helpful for the study if you could film a home-reading session with your child during Week 1, Week 6 and Week 12 (once at the start of the study, once half-way through and once during the last week). The videos should be of typical reading sessions, using the resources which have been sent home by the school. Each video does not have to be very long (anything from less than a minute up to ten minutes at most). This will help us to see if and how you and your child have progressed during the twelve weeks and to see any differences in your child's reading at home and at school. We will also try to film your child doing reading activities with a staff member so that you can see how he or she is getting on in school. Please let Rachel Walker know if you will have difficulty making home videos. If you do not have an appropriate device to film with (e.g. video camera or mobile phone), or if there is no-one else at home who could do this for you, Rachel may be able to arrange a home visit. You can send/give your videos to Rachel by saving them onto a disk or a memory stick, or by emailing them to the school office. If you would like help to do this, please let Rachel know.

At the end of the 12 week study, we would like to invite you in to review the videos with us (Rachel and your child's class teacher). Rachel will also interview you about how the programme has been for you and your child and the support you have received during the programme.

Writing up the project

Following the 12 week study, all data and evidence (videos, comments, diary notes and interview transcripts) will be collected and stored securely by Rachel. They will be analysed and the findings will be written up as a doctoral thesis, towards Rachel's Doctor in Education Degree. Findings will also be shared with parents and staff. All reasonable steps will be taken to provide anonymity for all participants. This work is being done under the supervision of Dr xxxx and Dr zzzzz at the Institute of Education, London. If you have any further questions, please contact Rachel via the school office, or using the following email address: rfaulkner@ioe.ac.uk

Pre-Reading Skills

(taken from Parent Workshop on 3rd December, 2013)

Some guidelines for reading with your child

Prepare your resources

Make sure all the things you will need (book, associated props/toys, symbols, photos etc.) are ready. You may want to put the props in a special box or bag so that they are out of sight until you need them.

Choose a quiet time

Set aside a quiet time. Limit distractions (turn off TV, music, computer etc.). Five to ten minutes every day is usually long enough. 'Little and often' is best.

Gain and maintain your child's attention

Get your child's attention by starting with some interaction which they enjoy e.g. an interactive song or rhyme or using a toy they really like. When reading books, looking at and naming related props and toys, show your own interest and excitement in what you are doing by using expression in your voice and using animated actions.

Demonstrate clearly

When demonstrating (or 'modelling') reading behaviours, be very obvious about what you are doing. If you can, get your child to do the action/task with your hand over theirs, guiding them. For example, when turning a page, help your child to grip the edge of the page with your hand over theirs and say "We're **turning** the **page**" as you do it, stressing the key words.

Be positive

If your child demonstrates one of the 'pre-reading behaviours', praise them. Make sure your praise is specific e.g. "Well done for turning the page" rather than just "Good reading". Ignore undesirable behaviours if possible.

Early reading behaviours

- Making sure the book is the right way up
- Working through a book from front to back
- Moving from left to right on the page following the direction of text
- Looking at one page at a time
- Looking at pictures
- Listening to words and sounds
- Responding to word and sound rhythms and rhyme
- Matching items to pictures and words
- Understanding that words contain a message and books tell a story

Emergent Reading Skills

(taken from Parent Workshop on 5th December, 2013)

Some guidelines for listening to your child read

Choose a quiet time

Set aside a quiet time. Limit distractions. Ten minutes every day is usually long enough. 'Little and often' is best.

Set the scene

Before reading, look at the cover or illustrations together and discuss what the book might be about.

Maintain the flow

If your child mispronounces a word do not interrupt immediately. Instead allow opportunity for self-correction. It is better to tell a child some unknown words to maintain the flow rather than insisting on trying to build them all up from the sounds of the letters. If your child does try to 'sound out' words, encourage the use of letter **sounds** rather than letter **names**.

Be positive

If your child says something nearly right to start with that is fine. You can say 'Let's read it together' and point to the words as you say them. Read together up to the error and show your child how to solve a new word. Boost your child's confidence with praise for even the smallest achievement. Make sure your praise is specific e.g. "Well done for using your letter sounds" rather than just "Good reading".

Don't rush to correct mistakes unless it significantly alters the meaning.

Encourage reading with expression

Offer to read character parts yourself. Encourage your child to put expression into the reading by demonstrating to them how the character might sound.

Strategies to use when your child gets to a tricky word

Let your child try to work out the word. Use the following 'cues' to prompt them or to test whether their suggestion is right.

Visual cues - Does is look right? Does the letter pattern help in guessing the word?

- *Meaning cues* Does it make sense? Does it match what is happening in the pictures? Is it right for the context/setting of the book or story?
- **Structure cues** Does it sound right? Read the sentence again does it sound like a language pattern the child knows? Are the words in the right order?

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DAL	Videos – Home Videos	e Videos				ts at sch?
Context		Home video 1		Home video 2		
	Child and Parent	What doing	Strategies used	What doing	Strategies used	
	1	Maisie's bedtime	Sitting at table opposite FTF	Word task – HF	Siting opposite.	FTF / tuble
. <		C reading independently	Minimal verbal praise	words	word say? Can you spell it? (with	contra school
9		Poortina	Checking 'what does this word say?' and	Tashs		
	Pad / tri nod?	7	When C's attention wandered to picture Wn BHS of nage) mum tanned the text on		checking understanding – what are the letters. what does it sav?	
	madul		(VIII KHO OI page), ITIUIII tapped the text of the LHS to draw attention			•
		Ben's treasure chest (attempted)	Mum and dad tried asking 'what does it sav?' in different places (inside and on the	The fussy child	Dad reading with varying tone of voice and expression. C sitting beside –	
2	_	C wailed, put	cover)		tolerating and listening but not really	
D		book back in	CB -> improves		engaging. Wanders off as soon as	use of school
	Mum	packet and walked off	and the sta	Reacting	01	' longrage.
		1 0		7	closes the book and screams when Dad	
		-Leading-	585		tries to verbally encourage. Screams at every parental attempt to engage. \$\$ 5	SBS Table
		Where is	Dad pointing to text; V praise "that's	The ball		
(Hannah? C	right!", "good reading"; Dad prompting	Mord activity with	only points to go back to a wrong word, Croading much more fluently Dad	Child incorner
Ð		attempting to read	Child occasionally getting frustrated;	whiteboard	ylla	Theorem 1
)		independently	physically pushing Dad's hand off page.		reinforcing sense of text by reading	
	MMM		C distracted with pipe cleaners	Keelding	again more fluently immediately after child. Pushes child – "come on – we bad –	Mahu exercil.
		leeding	CR Not outdoor is 2ad	Tash	this word on the previous page" in	man L. D
		,	U THE CARDEN IN LAR.		some cases. C asks for <u>Daddy's turn</u>	*
			Eng anti -> 525		encourages C to listen. Uses lots of 585	sosv table

Appendix 8: Examples of video analysis (Phase 4)

Appendix 8 continued...

	LH - Late	. here	Same 1 Law IL	
	Videos – First	School Videos	Voice / language Behaviou + + levads Digagement difficulturs.	
	Child and teacher	What doing	Strategies used	
	(i)	Reading Mr Gumpy C not happy, trying to close	Sat face to face, C behind table, in corner Use of nursery rhyme to engage and distract –	
	Franklin	book; some returning to book after rhyme	following C's cue	CB
	- 07	Matching animal pictures (3) Reading Biff and Chip book	Sat face to face	~ v
	IEH	Word matching task and circling the words with dry-wipe pen	T pointing to text to prompt when C hesitant Lots of T encouragement – 'Good job, keep going';	FTF
	1 LH		when word matching, kept teacher language very	
	0		simple and repetitive; showed printed word and read sentence when asking A to find and circle word in sentence	
<u> </u>		Reading Goldilocks (C wanted to read Thomas)	Sat side by side Putting Goldilocks and Thomas books into trays to	SB
	3	T reading and pointing to words	structure – G first then Th.	CB
		C moaning and wanting to rush through/close book and knock it off table	T remaining calm despite C's temper; following through with stated course of action.	Cully
		Reading Biff and Chip book	Sat face to face	X
	IMH	,	T read text and pointed out words; traced round items in illustrations with finger when naming	PT
	Ŵ		and/or asking what can be seen	
		Reading a transport book Adding expression for	Sat side-by-side LL Used 'seatbelt' song to motivate	ch
	IMH	exclamation marks	T using Makaton to support spoken lang.	SB
		Using magnetic letters to form	Did not give in to C wanting to move T's finger. Lots of waiting; using PP to stop unwanted	CB
	\$	words with same rhymes	behaviours (picking nose, trying to touch t's hair)	A
			without drawing attention Kept to 'rules' – C's turn to read then T will sing	
<u> </u>			song again; did verbal first and then	
		Reading book – C reading independently and pointing to	Sitting side by side. T repeating difficult words/phrases in appropriate	SB
	1-1	words. Reading quite erratically.	voice/tone (different to C's reading which was	
	IEH	Looking to RF for reassurance	quite disjointed) – helped to make sense of text for C.	
	ILH		When C got word wrong, T intervened, saying 'Not	
	(\mathbf{b})		[wrong word]' and asking a prompt q to help C guess correct answer.	
	8111	Reading Biff and Chip book	Lots of T encouragement – 'Good job, keep going' D	F7
	0	C largely reading on own but T reading words stuck on to	T ignored B's off task comments or acknowledged very minimally – kept on with task. Only praised a	. ,
	(8)	maintain flow.	lot (high 5) when task actually finished. 'T's turn	
			first, then C's turn'	
		C attempting independent	Clear ending "C did work; C is finished'	SB
0	IEH	reading of 'Hannah's - '	working out unknown words.	×
			>	

Appendix 9: Codes from teacher interview responses

Codes identified in response to teacher interview questions are grouped into family themes under each interview question

Question 1: Has involvement in the study changed your classroom practice (particularly in your teaching of reading)? If so, how?

Parent Liaison

- Parent questioning opportunities
- Feedback
- Dialogue with parents
- Follow –up opportunities
- Joint problem solving
- New opportunities

Professional Development

- Teacher reflection on practice
- Use of training
- Not how to teach but what to send home
- Demonstration

Planning, teaching and learning

- Functional activities
- Encouraging engagement and joint attention skills (in children)
- Physical activities
- Role-play
- Interactive stories
- Resources (flashcards, magnetic letters, activity pack, colourful semantics)
- More individual reading

Question 2: Has involvement in the study changed your understanding of the issues parents face in supporting their children at home? If so, how?

Views and attitudes

- Parent and teacher positioning
- Parents' goals and expectations
- Changing perceptions of reading
- Changing perspectives (what is 'good', expectations)
- Teacher and parents assumptions
- Child's attitude towards reading at home

Practicalities

- Having the space (+ distraction free)
- Having the time (family commitments)
- Written language, avoiding jargon
- Time and space in school (rooms, people, resources)

• Giving advice on issues not faced at school

Other

- Achievement of children
- Parents' understanding of what to do
- Training issues (teachers training parents to teach)
- Siblings
- Realisation of differences (child at home and at school)

Question 3: Has involvement in the study changed the way you work with parents and your attitude towards working with them? If so, how?

Building relationships

- 'feel good' factor of working together
- Trust
- Understanding what the parents want
- Functional/focussed conversations
- Understanding home life pressures
- Admiration of parents
- Need to be helpful and supportive
- Appreciation of home challenges
- Challenge to judgemental attitudes
- Videos to appreciate parents' issues

Teachers' own professional development

- Challenge to think of something new
- Reflection on practice
- Videos the power to show what you mean
- Validation of professional skills

Question 4: What have been the positive aspects of home-school reading?

For teachers and parents (teachers' perspectives):

- Two-way conversation/dialogue
- Affirming professionalism
- Parents and teachers identifying with each other
- Seeing the progress
- Structure
- Specific aims and focused work
- Videos very helpful
- Seeing the difference between home and school
- Getting to know the children better

For children:

- Generalisation of skills
- Consistency between home and school

- More reading
- Wider skill development (not just reading)
- Progress

Question 4: What have been the negative aspects of home-school reading?

For teachers:

- A lot of work
- Making resources (time-consuming)
- When parents don't respond disappointing
- Progress not shown on B2

Appendix 10: Codes from parent interview responses

Codes identified in parent interview responses are listed under the question headings.

Question 1: Did the parent workshop(s) and teachers' advice during the Spring Term Programme help you to develop your practice in reading with your child at home? If so, how?

- Lack of teaching skills
- Admiration for teachers
- Blending/incorporating aspects of school with home
- Teachers' supportiveness
- Child sitting with parents for longer
- Have more strategies
- Props, especially matched props
- Child's transfer of skills
- Knowledge of child's performance in school
- Dialogue with teachers
- Confidence to teach at home
- Finding own ways to do things

Question 2: Has involvement in the study changed what you do when you read with your child at home? If so, how?

- Unanimous yes
- Changed routine/ time of day
- Child more active participant in reading
- Positive attitude
- Kick-started a process
- Use of props/ resources
- More patience
- More structure
- More variety of books
- More consistency
- Strategies for engaging child
- School has promoted child's interest
- Use of rewards
- Videos helpful
- Bonding time with child
- Pleasure in child's achievement

Question 3: What changes/progress have you noticed in your child, if any?

- Child more interested in reading/engaging with books
- Child using books more functionally
- Improved reading behaviours
- Interested in a bigger range of books
- More aware of child's skills
- Able to push child more

- Child's clarity of speech has improved
- Speed of progress surprising
- Child initiates reading time

Question 4: How has your relationship with your child's teacher changed, if at all?

- More focused conversation
- Teachers listen working together
- Could discuss problems
- Videos learning from each other
- Patience

Question 5: Would you like to continue with a home-school reading programme? Why/Not?

- Unanimous yes
- Useful for ideas to do with the child (particularly during holidays)
- Structure
- To make progress
- Surprised at progress
- Understand children better
- Awareness of shared responsibility

Appendix 11: Sample pages from home-school reading diaries

Week 1: is working on: At school, 0 Reading unfamilar words and finding words in text. Resources sent home: Match the Words Workshelt and Words At the Park ORT Book. At home, ______ is working on: Match the words worksheet and Reading unfamiliar words w/ adult. What went well this week 😊 At home: After reading the At school: I asked him the . and - on does well required quections he reading the words only a few were hard for to read the activity answered them all easily. A couple of words he read himself e.g. swing, matching the words he aid quickly without any help. He aid well was good for , What was difficult this week 🐵 a.a.m. of want At home: At school: to read the book initially I had to threat to throw his toge away. Unforteneally his toge are a big distraction. One of-Tried to extend the activity for put he was leager to finish. the matching words was musing (hose) and he got upset because it wasn't thee t did not manage to video Number of 1-1 (individual) reading sessions this week at school: 2 at home: 2 Parent questions or comments in the weath has his routing of coming home getting undressed having his dinner and the getting on his Tablet. So brying to acting on his labiet. No was act him to add in the recoin was difficult but it can be done. Please can I have the match wind hose Shank you for the feed back. Changed The activity a little and the Book. Staff questions or comments Hopefully a little more Challensing. it book & In the evening poole the book up and read Nords stumbling only on a mself-

Appendix 11 continued...

Weekt	
Week 1: At school, is working on:	
	is at in the story using words symbols
· Using altrubutes of size	is etc. in the story using words (symbols about & dentify an unale e.g. I see bygar
Resources sent nome:	
· Stry props - crocodule,	bund.
At home, 1 L is working on:	
	The Enormous Crocadile,
The obtens willinger in st	and .
· Using colour/size attributes	
What went well this week © At school:	Athema
•	At home: was able to point to
Sat klistered to story for up to Survise with lots of help.	the animals and repeated
. Identified anungle -	"I see". Was co-operative
Crocediley monkey, bird	to last but was polaor to not
	to look, but was eager to get on to his usual feworunte book
. Weeded support to use	LI I have all a the fore and hade
Colour Size attributes	liked handling the toy animals
What was difficult this week 🐵	
At school:	At home:
, Needed lots of encouragen	Book was too long for 1
to look at book as	so I read the first pourage page
he was very distracted	
by picking things on	was not 100% and
ing protog pross and	was tired in the evenings. But
tereste, terpt up un see is	Jam going fit it in before dinned
fre .	in the evenings
Number of 1-1 (individual) reading sessions	this week at school: at home: 4
Parent questions or comments	his usual books and email
	A MAS HOLDER DOORS WHEN CITATON
it next week.	
Staff questions or comments	
illaing attributes of colour teurget for 1 more on this, a will be consolido practise	r(size is a new
terrat For	we will work
mager for 1	Land La Part City Chills
worker on they, a	the d will with an
which we consolide	were with with of