A REALISTIC EVALUATION OF THE WORK OF A SPEECH AND LANGUAGE THERAPY SERVICE IN PRIMARY SCHOOLS (THE FIRST SCHOOLS PROJECT) USING THE PERCEPTIONS OF SOME OF THE IMPORTANT STAKEHOLDERS (TEACHERS, SLTS AND PARENTS)

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Dedication

To Chris, without whose support, forbearance and encouragement this thesis never would have been completed

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Synopsis

Speech and language therapists (SLTs) have expertise in supporting schools in meeting language needs but SLTs are part of the health service. The First Schools Project was developed as a way of collaborative working between a speech and language therapy service and primary schools and for its evaluation Pawson and Tilley's (1997) model of realistic evaluation (with its principle of explanatory causation) was chosen. This was innovatory use of the model in educational research. Realistic theories were developed in the form of Contexts (possible explanations for Outcomes), Mechanisms (the structures of the First Schools Project e.g. regular school visits) and Outcomes. There were two parts to the inquiry. Part 1 was concerned with identifying regularities (i.e., which Mechanisms of the First Schools Project were occurring with which Outcomes) and a questionnaire with school staff was used. The purpose of Part 2 was to explain those regularities by collecting data that would support, modify or challenge the realistic theories. A version of the realistic interview (Pawson, 2006) was used with stakeholders (parents, teachers and SLTs). Contexts that facilitated the working of the First Schools Project were identified and suggestions are made for future education researchers who choose the model of realistic evaluation.

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CHAPTER 1

INTRODUCTION:

A REALISTIC EVALUATION OF THE WORK OF A SPEECH AND LANGUAGE THERAPY SERVICE IN PRIMARY SCHOOLS (THE FIRST SCHOOLS PROJECT) USING THE PERCEPTIONS OF SOME OF THE IMPORTANT STAKEHOLDERS (TEACHERS, SLTS AND PARENTS)

Language is fundamental to our learning since we understand and process almost all knowledge through language. In the UK, speech and language therapists support children with language difficulties and help them to learn in school, yet speech and language therapy services are part of the health service and not part of education. Because of the importance of language in education and because of the increasing numbers of children with language difficulties, speech and language therapy services have been trying to find ways of working more closely with education colleagues. This research study is about one such service where speech and language therapists changed their practice to working in schools rather than in clinics. They called the programme the 'First Schools Project'. Since the speech and language therapists wanted a way to examine their practice, we agreed on an evaluation of the First Schools Project.

The method used for scrutinising the First Schools Project was a realistic evaluation. This gave an important innovative dimension to the research study since it seems that this methodology has hardly been used in educational research.

1.1 Influences on the development of the research inquiry

I am an educational psychologist and have worked for many years with my speech and language therapy (SLT) colleagues and it is through our working relationship that this research study has developed. Before it began, I had presented courses to school staff with the SLTs, shared in the same training, had many discussions on the most effective way of organising a service and been part of the development of the First Schools Project. We had also discussed ways in which we might carry out research together. However, it was not until I was able to read for a doctorate degree that these ideas about research became a reality. The long working relationship that I have had with SLTs has made it difficult for me to say when the research study actually began but I have decided to choose the end of 2002 when we had our first formal research meeting since, by then, I was beginning to develop more critical ideas about how research could be conducted. None-the-less, the research project has to be understood as a constantly evolving scheme that has developed between the speech and language therapists (SLTs) and myself. (I have listed the formal meetings that we had together in Appendix 2.) As a framework for the research project, there follows a description of the First Schools Project and the roles of myself as the researcher and of the SLTs as co-researchers.

1.1.i The First Schools Project

1.1.i.a The District and the schools

The First Schools Project was located in a shire county but covered only one third of it, an area that I called the 'District'. At the centre of the District was a large rural town and there were also three smaller rural towns, villages and country areas. The total population was about 97,000 and the area was about 15 x 10 miles. The District covered a range of socio-economic areas and there was one Sure Start project that focused on an extensive area of economic deprivation. Of the schools for younger children in the District, 34 were first schools (years: nursery to 4) and two were primary schools (years: nursery to 6). The schools varied in size from 50 – 300 pupils. The change in practice was focussed on these schools, hence the name, the First Schools Project.

1.1.i.b The speech and language therapy service

The SLTs in the District paediatric speech and language therapy service also supported pre school children, older children and children in special schools; hence not all of the SLTs in the service were involved in the First Schools Project. The actual number involved varied from five to eight over the course of the research study since there were changes in whether the SLTs were full-time or part-time. However, towards the end of the research project, recruitment was restricted and this resulted in a reduction in the overall full-time equivalent staffing complement which placed a strain on the level of service SLTs were able to offer to schools.

1.1.i.c Reasons for the change in practice

When they were considering a change in practice, I was working closely with many of the SLTs and we often discussed how language needs could be met in schools, shared research papers on models of collaborative working and I read notes and discussion documents that they compiled. In this way, I learnt from them what motivated their thinking and why they were considering a change in service delivery.

Primarily, the SLTs were concerned about the increasing numbers of young children in nursery and reception classes who had speech and language needs. The SLTs were already working with 10% of the pre school children (0-4years) generally and with 40% of 0-4 year-olds in the 'Sure Start' area across the District. They knew of large numbers of children in nursery and reception classes whose needs were less severe but who, they believed, were also in need of language support. (One nursery had 17 out of a class of 24 children who were considered to have special language needs.) They also suspected a high level of need amongst Key Stage 1 and Key Stage 2 pupils. The SLTs knew that there would be no increase in the level of funding to meet the language needs of this growing number of children and that the only way forward lay in a review of their practice.

There were also concerns about a model of working which involved SLTs seeing children in clinic and giving suggestions to teachers for the child's support either through the post or by telephone.

- The SLTs in clinics felt that they were working in isolation from schools.
- Attempts to liaise with schools were limited by time.
- Resources that were sent into schools were often not used appropriately or at all.
- There were high numbers of children who did not attend clinical appointments.

However, change was also driven by the beliefs of the SLTs

- They were aware of the guidelines of the Royal College of Speech and Language Therapists (RCSLT,1996), which recommended collaborative working with educational professionals.
- They anticipated that the change would facilitate collaborative practice as suggested by Wright (1996).
- They anticipated, as noted by Wright and Kersner (1998) that support for children with language needs would be most effective when offered, not in isolation, but in the context of the child's social and educational environment.
- They adhered to ecological perspectives on speech and language development and therefore believed, following the work of Kersner and Wright (1996) that SLTs should be involved in addressing a child's social and educational needs and not just their language needs.
- They were concerned that identified children who did not attend clinics should also be able to access the service.
- They anticipated that the change in service delivery would be a method of empowering others since education staff would become more skilled in meeting the needs of children with language difficulties.
- The believed that, if SLTs and education staff worked together more closely, this would lead to effective communication between professionals and thus ensure that parents were provided with consistent information.

The SLTs' reasons for change were consistent with subsequent national guidelines (in particular, Report of the Working Group, DfEE, 2000 and the Special Educational Needs Code of Practice, DfES 2001 and RCSLT Position Paper, Gascoigne 2006).

1.1.i.d The beginnings of the First Schools Project

In 1999 the schools within the District were invited by the speech and language therapy service to engage in a process of consultation on the best ways for school staff and SLTs to work together. There was a bid for Standards Funding but this was rejected by the DfEE, hence there was no additional dedicated funding and the project has been wholly funded from the health service base-line speech and language therapy budget. At first, the 36 first and primary schools in the District chose whether to opt into the First Schools Project and most (27) did so. Schools came to recognise the value of the project and by the time of the beginning of the research study all of the schools were included.

1.1.i.e The Structure of the First Schools Project

Since the inception of the First Schools Project in 1999, the type and level of service provided by the SLTs has varied according to the level of assessed need of the child population attending each school. However the following represents how most SLTs worked with schools.

- Each school had a named therapist.
- Each school had a caseload review meeting which was attended by the named therapist for the school, the special educational needs coordinator (SENCo) and other teachers or teaching assistants (TAs) who were involved in meeting the language needs of individual children.
- Assessments of children's language difficulties were carried out in schools. SLTs met the parents in the school setting and liaised with teachers about interventions.
- SLTs worked collaboratively with the pupil, parents, teachers, TAs and SENCos to develop and review individual education plans (IEPs) of children with identified language and communication difficulties

- SLTs provided appropriate materials for schools for use when implementing agreed interventions.
- SLTs carried out some joint assessments with other outside agencies (e.g. teachers from the Learning and Behaviour Support Service, LBSS).
- SLTs met, or liaised in other ways, with the LBSS on a regular basis to discuss children who are at school action or school action plus (Special Educational Needs Code of Practice, DfES,2001).
- SLTs identified staff training needs and either provided training in schools for staff or suggested where the school might purchase it.
- Support in schools was focussed on individual children who had been referred to the speech and language therapy service. The intention was that other children with less severe speech and language difficulties would also benefit as schools staff became more skilled.
- Normally, children with marked articulation difficulties only were seen at the clinic for assessment and regular therapy. (The SLTs' reason for this was that such children need individual therapy and practice between sessions can be carried out by the parents. Also, articulation difficulties are thought to have less impact on the child's access to the curriculum. These beliefs are discussed in Chapter 2)

(Worcestershire speech and language therapy services, 2002)

At the beginning of the research study, The First Schools Project was a discrete programme that operated in the first and primary schools only. However, the SLTs then extended their practice so that the model of working included all children in mainstream schools. The research study, however, involved only first and primary schools, their staff and their pupils. It should also be noted that, although some of these schools included nurseries, these were not covered by the First Schools Project.

1.1.ii The researcher

I am an educational psychologist with a specialism in language. My belief is that children need language and communication skills before they can function effectively in the classroom. This core belief originated from studies of Vygotsky (1962) who saw the role of language as central to learning. He understood language as the social representation of thought and that a child's intellectual growth was contingent on her mastery of language. Subsequent studies, (discussed in chapter 2) have demonstrated the negative effect on learning and social outcomes for children with language difficulties. Recent government reports (DfEE, 2000, Law, Lindsay, Pearcy, Gascoigne, Soloff, Radford and Band, 2000 and DfES 2001,) now stress that language and communication are fundamental to learning.

My purposes for carrying out this research project were based in my beliefs about the importance of language skills

- My belief, based in the writings of such authors as Wright and Kersner (1998) was that the most cost efficient and effective way to address the needs of children with language difficulties was through closer collaborative working between SLTs and education professionals. It seemed that there could only be good educational and social outcomes for these children if there were shared understanding and responsibility between parents and all professionals. I was very aware of these beliefs and, although they motivated me to initiate the research, I have attempted to control for confirmatory bias throughout the study
- I had a practical motive for carrying out this research study with the SLTs. From my own experience in schools, I believed that the collaborative working between the SLTs and education professionals who were part of the First Schools Project had had a very positive effect for children on their learning outcomes. However, since the project covered only one third of the county, I was motivated to collect, analyse and communicate data that might constitute a reliable and persuasive basis for extending collaborative practice to the other sections of the county.

1.1.iii The Co-Researchers

As the researcher, I held the control of the inquiry but since the SLTs were actively involved in the design of the research project and in its implementation, they fulfilled the role of co-researchers. This coincided with the strong beliefs that I had that the research project should be 'with' rather than 'on' the SLTs since they would have much to contribute to the process of the research. In their role as co-researchers, the SLTs provided inspiration, criticism and consolidation for the research study. By ensuring that the research process involved shared planning and an open exchange of views, I hoped to achieve valid and useful results that would effect change (Reason, 1999).

However, the SLTS also had their own purposes for the research.

- They wanted a research project of which they had ownership and in which they were involved.
- All were very positive about the First Schools Project and wanted a means to demonstrate and validate its success.
- They also wanted to learn from this study and were willing to change their practice on the basis of the research findings. However, from the outset, it was expected that any such changes would only be in the context of school-based working, as they did not envisage a return to a clinic-based model of practice.

In an early meeting with the SLTs I discussed how the research project might be organised and it became apparent that the amount of time that they could give to the research project was very limited. We, therefore, agreed on the following division of work for the study.

- The SLTs would be involved in the overall direction of the research study through a series of regular research meetings.
- The researcher (with supervision from the university) would be responsible for underlying philosophy and intellectual rigour of the design of the study and for data gathering.
- The SLTs would help with the practicalities of the inquiry where possible (e.g. in collecting in questionnaires).

1.2 The Research Question

In 2000, when this research study was in its preliminary stages, the report of the working group on 'Provision of speech and language therapy services to children with special educational needs' (DfEE, 2000) was published. This was an important government report which had been compiled within the context of increasing numbers of children with identified language needs. The report emphasised that language is fundamental to learning and also recommended collaborative working between SLTs, education professionals and parents. The First Schools Project had begun sometime earlier and the SLTs felt that they might have, in the project, a possible model for SLTs to work with schools and needed a method to evaluate it.

The evaluation, therefore, was an exploration of how SLTs and education professionals collaborate in a specific locality. But within this simple idea were many questions about how different professionals work together and with parents. For example, there were issues about the nature of the working relationship; the extent to which collaboration is facilitated by the sharing of expertise and responsibility and whether working together resulted in good outcomes for children with language needs. The immediate focus of the research project was to explore how a particular group of SLTs worked with school staff within the structures of the First Schools Project but the aim was also to encompass some of the wider questions. The over-arching research question for this study was, therefore,

> Can the stakeholders provide evidence that the model of the First Schools Project is an effective way for SLTs and school staff to collaborate and does the model lead to good language and educational outcomes for children with language needs?

Cohen et al (2000) discuss how there can be ethical issues at all stages of the research process. Care was taken, therefore, throughout the inquiry, to follow the principles of ethical research as set out by the British Psychological Society (BPS, 2007) that were relevant to the research study. The use of realistic research methodology ensured that participants were aware of the purpose of the research study and this meant that mutual respect and confidence between investigators and participants (one of the core BPS principles) was integral to the conduct of the

inquiry. The other main principles that were relevant to this study were the giving of informed consent by the participants and anonymity. How these were upheld in the involvement of the different groups of participants is discussed in subsequent chapters.

The SLTs were involved in the research study from its inception and all wanted the evaluation. They participated as co-researchers, their purposes were included in the design of the study and their roles and responsibilities were agreed (see section 1.1.iii). SLTs did leave and join the project as the inquiry progressed but all new SLTs were willing to participate in the study.

1.3 Realistic Evaluation

It was decided that an evaluation would be the most appropriate way to answer this question and, for reasons that are developed in detail in Chapter 3, I chose to follow the methodology of realistic research. This was an important innovatory aspect to the research study since realistic evaluation had hardly been used in educational research. A brief outline of aspects of realistic research are included here because these govern much of the discussion in Chapter 2 but the full explanation of the methodology and the justification for its use are confined to Chapter 3.

The philosophy of realism combines aspects of positivism and interpretivism and is particularly appropriate for research in the real world which often involves the exploration of intricate phenomena (such as the First Schools Project) which can be understood in different ways and at different levels (see Table 3.1). In order for the reader to follow the argument in Chapter 2, it is necessary to outline the realistic researcher's interpretation of 'theories'[1] since it is the task of the realistic researcher to construct theories that might explain the social phenomenon under study and then to test those theories using rational criteria (Robson, 2002).

[1] The term 'theory' has a certain meaning in realistic research and, where it is necessary to distinguish it from the more general meaning of 'theory', I have used the term realistic theory. Also, I have used the term 'Theory of the Inquiry' in order to identify the realistic theories I developed about the First Schools Project

The theories used in realistic research need to be constructed in terms of *Mechanisms, Context* and *Outcomes*[2] and the researcher seeks to explain, using Contexts, the interesting regularities that occur between Mechanisms and Outcomes. Pawson and Tilley (1997) had developed a model of realistic evaluation for use in the social sciences, which had been used only in the field of crime prevention, but I felt that the model could be developed for use in education. When I interpreted this model for the First Schools Project, I construed the Mechanisms as the structures of the project (for example, the named therapist, the regular school visits), the Outcomes were what was expected from the project (e.g. children making good progress in language skills) and the Contexts were not only the geographical location of the project (the schools) but also wider issues such as government initiatives and LA and health authority policies. Table1.1 is an example of a *Theory of the Inquiry* from the evaluation of the First Schools Project. The first task of the evaluation was, therefore, using the literature review and other data, to identify Contexts, Mechanisms and Outcomes and then to construct theories that might explain the workings of the First Schools Project (Pawson, 2002b).

Table 1.1: An example of a realistic theory from the evaluation of the First Schools Project

	Context		Mechanism		Outcome pattern
Theory of the Inquiry 4 (Time)	A school where there is time for the SLT to talk to school staff	+	The SLT makes regular visits to the school	=	Communication between the SLT and the school is facilitated and a good working relationship is established

1.4 Outline of the Thesis

Chapter2. Literature review: Creating the Framework for a Realistic Evaluation

The review of the literature on collaboration between SLTs and education staff sets the framework for the research study. Moreover, the literature is interpreted for a realistic evaluation and identifies Contexts that are likely to be barriers to and

[2] The terms Context, Mechanism and Outcome are widely used in the English language but, within realism, they have quite specific meanings. In order to avoid confusion, for the most part I will use the terms only in with their technical meaning throughout the thesis and, if I need to use the words in a more general way, I will use a synonym whenever possible.

facilitators of collaboration. Also, alternative models of collaborative practice are described in an attempt to understand how they work and aspects of the models are re-interpreted as theories in terms of Contexts Mechanisms and Outcomes. There is also a section on the educational and social implications for children with language needs.

Chapter 3. The Rationale for using a Realistic Evaluation of the First Schools Project and the Design of the Study

Here the use of realism is justified through a discussion of its underlying philosophical principles. Pawson and Tilley's model of realistic evaluation is scrutinised and developed in an innovatory way for use in education. Also described is how the theories of the inquiry, which underpin the process of the research, were developed, using information from a variety of sources.

Chapter 4. Research Study Part 1: Identifying aspects of Regularities within the First Schools Project using a Questionnaire with School Staff

In realistic research the purpose of the first stage of data collection is to identify regularities. This chapter considers which Mechanisms and which Outcomes of the First Schools Project are happening and which might be occurring together (i.e. identifying the regularities). The most appropriate stakeholders to supply this information are identified as the staff of the First Schools and the chosen instrument for the collection of this data is a questionnaire. The method and results from this first part of data collection are included in chapter 4 as well as a discussion of the validity and reliability of the results.

Chapter 5. Research Study Part 2: A Study to Collect Data that will evaluate the Theories of the Inquiry using Interviews with SLTs, Parents and SLT/Teacher Pairs

The second stage of the research study involves explaining the regularities which were identified in the first stage. The theories of the inquiry pose possible explanations for the regularities and it is the purpose of the second stage of the research study to collect a range of information that will support, modify or invalidate the theories. In order to focus the data collection, contrasting cases of successful and non-successful interventions with children with language needs are identified. The method of data collection is the realistic interview and the

stakeholders used to give the information are the parents, SLTs and teachers of the children.

Chapter 6. Results from all of the Research Study and Conclusions from the Theories of the inquiry

This chapter reviews the theories of the inquiry using all of the information from across the research study. The discussion focuses on whether the theories are validated, disproved or modified. There are conclusions about the First Schools Project as a model of working.

Chapter 7. Conclusion: A Review of the use of Realistic Evaluation and the Implications for its use in Educational Research

The process of the realistic evaluation is scrutinised and successes and difficulties in using the model are discussed. There is also consideration of how this innovative use of realistic evaluation can be further developed for educational research.

CHAPTER 2

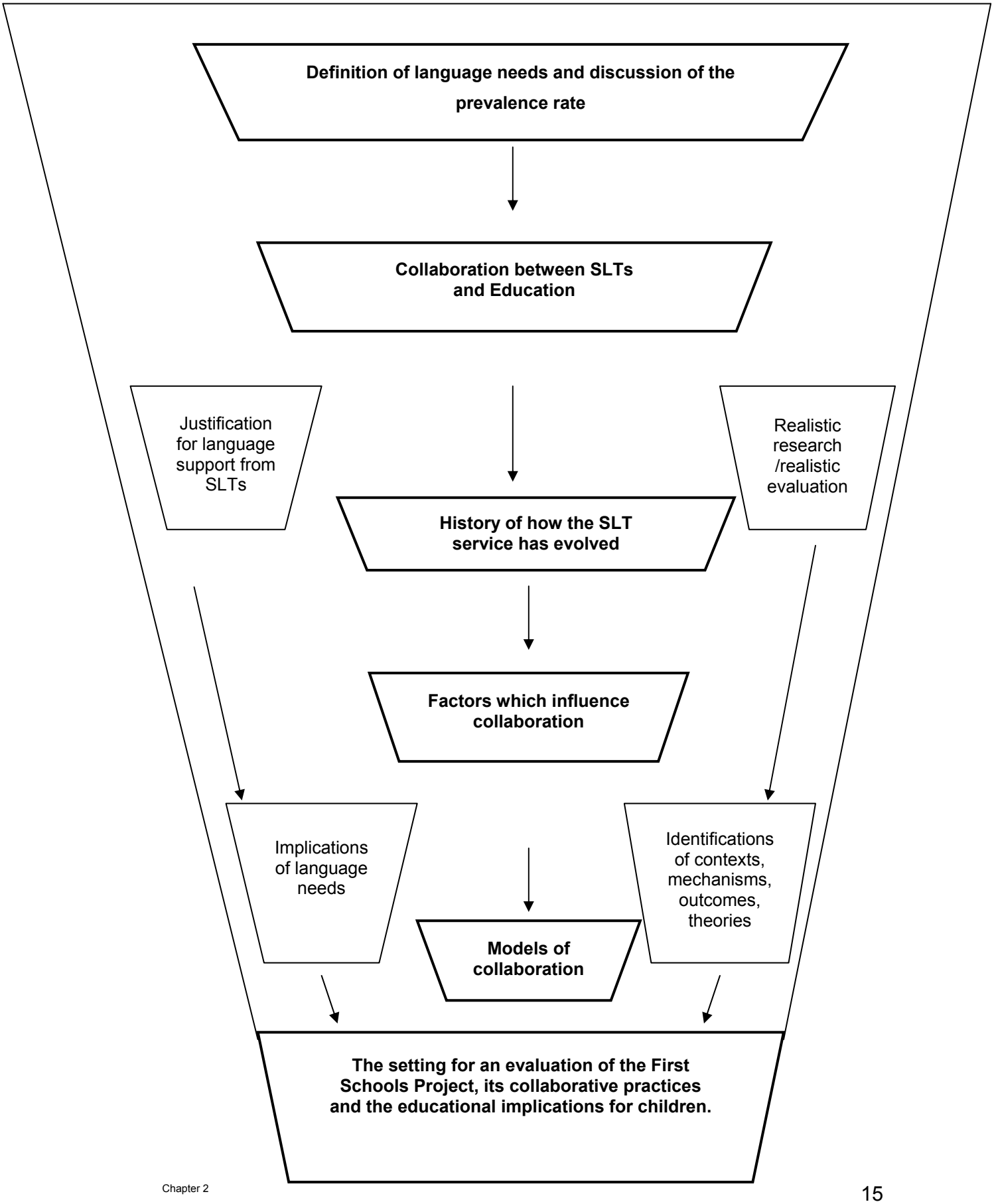
LITERATURE REVIEW: CREATING THE FRAMEWORK FOR A REALISTIC EVALUATION

2.1 Introduction

Because there is so much literature on speech and language therapists and educational professionals working together, I have conceived of the literature review as a funnel which compresses the large amount of information into a framework for the realistic evaluation of the First Schools Project (see Figure 2.1). The first task was to define the boundaries of the study by discussing the definition of language needs and prevalence rates. This not only drew a circumference around the subject matter of the research but also explained some of the terms that are used throughout the thesis. From this discussion comes, what I have termed, the core of the literature review which is the consideration of collaboration between speech and language therapists and education professionals since, fundamental to the beliefs of the SLTs when they set up the First Schools Project, was that collaborative practices would lead to better language outcomes for children. The first section of the core is a brief history of the development of speech and language therapy services and its implications for collaborative working. The next section considers barriers to and facilitators of collaboration. Finally in the collaborative core, there is an examination of other models of collaborative practice between SLTs and education staff.

Either side of the core of collaborative practice I conceptualised two supporting strands. One strand was that of realistic research which interconnected with the literature review and shaped it around a realistic research study. The second

Figure 2.1: The progress of the literature review for a realistic evaluation of the First Schools Project



strand (which forms the last section of the chapter) is consideration of the social and educational implications for children with language needs since this justifies the work of SLTs.

2.2 Definition of Speech and Language Needs and Prevalence Rate

2.2.i What is meant by the term 'Language Needs'?

Establishing a definition for the term language needs is complex since the term embraces so many different problems. Language difficulties were traditionally conceptualised within a medical model and terms such as diagnosis, therapy (treatment) and prognosis continue to be used (Dockrell and Lindsay, 2000). Such an approach can be unhelpful as it suggests that all language difficulties have a neurological basis and are a single condition whereas, as discussed by Bishop (1994) there are widely different problems experienced by the group of children with language needs. They may struggle with speech, vocabulary, grammar, narrative, pragmatic skills and non-verbal communication. Further, how a language difficulty is defined depends upon the way in which children are assessed and their difficulties categorised. The use of standardised tests and the use of questionnaires are the two of the main approaches which are employed by researchers and identified by Burden, Stott, Forge, and Goodyer (1996). They discuss how standardised tests can be compiled in different ways to measure different aspects of language development (e.g. vocabulary or receptive skills). Moreover, as standardised tests are norm referenced, where the cut-off point for 'language difficulties' occurs will depend upon where the researcher or clinician chooses to draw the line. The definition is no clearer when a questionnaire is used since then language difficulties will be construed in terms that are decided by the author of the questionnaire (Burden et al, 1996).

Yet another way of categorising language difficulties uses a discrepancy model, which is based on the assumption that children may have a specific difficulty which is identified by the difference between a child's scores on measures of language and non-verbal ability (Dockrell and Lindsay, 2000). This model is used by the First Schools Project SLTs but, like other practitioners (as noted by Dockrell and Lindsay, 2000), they use their clinical judgement rather than any agreed formula for identifying the discrepancy. The First Schools Project SLTs use the term 'Specific

Language Impairment' (SLI) and, using standardised tests and information from parents and teachers, assess a child's skills in the components of language including phonology, grammar, semantics and pragmatics. Identifying a-typical development is compromised by the considerable diversity in the rate at which children acquire language (Dockrell and Lindsay, 1998). None-the-less, the First Schools Project SLTs feel able to identify a child with SLI as one with an uneven profile in the development of language skills and a discrepancy between the level of some or all of the language skills and the level of cognitive ability. However, again like other practitioners (as noted by Dockrell and Lindsay, 1998), there is no agreed system for the measurement of cognitive ability and the level of discrepancy. Hence, within the District, whether or not a child is deemed to have SLI, and hence support from the SLT, is likely to depend upon the clinical judgement of a First Schools Project SLT. It should be noted, however, that, although this may seem to be a rather unsystematic way of defining SLI, professionals and parents within the District are generally satisfied with the way that SLTs identify and categorise language needs. Indeed, anecdotal evidence suggests that the First Schools Project SLTs' assessment of children's language needs is regarded as thorough and helpful.

From discussions with teachers, I have understood that educationalists within the District accept the importance of a thorough assessment of a child's difficulties but they are more interested in meeting the child's needs through appropriate interventions, rather than in the details of the discrepancy model. Dockrell and Lindsay (2000) note that the focus for teachers is a child's performance across different tasks and situations and from this they can compile a profile of skills and needs and an individual education plan (IEP). It would seem that teachers are interested in the identification of a child's language needs only so that they can make appropriate accommodations within the educational environment to meet those needs. The findings from Dockrell and Lindsay (2000) are reflected in recent advice from the Royal College of Speech and Language Therapists (Gascoigne, 2006) which recommends that SLTs should identify speech, language, communication and or eating/drinking needs of a child and then to, "Identify the functional impact of these needs," (Gascoigne, 2000, p6). She continues that understanding the child in isolation cannot lead to meaningful support but, rather,

language support should be integrated into the child's environment. Following Gascoigne (2006), I have also chosen to use the term 'language needs' rather than 'language difficulties' since I feel that the latter term suggests that the problem lies wholly within the child whereas the term 'needs' implies that the requirement for change lies in the child's environment.

For reasons of clarity I have chosen to use 'language needs' as an inclusive term to comprise terms used by other authors (for example Speech and Language Impairment, SLI, Specific Speech Difficulties, and Specific Speech and Language Difficulties, SSLD) and their definitions for these terms. Within the framework of the First Schools Project, I will use the term language needs for those children with whom the SLTs are working (i.e. those children who are recognised as having SLI). However, the term will also be used for the needs of the wider population of children, who have been identified by schools and whose language difficulties are less severe but still impact on the children's ability to access the school curriculum.

2.2.ii How many Children have Language Needs?

As discussed in the previous section, there is no agreed definition of the term 'language needs' amongst clinicians and researchers and, since determining the number of children with language needs cannot be separated from the definition, deciding on prevalence rates is another complex task. There are many studies which seek to establish a prevalence rate by sampling a population. For example, Tomblin, Records, Buckwalter, Zhang, Smith, and O'Brien (1997), using a definition of language needs based on normative testing, assessed over 7000 kindergarten children in Iowa and Illinois for language difficulties using screening tests, and then a battery of standardised tests with those children who failed the screening test, and arrived at a figure of 7.4% prevalence rate amongst the kindergarten children. However, it is very difficult to generalise from such studies to a probable prevalence figure for the children in the First Schools Project because of the non-equivalence of the variables. If the study by Tomblin et al (1997) is used again as an example, it can be seen that the population, which is from North America, is culturally dissimilar, the children are younger and the standardised tests would also be different from those used in the UK.

It is, perhaps, more useful to consider research which examines a number of studies on prevalence rates. A systematic review was conducted by Law, Boyle, Harris, Harkness, and Nye (2000). This study adhered to search strategies that made it comprehensive and thus considered widely differing papers on the prevalence rate of primary speech and or language needs in children up to 16 years in age from 1987-1997. Law et al then decided on which papers should be included in the review using strict criteria. They specified that the studies should use a two-stage approach which involved a pre-screening of a population, with a proportion of passes and fails sampled and then given a diagnostic assessment, either on a standardised language procedure or on a criterion referenced clinical judgement. The final analysis was of 21 studies. The authors discussed the wide range in figures for prevalence rates between the studies, which they explained by the different ages of children that were sampled, the category of communication difficulty that was used and the level of problem that was identified. Law et al (2000) calculated the median prevalence figures and reached a composite figure for speech and/or language difficulties of 5.95%. Commenting on these and other figures, Law and Tamhne (2000) suggested that there is a general consensus that "the percentage of children reaching school-age with significant speech and language difficulties is around 5%" (p33).

It is interesting that another study, also led by Law and published in 2000 reached a far higher prevalence rate. Law, Lindsay et al (2000) suggest that as many as 10% of all children in England and Wales may have speech and language needs and that this figure may rise in areas of social disadvantage. Unfortunately, the authors give no details about how this prevalence figure was calculated but the higher prevalence rate can probably be explained by a looser definition of 'language needs' and certainly, the Law, Lindsay et al (2000) study included children with secondary speech and language needs (e.g. children with cerebral palsy who also have language needs), whereas the Law et al (2000) study included only children with primary speech and language needs.

Some discussion of these prevalence rate within the framework of the Shire County, in which the First Schools Project is located, is relevant to this research study. The only figures available are those from the Pupil Level Annual School

Census (PLASC). The review of figures in the Shire (figures are not available for the District only) for school-aged children with statements or at School Action or School Action Plus on the Code of Practice (DfES, 2001) in January 2005 indicated that 2.5% of the children have primary or secondary language difficulties. As described in Chapter 1 (see in section 1.1.i.e), First Schools Project SLTs focus their work in schools through children who are referred to them and, although there are no similar health figures, a reasonable assumption would be that the 2.5% figure includes most of those children known to the speech and language therapy service. From anecdotal evidence, it would seem that neither teachers nor SLTs would say that only 2.5% of children have language needs but they would claim that this figure represents the prevalence rate for children with the most severe language needs who need individual intervention in order that their SEN can be met. There is evidence from the schools (e.g. from Foundation Stage checklists) that there are large numbers of children in mainstream classes who have language needs that prevent them from learning in school and that such children are likely to need a modified classroom environment (e.g. simplified explanations or extra help with specialised vocabulary) to ensure that they can access the full curriculum. As do the researchers, teachers and SLTs within the District have differing understandings of 'language needs' and so they would give differing prevalence rates but I know from frequent discussions with practitioners that many would agree with the Law, Lindsay et al (2000) figure of 10%.

However, it is not the purpose of this study to arrive at a definitive prevalence rate for the children in the District where the First Schools Project is located. What seems certain is that the rate is considered to be high. Certainly Law and Tamhne (2000), who decided on the 5% prevalence rate, conclude,

> Although there is considerable variation in figures it is evident that all of the studies suggest that the number of children with speech and language delay is high.
>
> (Law and Tamhne, p 35)

From the prevalence rates, even though they vary considerably, it would seem that there is a need for speech and language support for mainstream schools and this provides substantial justification for the First Schools Project.

2.3 History

A brief history of the speech and language therapy service is fundamental to understanding collaboration between education and the SLTs in the First Schools Project (and hence its evaluation) since the development of the service provides an explanation of some of the tensions felt by SLTs who are part of the health service yet work in education. The speech and language therapy profession began to develop only at the end of the 19th century when doctors sought help in the treatment of defective speech (Wright and Graham, 1997). Gradually two services evolved: the education speech therapy service that was part of the school health service and the hospital-based service that was part of the National Health Service (NHS). Dockrell and Lindsay (2000) note that provision for children with speech and language difficulties has been characterised, generally, by integration in, rather than by segregation from, mainstream provision since, from 1944, some children have been taught in language units attached to mainstream schools. A few special schools specifically for children with speech and language difficulties did develop (Wright, 1995) but speech and language therapists (SLTs) also worked in more general special schools where children often had significant language problems which were part of their other learning difficulties.

In the reorganisation of the Health service in 1974 the two speech and language services were unified within the health service (Reid and Farmer, 2001). Services generally became clinic based although some retained their links with mainstream schools and SLTs continued to work in special schools. However, area services have responded in different ways to subsequent legislation. Hence, as described by Wright and Graham (1997), children with communication needs in one area may receive a service that is organised differently elsewhere for children with similar levels of need.

In recent years, one of the most important documents for Speech and Language Therapy Services has been the report written by the Department of Education and Employment in collaboration with the Department of Health, 'Provision of Speech and Language Therapy Services to Children with Special Educational Needs (England): Report of the Working Group' (DfEE, 2000). Prior to this there had been

many disputes between parents and local education authorities (LEAs) about whether speech and language therapy provision should be included in the education part of a statement of SEN or whether is should be included as 'other' provision under sections 5 and 6 of the statement. Parents argued that, as language was fundamental to a child's learning, it should be provided by education. A court ruling in 1996 (R *v* London Borough of Harrow) stated that, while the prime responsibility for children with speech and language difficulties lay with the health services, the ultimate responsibility lay with the education authority. Disputes, however, continued based on the definitions of *prime* and *ultimate.* The recommendations of the Working Group are less ambiguous,

> Since communication is so fundamental to learning and progression, addressing speech and language impairment should normally be recorded as educational provision unless there are exceptional reasons for not doing so.
>
> (DfEE, 2000, p1)

It might be argued that the logical conclusion for the Working Group would have been for paediatric Speech and Language Therapy Services to move, with their funding, from health to education. This would have nullified the paradox, noted by Lindsay, Solloff, Law, Band, Pearcey, Gascoigne, and Radford (2002), that, "They (speech and language therapy services) are funded from one source (health) while providing a service to a second (education)" (p286). It would also have ameliorated some of the tensions to collaborative working described later. However, such a radical change was outside the terms of reference of the Working Group (DfEE, 2000) but they did make strong recommendations that there should be joint working between speech and language services and education professionals. The report also emphasised the need for specialised training for teachers, support assistants and speech and language therapists (SLTs) and this should include examples of good practice from joint working both at a case work level and at a service level. These recommendations apply to provision for all children with speech and language needs, not just to those with statements of SEN.

Other recent guidance also directs speech and language therapy services to closer working with education. For example, The Special Educational Needs Code of

Practice (DfES, 2001) includes amongst its critical factors for success in meeting the needs of children with SEN that,

> "There is close co-operation between all the agencies concerned and a multi-disciplinary approach to the resolution of all issues."
>
> (DfES, 2001 p8)

The Code also repeats the recommendations of the working party that speech and language provision should normally be recorded as educational provision in a statement of special educational needs. The most recent legislation, The Children Act (DfES, 2004) is even more definitive since it makes collaborative working mandatory and stipulates that all services (Education, Health and Social Services) should work together for the good of the child. Every Child Matters (DfES,2004), which outlines the national framework for change that is demanded by the Act, makes, as the first step,

> The improvement and integration of universal services – in early years settings, schools and the health service
>
> (DfES, 2004, p 4)

This is a very important piece of legislation which is leading to radical change in both education and social services. The Health Service document that is integral to the Children Act (2004) is "The National Service Framework for Children and Young People" (DoH, 2004) which sets out a programme for the improvement in children's health and well being. Moreover, Dunsmuir, Clifford, and Took (2006) discuss how local authorities and health trusts are being urged by central government to pool budgets into children's trusts to support more 'joined up' services for children.

All of these directives have to be understood in the context of the trend towards social and educational inclusion. There have been numerous government documents promoting inclusion (for example, the Programme of Action, DfEE, 1997, Excellence for all Children, DfEE, 1997, The Code of Practice, DfES, 2001). The result has been increasing numbers of children with significant learning difficulties in mainstream schools (Law, Luscombe, and Roux, 2002). As many of these children have language difficulties as either primary or secondary needs,

SLTs have to find ways of working with mainstream teachers in order to ensure that the needs of these children are met.

Recommendations from the Royal College of Speech and Language Therapists (RCSLT), which sets professional standards, (Royal College of Speech and Language Therapists, 1996) also emphasise the need for joint working in order to develop good practice. In the recommendations for service delivery by SLTs to mainstream schools, the first aim is about sharing knowledge, skills and expertise. The second directs SLTs to ensure that speech and language therapy input is part of a total programme for the child. More recently, The College's Position Paper (Gascoigne, 2006) aims to set out the recommendations from the RCSLT on the role of SLTs within the development of children's services. This document is a response to the guidance, which is part of the Children Act 2004, that professionals should work in a 'team around the child' and the proposals represent a significant development from earlier advice from the RCSLT. Included in the recommendations are that: SLTs should identify speech and language needs as part of a multidisciplinary team; support should be provided in the setting which is most appropriate for the child and their family and the RCSLT regards trans-disciplinary working as central to working with children.

The First Schools Project was begun in 1998 and thus pre-dates many of the initiatives towards collaborative working. However, the need, identified by the District SLTs, for closer working relationships with schools clearly anticipates much of the more recent government legislation and professional guidelines although not the trans-disciplinary working recommended by the Children Act. This thesis describes collaborative practice that took place before the developments from the Children Act 2004 were enacted. The implications for the First Schools Project within the framework of the most recent legislation will be considered in Chapter 6.

2.4 Collaboration

As discussed in the introduction to this chapter, analysing earlier work on collaboration formed the core of the design for a realistic evaluation of the First Schools Project. Since collaboration was fundamental to the First Schools Project

it was important to understand the meaning of collaborative work through evidence from literature. However, the literature review also needed to form the basis for the realistic evaluation but, since I had been unable to discover previous realistic evaluation in education, I had no template for this. Pawson and Tilley (1997) recommended that the realistic researcher should look in the literature for evidence that will help in the selection of Contexts, Mechanisms, Outcomes and Theories. It will be remembered from Chapter 1 that Contexts are the geographical and social framework of the programme under study, Mechanisms come from the structure of the social programme and Outcomes follow from the programme. It seemed to me that, when I considered other studies of collaborative working between SLTs and education professionals, then I would be able to identify Contexts that had hindered or facilitated collaborative working. However, some Mechanisms and Outcomes, that were relevant to the evaluation of the First Schools Project, might also become evident. In the following section (2.5) of the literature review, when I consider other models of collaborative working between SLTs and school staff and compare them to the First Schools Project, then theories (framed in Contexts, Mechanisms and Outcomes) that can be used in a realistic evaluation should become apparent.

2.4.i Towards a definition of collaboration

Quoting a Scottish office document, Forbes (2001) describes collaboration between SLTs and teachers,

> The hallmarks of which are mutual trust and respect, joint goal-setting, joint training and parental satisfaction with the provision.
>
> (Forbes, 2001,p196)

However, there are many different interpretations of collaboration and there are many different ways of working together that are called collaborative. Topping, Gascoigne and Cook (1998), for example, describe a range of models of collaborative working from a multidisciplinary approach (where each professional acts independently), to interdisciplinary methods (where there is partial collaboration between professionals) and beyond to a transdisciplinary model (where the disciplines are integrated and provide an integrated approach). Law et al (2002) describe a consultancy approach where the SLT works mainly through other practitioners such as TAs and teachers. Wright (1996) notes that

collaboration does not occur simply because two professionals are timetabled to work together. She argues that collaboration occurs when there is equality between professionals. This approach is echoed by Lindsay and Dockrell (2002), for whom collaboration is not simply ensuring that different professionals are involved.

> Collaborative practice requires limitations on authority and a sharing of responsibility ….. Some shared knowledge and understanding is required for effective communication.
>
> (Lindsay and Dockrell, 2002 p95)

Although, as remarked by Wright and Kersner (1998), collaboration is rarely constrained by any specific definition, it does seem that most authors agree that collaboration involves shared knowledge and responsibility but there is variation in the degree to which this is accomplished. For the purposes of this study, I will use a working definition that represents a general consensus: collaboration involves professionals and parents developing a shared knowledge, understanding and responsibility and working together for the good of children with language needs. Also this definition describes the collaborative working as it is intended in the First Schools Project (Worcestershire SLT, 2002). Throughout this study, I will make reference to other studies which describe models of collaborative working but I will only discuss the nature of collaboration when it is relevant to the evaluation of the First Schools Project (for example if the model of collaboration is radically different from that of the First Schools Project).

2.4.ii The need for collaboration

As noted in section 2.3, collaboration between professionals in education and health has been promoted by government policies, professional bodies and by researchers. Government documents include: The Report of the Working Group (DfEE 2000) and The Special Educational Needs Code of Practice (DfES, 2001). The Joint Professional Development Framework (JPDF) (I-Can, 2001), was government funded and outlined the professional competences and practical skills that would enable teachers and SLTs to work effectively with children with speech, language and communication needs. The aim was that training in the competences would enhance professional development that could be undertaken

jointly and collaboratively by both professional groups (Paradice, 2001). The RCSLT Position Paper, (Gascoigne, 2006) outlines how SLTs need to work with other professionals within the context of an integrated service around the child. Many research studies also emphasise the value of working together. Wright (1996), for example, states that, ideally, teachers and therapists, who are supporting a child with language needs, should work together with the child's parents to provide a co-ordinated plan of intervention.

Collaboration between SLTs and teachers is also driven by the SLTs change in practice. Law et al (2002) describe how, traditionally, when SLTs were clinic-based, they worked with individual children and focused on ameliorating or repairing the impairment experienced by the child. Law et al continue that the approach of SLTs now is more holistic and there is an emphasis on support for the child being given, via others, within the classroom environment and this is the aim of the SLTs who work in the First Schools Project (Worcestershire SLT, 2002). In such circumstances, Wright and Graham (1997) note that it is essential for teachers and therapists to establish effective collaborative working practices.

2.4.iii Barriers to collaboration that lie in the organisation of the health service and education system

Although desirable, collaboration may be difficult to achieve because of differences in the structure and systems of education and health services. The health service, which employs SLTs, and the education system, where teachers are based, are radically different, and McCartney (1999) suggests that it is perhaps surprising that good collaboration occurs as often as it does. Reid and Farmer (2001) note that, at an organisational level, there are different conditions of service and different roles and responsibilities held by teachers and SLTs and these can contribute to the problems of collaborative working. For example there are differences in the hours worked by SLTs and by teachers as well as differences in when they take holidays. Moreover, although SLTs may work in schools they can still be seen as 'visitors' and neither they, nor their education colleagues, may have an understanding of the practices or conditions of service of the other (McCartney, 1999).

McCartney (1999) carried out an extensive review of barriers to collaboration between teachers and SLTs. She used a systems method of analysis and refers to her own work and that of other researchers. She notes that the most important functional difference between schools and SLT services lies in the notion of for whom the service is provided. McCartney and van der Gaag (1996) describe education as an *allocating* service and all children are allocated 11 years of schooling whereas the health service, by contrast, is a *commissioning* service and intervention is only offered where there is a need. McCartney (1999) goes on to argue that SLT services are increasingly prioritising and rationing services and clients are selected by balancing their individual needs against the competing needs of other individuals. There are some parallels in the allocation of resources for children with SEN but debates about who will receive basic services are not necessary in education. Thus, teachers may find the prioritising process of an SLT unacceptable.

A second functional tension identified by McCartney (1999) lies in the conceptualisation of how children are helped to learn. She discusses how, since access to the curriculum is a universal entitlement, teachers will look at ways of adapting the educational environment so that all children, including those with special educational needs, are able to learn. McCartney (1999) notes that SLT practice, by contrast, is derived from medical models of deficit and disability and that SLTs may see difficulties as located within the child rather than within the child's learning environment. As discussed above, SLTs themselves are reported to be moving to a more holistic approach to assessing children's difficulties and meeting their needs (Law et al, 2002) but, as Wright and Kersner (1998) suggest, the myth of the medical image may remain and teachers can expect SLTs to 'cure' children through 'therapy'.

These barriers to collaborative working are reflected in the tensions that can arise between the structures of the First Schools Project (which is based in health) and the working environment of the SLTs (which is generally in schools). For example the work of the SLT is governed by their caseload so they will only visit schools where there are children who meet the criteria for SLT intervention. There are, therefore, some very small schools where SLTs might like to visit but this is not

possible under health regulations. Teachers in these schools may feel that they have children with language needs (even though such needs may be insufficiently severe to warrant the individual involvement of an SLT) and would benefit from regular school visits by the SLT.

2.4.iv Facilitators of Collaboration

In recent years there have been numerous studies of collaboration between SLTs and education professionals. In an attempt to rationalise this large amount of information, I have chosen to group together studies under headings (e.g. support at a strategic level, see sections 2.4.iv.a-e) that represent different aspects of facilitation and also seemed to be possible Contexts for the realistic evaluation.

However, grouping together different research studies was a problematic task since their designs were quite disparate. The first inconsistency was in the researchers' interpretation of 'collaboration', which, as noted above, is an ill-defined process and can occur when individuals work together or it can happen at a strategic, organisational level. The researchers generally collected the views of teachers and SLTs working in either mainstream or special schools and, in a few cases, information from education and health service managers but there was variation in the type and size of sampling. Some studies (e.g. Lindsay et al, 2002) relied on postal returns and hence sampling would rely on the motivation of the respondents since this depended on who chose to return the questionnaire. Other studies used more purposive sampling, for example Cross, Blake, Tunbridge, and Gill (2001) took the views of all of the professionals involved with one child. The instrument used for the research was usually a questionnaire but sometimes group discussions and interviews were used. As noted by Robson (2002), there is ambiguity in data collected using these instruments since respondents can interpret questions in different ways, individuals may have different agendas and how qualitative data is analysed can depend upon the views of the researcher. Hence, although the different research studies are put together under headings, any comparisons that are drawn need to be understood within the limitations of comparing different research studies.

Despite these restrictions, I have chosen to combine different studies in this way since it is the best that can be done in order to arrive at tentative Contexts for the realistic evaluation. The purpose was to identify evidence that might indicate how Contexts could facilitate or hinder the working of the First Schools Project.

2.4.iv.a Support at a strategic level.

Strategic support for collaborative projects needs to be understood at different levels (e.g. at Local Authority level or at school level). Lindsay et al (2002) describe work that was part of an extensive research study which aimed to map existing provision for children with speech and language difficulties across England and Wales in order to help to facilitate the process of collaboration between health and education services. The authors stress the need for local authorities to develop policy on meeting language needs in collaboration with health trusts if practitioners are to be able to work together effectively. Studies by Law et al (2001 and 2000) describe other aspects of the same national study but acknowledge that good collaboration can occur between individuals at a local level even without strategic support. However, they also conclude that structures should be in place to ensure that collaboration is more than individuals talking about the needs of the children with whom they are working.

Hartas (2004) considered strategic support at school level although her work was in a special school for children with language difficulties. She looked at how SLTs and teachers collaborate and found that both were unclear about their roles and the kind of collaboration that was expected of them. They identified the need for organisational structures in order to produce clear policy statements. This lack of clarity in the roles of SLTs and teachers has also been noted in mainstream settings (e.g. Dunsmuir et al, 2006). Some of the evidence from the Hartas (2004) study may also apply to mainstream schools and it would seem that appropriate management structures at a school level may facilitate collaboration.

2.4.iv.b Professional development

It seems that many teachers have little specialised knowledge of how to meet speech and language needs and SLTs can have a limited understanding of how schools run and of the school curriculum. Dockrell and Lindsay (2001) and Sadler

(2005) surveyed teachers who worked with children with language needs in both mainstream and special schools and both studies found that the teachers had received little, if any, training in identifying or providing for children with language needs. For SLTs, Wright and Kersner (2004) note that, understanding the role of the teacher and the education system will normally be part of their initial training course but the weighting given to this area of study will vary for each course. It is unsurprising, therefore, that many authors discuss the need, for both SLTs and teachers, for training in the roles and responsibilities of the other. Kersner and Wright (1996) describe how teachers and SLTs can learn from each other through working together. Other studies (Dunsmuir et al, 2006 and Sadler, 2005 for example) emphasise the value of receiving and delivering joint training. Furthermore, four of the thirteen recommendations of the Working Group (DfEE, 2000) concerned training for SLTs and education staff and from this report the Joint Professional Development Framework (I CAN, 2001) (discussed in section 2.4.ii) was a direct outcome.

2.4.iv.c Time and resources

All authors who discuss collaboration emphasise the need for time and adequate resources if collaboration is to be effective. At a health authority level, Law et al (2002) discuss the need for managers to allocate SLT time to the collaborative process so that they can work effectively with schools. Dockrell and Lindsay (2001) note that teachers reported that SLTs were unable to provide children with the service they needed because SLTs had insufficient time and that this led to poor liaison and collaboration. Law et al (2002) and Hartas (2004), in her school-based study, discuss the need for schools to ensure that staff have designated time to work alongside the SLT in order to allow the collaborative process to happen. However, although there is general agreement that time has to be dedicated to the collaborative process, not all authors agree that there will be a need, overall, for extra time, since, as suggested by Wright and Kersner (1998), collaboration can lead to an economy of time and effort for professionals.

From their work with teachers, Dockrell and Lindsay (2001) identified the importance of adequate resources in schools, if collaboration is to be effective. Teachers in mainstream schools described how they were unable to carry out

language programmes since they had insufficient time and there was no TA support. This led to teachers feeling dissatisfied with their working relationship with SLTs. Teachers in specialist language provision were more positive as they were able to plan programmes collaboratively with the SLTs and, since classes were smaller and there was a high level of TA support, teachers were able to carry out the programmes. Sadler (2005), who also surveyed teachers who work in mainstream schools and have children with speech and language difficulties in their classes, again noted the need for adequate resources (e.g. TA time, teaching materials) in order to implement jointly agreed programmes.

2.4.iv.d The collaborative setting

The location of the collaborative process seems to have some bearing on its effectiveness. For example, the study by Wright and Kerser (1998) draws heavily on previous work by the authors and describes examples of positive collaboration. However, much of their work (e.g. Kersner and Wright, 1996) is carried out in special schools and, as noted by Wright and Graham (1997), most collaboration is found in special education settings, where there is a higher level of resourcing and SLTs are often based in the school. Authors who have surveyed professionals working in mainstream education and those in special schools (e.g. Dockrell and Lindsay, 2001) describe less successful collaborative practices in mainstream settings. It may be that the facilitators for collaboration that are listed here (including the availability of time and resources) are more likely to be found in special schools where the levels of staffing and resources are higher than in mainstream schools.

2.4.iv.e Commitment from participants

Wright (1996) recognises that collaborative practices require commitment, energy and effort. She also argues that collaboration is a voluntary partnership and that, in order to maintain it, teachers and SLTs need to be realistic about the advantages and disadvantages of working together. Her study could be said to be self-selecting of professionals who believed in collaboration since she sampled the views of SLT-teacher pairs who were already working together at the beginning of the study. Half of the SLTs in the study were based in the same school as the teachers and half visited schools on a regular basis but there is no indication

whether the participants worked in special or mainstream schools. Wright enabled both SLTs and teachers to identify the advantages of collaboration and they noted benefits to the child as well as personal and professional gains. The author notes the limitations of the study and admits that the participants seemed to have a commitment to collaboration. She continues

> "It would seem that both parties appear to be rewarded by collaboration and so it continued"
>
> (Wright, 1996, p9)

Wright (1996) also notes that one of the major benefits that the SLTs and teachers identified was that of learning from each other. She argues that, if professionals can be helped to identify their own professional and personal benefits from working together, as well as disadvantages, and if they can become aware of their own learning processes, then this will provide a sound basis for the evolution of positive, collaborative working practices.

2.5 Models of Collaborative Working

Other models of service delivery for Speech and Language Therapy Services, which facilitate collaboration with education, have been evolving at the same time as the First Schools Project. Again, the review of the literature has been structured to form the framework for this evaluation. As this was a consideration of alternative models of collaborative practice, it seems that, not only Contexts, Mechanisms and Outcomes, might become evident but also Theories.

In chapter 1 (See section 1.3 and this will be developed in chapter 3), I described how realistic research seeks to explain the causal relationship between Mechanisms and Outcomes. In his review of the quality of evidence in evidence-based policy, Pawson (2004) examines many different kinds of research from the viewpoint of realistic research. He makes the distinction between the practice of research (the technical competence of the inquiry) and the progress of the inquiry. He states that research only progresses insofar as each investigation contributes a better set of explanatory propositions. For Pawson, the quality of a research study

"is not its technical competence as such, but whether its technical infrastructure provides good explanation," (Pawson, 2004, p3). I have adopted a similar method for reviewing the literature on other models of collaboration since I was looking for 'good explanations' of models, which might contribute to the structure of my research project. Fundamental to the design of a realistic evaluation are the theories which make explanatory propositions (in terms of the Context) for the causal relationship between Mechanisms and Outcomes. (Theories are described briefly in section 1.3 and developed in Chapter 3.) The aim was to develop good explanatory propositions from the literature review into theories for the research inquiry. Also, as part of developing the framework for a realistic evaluation, I looked, in the descriptions of alternative models for collaborative working, for Contexts, Mechanisms and Outcomes, which might be relevant to the First Schools Project.

There are many articles on collaborative projects. Hence, I have chosen only those which seem most relevant, either because the structure of the collaborative project resembles that of the First Schools Project or because there are features in the collaborative project (e.g. an intensive programme of support for certain schools) that might be incorporated into the First Schools Project. Most of the articles generally focus on the details of the collaborative project and how it was carried out and some include sections on evaluation, so, identifying Contexts, Mechanisms and Outcomes from the projects and explanations for them has been quite an intricate task. Below, is listed each collaborative project, it is described briefly, its explanatory propositions are considered and, where appropriate, the section concludes with a theory.

2.5.i The Harrow Project

The Harrow project (Shaw, Luscombe and Ostime, 1996) was a model for a speech and language therapy service of school-based working that was developed in consultation with the LEA, the local Health Authority and with parents. The authors described the planning process, the model of service and an audit of the early stages of the implementation of the model as well as the development of a teacher training programme. The project pre dated the First Schools Project and the article was, in fact, used by the District SLTs when they were setting up the project. There

were many Mechanisms in common: in both projects SLTs carried out assessments, worked with children and advised teachers; both projects had a training package for schools and both have developed resource packages for schools. One way in which the two projects differed was that in Harrow there was a rotational model of delivery (the SLTs worked in half of the schools in the borough for half of the year) whereas the service to schools of the First Schools Project was continuous.

An interesting part of the Harrow project was that aspects of its Context were specified in that the SLTs gathered detailed information about the level of need in the borough. Before the beginning of the project there was an assessment of the needs of all of the children on the SLT caseload with the aim of evaluating, for each child, the severity of their communication need and to identify the frequency of speech and language therapy input that was required. It was decided that the only way to meet the level of need was with the rotational model of service delivery. Thus, there was a very clear explanation of how the mechanisms of the project were designed in that Context. However, that Context is now no longer relevant to any collaborative project since the information was collected in a period (1993-1994) when there were disputes about the amount of SLT time specified in the statement of SEN but now statements include speech and language needs in the education section and the type and amount of therapy is rarely detailed (see section 2.3) and so that highly specified level of service delivery is no longer necessary. Hence, although there were good reasons for detailing the needs of each child at the time of the Harrow project, such a Context may be no longer relevant for the First Schools Project. Moreover, as it was in order to meet the need for the specified hours that the rotational model of service delivery was adopted and, because the Context is no longer necessary, it seems inappropriate to consider the Mechanism of a rotational model.

The Context of the training package that was provided for teachers as part of the Harrow project was also specified. The SLTs consulted with the learning support services, with teachers and with SLTs who had experience of working in mainstream schools and then developed a course that aimed to offer teachers theoretical information and practical ideas on communication difficulties. Each

participant completed an evaluation questionnaire at the end of each session and the information was used to make ongoing changes to the content of the course. This gave a clear explanation of how the Context (the education professionals) shaped the development of the course. Outcomes described by Shaw et al (1996) included: SLTs were more aware of the difficulties faced by teachers; teachers and therapists developed a shared understanding and teachers developed increased confidence in reinforcing speech and language therapy aims. Hence it is possible to construct a theory that offers an explanation for effective course writing (see Table 2.1) and may have relevance to the First Schools Project.

Table 2.1: Theories from the Harrow Project

Source	Context		Mechanism		Outcome pattern
The Harrow Project	SLTs take regular feed-back from teachers on courses and adjust the content of the course to meet the needs of the teachers	+	SLTs deliver courses for teachers on how to meet children's communication needs in collaboration with SLTs	=	▪ SLTs are more aware of the difficulties faced by teachers ▪ Teachers and therapists develop a shared understanding ▪ Teachers develop increased confidence in reinforcing speech and language therapy aims

2.5.ii The Camden Project and the Islington Project

Included in their descriptions of these two projects, Topping et al (1998) discuss different levels of collaboration (considered in section 2.4.i). Like the First Schools Project, the Camden Project was developed to promote a philosophy of collaborative working with the school as the central point of service delivery. Mechanisms of the Camden Project included: a link therapist for each school; a school-based referral system and each school had an allocation of hours based on need. A survey of the schools conducted at the end of the first term of operation and at the end of the first academic year showed that users were increasingly pleased with the Mechanisms of the project. The description of the Camden Project was very brief, there was no information that could be used to explain or justify the Mechanisms and Outcomes (e.g. progress made by children) were not specified. It was difficult, therefore, to use aspects of the Camden Project in the framework of the realistic evaluation of the First Schools Project.

The details of the Islington Project (Topping et al, 1998) were also not specified but this project is of particular interest in today's educational environment since it was a co-ordinated multi-agency approach of the kind that is being advocated by government and by professional directives following the Children Act 2004 (for example, Gascoigne, 2006). At an operational level, the three support services (educational psychology, the peripatetic teachers and the SLTs) were re-conceptualised as the Language and Communication Team and thus the different disciplines were integrated and different professionals took responsibility for the child's management according to their level of need. Aspects of the Context of the Islington Project are specified in the list of presenting issues (e.g. a high referral rate, limited co-ordination between professionals and ineffective and inefficient use of limited resources). The central Mechanism of the Project was the 'Multi-agency Management Group' which discussed referrals of children with language needs, allocated the assessment of their needs and, subsequently, agreed the provision the child should receive based on his needs. As with the Camden Project, the description of the project is brief and there are no outcomes listed but, unlike the Camden Project, there is no evaluation. It is therefore difficult to generate explanatory propositions for the Islington Project and to understand whether or not this integrated way of working was successful.

2.5.iii The Haringey Project

In the Haringey Project, described by Lennox and Watkins (1998), speech and language therapists and language support teachers worked together to produce a model of working that was designed to support children on the SEN Code of Practice (including those with Statements of SEN) with language needs. The aims were to identify children with speech and language needs who would benefit from group work and then for a teacher to deliver the group work. The courses were designed with the support of an SLT. The project was carried out in 7 schools where there was a high level of language need. It was initially a pilot project over three terms but was extended to two years following positive feedback from schools. The pattern over a year was: in term 1 there was training for staff; in term two the SLTs and language teachers ran courses for the parents of children with language needs and in term 3 there were the courses for the children.

The description of the project includes some explanation of the Outcomes. Video evidence was used and it demonstrated that the children made significant progress in communication skills. Lennox and Watkins (1998) interrogated the results and noted that the group work was most effective for younger children whose specific language difficulties had been appropriately identified, whereas children with other additional learning difficulties made less progress. The Outcomes indicated by the support teachers and SLTs were also of interest. Both groups felt that they had an increased awareness of their complementary roles and knowledge bases and this was attributed to working together. The First Schools Project SLTs do not usually work with groups of children but this might be a Mechanism that could enhance their project. They do regularly consult with teachers and believe that this leads to greater understanding. I have therefore used the explanations from the Harrow Project to construct two theories (see Table 2.2) about these topics as I feel that they may have relevance for the First Schools Project.

Table 2.2: Theories from the Haringey Project

Source	Context		Mechanism		Outcome pattern
The Haringey Project	The language needs of the children are clearly identified	+	SLTs and support teachers work with groups of children on a programme that is specifically designed to meet their language needs	=	All of the children in the group make good progress in language skills
The Haringey Project	SLTs and teachers spend time together on a specific project	+	SLTs and teachers work together with children with language needs	=	Teachers and SLTs develop a shared understanding of each other's role

2.5.iv The Telford and Wrekin Project

In 1999 the DfEE indicated that the Standards Fund could be used to develop and promote flexible working arrangements between education and health through a number of speech and language therapy pilot projects. The result was 25 short-term projects that promoted joint working between speech and language therapy services and education and were outlined in a report by Barber, Farrell and Parkinson (2002). Many of these projects produced innovative ways of working such as training packages for high school teachers, the development of transition plans for children with language needs moving from primary to high schools and intensive work in specific schools and pre schools. The report on the projects

(Barber et al, 2002) had, as one of its purposes, to identify good practice that could be adopted by other speech and language therapy services. Examples of good practice are listed (for example, “Cambridgeshire reported that the use of video sessions proved exceedingly useful during training and workshops for parents and staff”, Barber et al, 2002, p17). However, there are no explanations of how such practice worked (the reason for the success might have been the feedback to parents on how they were interacting with their children from the videos or it might have been due to the supportive nature of the parent groups) and it is thus difficult to transfer such practice to different contexts.

The Telford and Wrekin Project, discussed by Miller (2002), is one of the Standards Fund Projects for which there is a more detailed description and outside evaluation. In this project extra SLTs (1.1 full-time equivalent) were appointed so that they could spend time in schools supporting children with language needs that affected their access to the curriculum. Actions undertaken during the project included SLTs and teachers planning activities together, the discussion of children’s language needs and joint assessments. For the evaluation there was a comprehensive collection of data through SWOT (strengths, weaknesses, opportunities, threats) analyses, information on individual children, discussions with SLTs and teachers and written information from them and, as a result, the researcher was able to describe the Outcomes from the collaborative project from the perspectives of the schools and from the SLTs.

Again there were explanations for the Outcomes from the project. One of the positive Outcomes was that both teachers and therapists, by working together, changed their own understanding. The teachers were mindful of the demands of the curriculum but, by working with the SLTs, came to understand more about language difficulties. Also, although the primary focus of the SLTs was on the child’s language difficulties, as they worked with the teachers, they learnt how schools functioned and how language skills could be effectively supported in a classroom setting. One of the negative Contexts, described in the evaluation, related to time and, again, there is an explanation. Teachers often were not given time free from the classroom to talk to SLTs. However, Miller notes that if collaboration is to be effective, then there needs to be time for the teachers and

SLTs to communicate. As both of these aspects of collaboration are of relevance to the First Schools Project I have construed the explanations from the Telford and Wrekin Project into theories (see Table 2.3)

Table 2.3; Theories from the Telford and Wrekin Project

Source	Context		Mechanism		Outcome pattern
The Telford and Wrekin Project	A project that facilitates learning so that SLTs can learn about how schools operate and teachers can gain an understanding of the needs of children with language difficulties	+	SLTs and teachers work together	=	Teachers and therapists develop their understanding of each other's role
The Telford and Wrekin Project	SLTs and teachers have dedicated time which can be used for planning interventions for children with language needs	+	SLTs and teachers plan together	=	Teachers and SLTs collaborate effectively

The four projects discussed in this section all include aspects of the First Schools Project. They also illustrate how the same outcome (for example increased understanding of roles) can have different explanations. In my evaluation of the First Schools Project, I will seek to construct theories that might explain outcomes. The explanations of the progress of the projects discussed above will provide evidence that will help me in my choice of theories. This will be further explained in the next chapter.

2.6 Educational and Social Implications for Children with Language Needs

This section considers the implications of language needs for children on their attainments in literacy and on the development of their social and behavioural skills. However, as discussed earlier, this section provides a background to the research study, rather than contributing directly to its structure and discussion of the wide-ranging literature on the implications of language needs will, as a consequence, be brief. It should also be noted that most of the studies focus on children with severe language needs and many involve children who attend language units or special schools. It may be, therefore, that the level of language need is higher in the

studies presented below than in the First Schools Project. However, the conclusions still have relevance to this study in that there is some indication (e.g. Botting and Conti-Ramsden, 2000) that the implications for children with less severe language difficulties are similar to those with more severe language difficulties, although less marked.

2.6.i Language needs and progress in literacy

There has been extensive research on the link between language needs and reading problems. As noted by Catts (1993), it is generally agreed that the group of children with speech and language needs have an increased risk of reading problems although there is great variability in reading outcomes and some children with language needs do develop good reading skills. He suggests that this variation may be explained by the heterogeneous nature of language difficulties and the complexity of skills needed for reading. From his review of literature in North America he concludes that children with language needs are more likely to develop reading impairments than children with just phonological or articulation problems. Catts (1993) further investigated this link through a study which involved 56 kindergarten children (average age 6 years) with speech and language difficulties and the nature of their speech and language needs was analysed using a battery of standardised tests. The children's reading ability was tested when they were in first and second grade, again using a selection of standardised reading tests. Catt's findings confirmed that articulation ability was unrelated to reading attainment but also suggested that the relationship between language difficulties and reading impairment depended on how reading was measured. Children with semantic-syntactic language difficulties had problems with reading comprehension whereas children with problems with phonological awareness and rapid naming abilities had difficulties with word reading.

I have been unable to find a similar review of UK literature but a study by Nathan, Stackhouse, Goulandris and Snowling (2004), carried out in the UK, does not altogether support the findings that children with articulation difficulties do not have problems with literacy. Nathan et al, using standardised language tests, identified 47 children with articulation problems at age 4 years who had significant speech difficulties, measured using standardised tests. These children had no receptive or

pragmatic difficulties and their cognitive skills were within normal limits. There was also a matched control group of typically developing children. The Statutory Assessment Tests (SATs) were used to assess the impact of the children's speech difficulties on their levels of attainment in literacy at age 7. Nathan et al concluded that children who had been identified with speech disorders at age 4 did less well than the control group on reading tests but there was no difference between the groups in results from reading comprehension tests. The difference between these results and those of Catts (1993) may lie in the nature of the SATs reading test. This is not a single word reading test but involves reading a story aloud to the teacher, a task which could be more stressful for a child with an articulation problem.

Because of the wide variation in language needs and literacy problems, it is difficult to reach definitive conclusions. However, it can still be inferred from the research discussed in this section that, in younger children, there is some association between language difficulties and progress in reading and this indicates a need for language support (and, indirectly, for the First Schools Project) in primary schools.

2.6.ii Language needs and social and behavioural skills

Language plays an important part in forming and maintaining social relationships. A child has to learn, not only how to form grammatically acceptable utterences and to use them appropriately, but also how close to stand, how to touch and to make eye contact. The child also has to learn how to recognise miscommunications and to repair them. I have been able to find only a small amount of work, in both North America and in the UK, on the relationship between language difficulties and social skills but all illustrate that children with language needs are more likely than normally developing children to have problems with peer relationships. One example is in the work of Dockrell and Lindsay (2000). They conducted a study that involved a survey of 133 children with language difficulties in year 3 and they found a high proportion of children with problems in social interaction and almost half had difficulties with relationships with peers. Similarly, the Botting and Conti-Ramsden (2000) study of children in language units showed that children with pragmatic difficulties (i.e. more complex language difficulties) had more marked peer competence problems. In North America Cohen (1996) and Gallagher (1996)

noted that there were more problems when children interacted with their peers amongst children with language disorders. Vallance, Cummings and Humphries (1998), commenting on an extensive review of the literature, suggested that a child with language difficulties experiences social failure repeatedly since they are unable to understand the meaning of what others say and, also, to express their own desires and that these experiences lead to emotional distress and social difficulties as the child grows older.

For some children with language needs, their social interaction problems are more acute and they present with significant behavioural problems. There are many studies which have shown a link between behavioural problems and language difficulties (for example, Stevenson, 1996, Law et al 1999) but drawing conclusions from such studies is problematic because of the heterogeneous nature of both constructs. None-the-less there are North American authors who have reviewed the literature (e.g. Gallager, 1999), acknowledged these sources of variability in the studies and have found a remarkable consistency in the findings. Their conclusions were that there is a high probability that children with language needs will also have behavioural difficulties. Vallance et al (1998), concluded that half of the children with language difficulties also have significant behavioural problems. I have been unable to find similar reviews of the literature in the UK but there are individual studies of prevalence rates which reach similar figures. For example, the Waltham Forest Study (Stevenson, 1996) concluded that, in the general population of 3 year olds, 14% had behavioural problems whereas 59% of the children with language delay showed similar behavioural problems. Stringer and Lozano (2007) assessed the language needs of 19 children (aged 8-13 years) who attended and school for children with emotional, social and behavioural difficulties and identified 14 children (74%) who had a significant level of language impairment. The authors note that in the general population only 10% of children would be expected to have this level of language need. Botting and Conti-Ramsden (2000) also reached similar high figures when they compared patterns of social and behavioural impairment across a group of children (6-8 years) who had different types of language impairment. The authors noted that amongst the group of children with more complex language impairment, 53% had a clinical level of behavioural difficulties.

There is literature on one other group of children with behaviour difficulties which needs some consideration. It seems that there is a high proportion of children who present with behavioural difficulties but who have unrecognised language needs. For example Stevenson (1996), referring to another aspect of the Waltham Forest survey, noted hat 13% of pre school children with behaviour problems also had language impairment, whereas only 3% of the normal population had similarly defined language difficulties. Cohen (Cohen, 1996 and Cohen et al, 1998) noted very high figures in two large studies (samples of 399 and 380) conducted in Canada with groups of children who were referred to psychiatric out-patients clinics. Evidence suggested that about 30% of the children had language impairment which had already been identified by a speech and language therapist and of the remaining participants, about 40% had an unrecognised language difficulty. Even if the definitions for both language needs and behavioural difficulties are liberal and include children with less severe difficulties, the figures still indicate that many children with behavioural difficulties also have language needs.

There is general agreement between several UK authors (Botting and Conti-Ramsden, 2000, Davison and Howlin, 1997 and Law et al, 1999) that there is an association between language difficulties and behaviour problems and that behaviour problems may be more likely to occur if children are older or have more complex language difficulties. These conclusions are supported by the evidence from the Cohen studies (Cohen, 1996 and Cohen et al, 1998) which also make reference to the large number of children with behaviour problems and unrecognised language difficulties. All this has implications for the First Schools Project since it seems likely that, if SLTs can work with teachers and help them to recognise and address children's language needs, then this might reduce associated behaviour problems.

2.7 Conclusion

This chapter has set the framework for the realistic evaluation. The section on a definition for language needs and the prevalence rate described the nature of language difficulties that children experience and explained the need for language

support in schools. Following sections aimed to review the extensive literature on collaborative working between SLTs and education professionals from the view of a realistic researcher. As this was an innovative method, the process was a tentative attempt to seek out evidence that was relevant to the First Schools Project, while at the same time looking for material that could form the structure of a realistic evaluation. From this it has been possible to distil Contexts, Mechanisms, Outcomes and Theories which can be used in the framework of the realistic evaluation of the First Schools Project. However, before this can happen, it is necessary to explore the reasons for the choice of a realistic evaluation and this is the subject of the next chapter.

CHAPTER 3

THE RATIONALE FOR USING A REALISTIC EVALUATION OF THE FIRST SCHOOLS PROJECT AND THE DESIGN OF THE STUDY

3.1 Introduction

The literature review had been used to provide a framework for the research study. The research question was about evaluating the First Schools Project as a model of collaborative working.

> Can the stakeholders provide evidence that the model of the First Schools Project is an effective way for SLTs and school staff to collaborate and does the model lead to good language and educational outcomes for children with language needs?

The next task was to identify an appropriate methodology and the principles of realistic research, as described by Pawson and Tilley (1997) seemed to coincide with the aims of this study. Firstly, the research would be about *real* events (i.e. the evaluation of the First Schools Project was a real-life problem). Secondly, I hoped to use a *realist* methodology which had sound scientific credentials. Above all, the evaluation would be *realistic* in that it was applied research. However, the use of realistic research for an evaluation in education seemed to be a new approach and therefore needed careful consideration.

This Chapter begins with a detailed reflection on the underlying philosophy of realism which has its own paradigm that combines and develops the principles of positivism and constructivism. The purpose is to justify the use of realism by comparing it with other philosophies that underpin research. Pawson and Tilley (1997) have developed a model of realistic evaluation for use with social programmes and this is described and developed for use with the First Schools Project. The final section describes the plan for the research study.

3.2 Realism

This section aims to show how realism offers promise for social science and theory since it provides an alternative to philosophical and methodological positions, such as positivism or interpretivism, which have been found wanting (Sayer, 2000). Thus, the section should demonstrate that realism challenges both the law-finding science based on natural science methodology and also the subjectivism of the interpretivist approach and thus provides a third way between empiricism and relativism. The aim is also to discuss how, as noted by Sayer (2000), for realists, social science is neither nomothetic (that is, law-seeking) nor idiographic (concerned with documenting the unique). Moreover, realism is able to embrace the concepts of reliable knowledge and scientific progress as well as to encompass ideas of complexity and change in social programmes.

3.2.i Realism and this study

As a preamble to the detailed examination of realism, it is important to take into account certain factors that are particular to this study. The first consideration is the form of realism that will be discussed since, according to Scott (2000), realism comes in variants including scientific realism, critical realism, subtle realism and transcendental realism. For the purposes of this study, the variant 'critical realism' is probably the most apposite since this offers a rationale for a critical social science: that is, one that questions the social practices that it studies. Roy Bhaskar (1986, cited in Robson, 2002), the influential realist philosopher, uses this term and argues that social science can be an emancipator. The study of the First Schools Project is about working with the actors (the SLTs) to produce an evaluation of their practice; hence they are carrying out a critical review of a social theory (the First Schools Project). The study is emancipatory as it provides the SLTs with the rationale to effect any necessary change. However, like Robson (2002), I have chosen to use just the term ' realism' for reasons of simplicity.

The second factor which is peculiar to this study is that I have been able to find no evidence that a realistic evaluation had been used to any great extent in the social

sciences in general and in education in particular. Matthews (2003) does suggest that realistic methods could be used to evaluate the work of educational psychologists (and there is work in process by doctorate EP students using realistic evaluation). Also, Timmins and Miller (2007) discuss how realistic evaluation might be used to assess innovative practice in education. More generally, Blaikie (2000) comments on the dearth of social research that has explicitly used the logic of enquiry based in the philosophy of realism. In the field of social care, Pawson (2003a) carried out an extensive review of research methodology and concluded that the realistic approach is virtually absent from studies. Houston (2001) criticises social constructivism and suggests critical realism as a meta-theory for the practice of social work and he does offer some examples. Where realism has been used in social science it seems to have been largely confined to the field of crime prevention (Pawson, 2002c, Tilley, 1993, are two examples). As noted by Timmins and Miller (2007), social programmes that are evaluated in crime prevention (e.g. placing CCTV in car parks, Tilley, 1993) are less complex than social programmes in education. As it seems that a realistic evaluation in education is a new venture, it is necessary to develop a new approach (but following the template of Pawson and Tilley's, 1997, model of realistic evaluation) within the realistic paradigm that is suitable for educational research.

What follows in this section aims to demonstrate how a realistic evaluation is appropriate for this research study. It begins with the principles of Realism as they pertain to the study of the First Schools Project. The ontology and epistemology of Realism will be compared to those of both positivist and anti-positivist philosophies. Central to realistic research is the nature of causation and this will be analysed in an attempt to justify its use with the evaluation of the First Schools Project. The final part of this section discusses how ranges of methods are open to the realistic researcher.

The justification for the use of realism is represented diagrammatically in Table 3.1. This attempts to contrast various dimensions (e.g. ontology) across the three different paradigms of positivism, realism and interpretivism. For the third column of the table, I followed Cohen, Manion and Morrison (2000) and used 'interpretivism' as a generic term to include different approaches (such as

phenomenology, relativism and constructivism) that reject the positivist belief that human behaviour is governed by general universal laws and, instead, hold that the social world can only be understood from the standpoint of individuals who are part of the ongoing action being investigated. The three columns give the impression of three discrete paradigms whereas, in fact, realism incorporates aspects of positivism and interpretivism within its underlying philosophy.

Table 3.1: A comparison of conceptions of social reality

	Conceptions of Social Reality		
Dimensions of comparison	**Positivism**	**Realism**	**Interpretivism**
Ontology and Epistemology	The world exists and is knowable as it really is. This conflates ontology and epistemology and ignores epistemology	Realism holds that reality exists independent of social actors and observers There is a distinction between: • the intransitive dimension (the objects of science) *and* • the transitive dimension (the understanding of the intransitive dimension, including theories of science) Because our understanding of the world may change this does not mean that the world itself changes	There is no objective reality since reality can only be constructed through a conceptual system. This conflates ontology and epistemology and ignores ontology
	Ontology is flat since what is observed is all that exists	*Ontology* is stratified and the world is characterised by emergence	
The role of social science	Discovering universal laws of human behaviour and of society	Inventing theories to explain the real world and testing these theories by rational criteria	Discovering how different people interpret the world in which they live
Research	Experimental or quasi-experimental validation of theory	Explanation is concerned with how Mechanisms produce events and in what circumstances	The search for meaningful relationships and the discovery of their consequences for action
Human behaviour	Social Scientist is an observer of social reality. Respondents are treated as objects, informants or producers of data	Observable human behaviour is characterised by underlying intention and choice. Understanding this is part of the research process	The importance of viewing the meaning of experience and behaviour in its full complexity is stressed
Research Methods	Quantitative methods	Mixed methods. The researcher chooses the method which best fits the investigation	Qualitative methods

(Partly after Cohen et al, 2000 but also using Robson, 2002 and Blaikie,2000)

3.2.ii Ontology, epistemology and the transitive and intransitive dimensions of knowledge

Ontology is the nature of our world and, whereas the positivist holds that the world exists in an objective form, for the interpretivist, the world exists only as we interpret it. Thus, our knowledge of the world (epistemology), for the positivist, exists independently from our thoughts but the interpretivist believes that the world exists only through our understanding of it. Realists (as noted by Sayer, 2000), however, make a distinction between the intransitive and transitive dimensions of knowledge. The objects of science form the intransitive dimension of science while the theories and discovery of science are part of its transitive dimension. The world itself, the intransitive dimension, remains the same even though the theories about it may change. So, when scientists changed their view (the transitive dimension) and decided that the sun was at the centre of the planetary system and not the earth, then the nature of the solar system (the intransitive dimension) did not change, only our understanding of it. Scott (2000) describes the relationship between our understanding and the intransitive dimension as changing knowledge of unchanging objects.

This differs from the principles of both phenomenology, which is that there are no objective, independent variables and of positivism, which is that what we see is the world as it is. Both of these philosophical traditions, in different ways, conflate ontology and epistemology. For the empiricist, our senses are cleansed of any preconceptions so, what is presented to them is the world as it is. This means that our knowing of the world is the same as what it is and epistemology (knowing) is bypassed. For an interpretivist, in contrast, epistemology is all there is since there is no distinction between thought and reality (Scott, 2000).

The realist's distinction between the transitive and intransitive dimension is easy to understand in the material world of the planetary system but is less easy to comprehend in a complex social system such as the First Schools Project. Social systems, as noted by Sayer (2000) are constructed by people and therefore cannot be said to exist independently of at least some knowledge but this is likely to be past knowledge. It is important to make the distinction between the knowledge of

those under study and the contemporary knowledge of the researcher. Sayer (2000) also remarks that, when researchers change their minds, this is unlikely to produce significant changes in the phenomena they are studying. Hence, although there is some interplay of ideas between the researcher and the object of their research, this does not mean that the subject-object distinctions collapse.

The realist's interpretation of the social world was important for me since, as one of the purposes of the research project was that the results from the evaluation could be used by other speech and language therapy services to inform their practice (see section 1.1.ii) I needed to be able to use the findings from the evaluation of the First Schools Project to inform other similar projects. I had considered using action research as the method seemed to suit the evaluation in many ways: it was democratic and collaborative and designed to improve professional practices in many different kinds of workplaces (McNiff, Lomax and Whitehead, 1996). However, as discussed by these authors, models of action research are based in an interpretive framework and are about developing, not an abstract theory, but one which is a guide to inquiry and action in present time. Because of the epistemology of interpretivism, there would be similar problems with any research based in its approach since methods largely result in knowledge that is personal, subjective and unique (Cohen et al 2000). In contrast, realistic research, by placing the social programmes in the intransitive dimension, is able to arrive at evidence that can have validity in another framework.

3.2.iii Stratification and Emergence

A second tenet of realism, and one which accommodates the complexity of social programmes, is that ontology is stratified. Realists see objects (whether they are physical like minerals or complex social systems) as characterised by structures and powers at different levels. Moreover, they believe that the world is characterised by 'emergence' (Sayer, 2000), which means that, when objects combine together, this gives rise to new phenomena that have properties which are irreducible to those of their constituents. An example from the physical world is the emergent properties of water which are quite different from those of its constituent parts, hydrogen and oxygen. In the same way, social phenomena (speech, for

example) emerge from biological and physical strata but conversation cannot be reduced to its physiological processes.

Stratification and emergence allow for understanding at different levels and hence contribute to the unravelling of complex programmes. In the First Schools Project, stratification can be demonstrated through one of its basic structures, that of the school visit. There are a number of elements that make up the school visit, including the level of experience of the SLT, the amount of time she spends in the school and the physical quality of the working environment, and the way that these elements combine will materially affect the impact of the school visit. For example, if an inexperienced SLT spent an hour in a school where there was nowhere quiet for her to work and she tried to do an individual assessment with a child, then the Outcome might be an ineffective school visit because she was unable to carry out the individual testing she had planned. But, if an experienced SLT was in a school for an hour where there was nowhere quiet for her to work, she might change what she did and, instead, observe a child in a classroom so that the Outcome was a school visit that was useful and purposeful. The First Schools Project is a distinctive but complex web of structures and elements and the nature of the project varies as these change and combine and it is this that makes its evaluation a challenge. However, stratification and emergence provide a strategy that enables the realistic researcher to acknowledge this complexity within the research design.

3.2.iv Causation

The interpretation of causation is, for Pawson and Tilley (1997), the distinctive feature of realism. Realism stresses the mechanics of explanation and attempts to show that the usage of such explanatory strategies can lead to a progressive body of scientific knowledge. This contrasts with the stance of the positivist for whom causation involves identifying a model of a regular succession of events and seeking putative social laws. The empiricist researcher seeks to gather data on regularities and repeated occurrences and to conclude that, because B follows A, then A causes B. Whereas for realists, the explanation of causation depends, not on the number of times we have observed a regularity, but on identifying causal Mechanisms and how they work and in what conditions they are activated.

Explanatory (or generative) causation can be illustrated through an example of a study of crime prevention cited in Pawson and Tilley (1997). The study showed that if, in a neighbourhood where there was a high rate of crime, valuable goods were marked with the householder's postcode, then a reduction in crime rates followed. The positivist might say that the postcode marking had caused the reduction in crime rate and would suggest that postcode marking leads to a reduction in crime rates. By contrast, Pawson and Tilley, as realists, wanted to know the reasons for the relationship between postcode marking and crime reduction and constructed realistic theories which might explain this. One theory was that thieves were deterred because, if post-marked goods were stolen, they could be recovered and the thief could be identified. An alternative theory was that the increased police presence in the neighbourhood, as they did the post-code marking, might be a restraint on thieves. In realistic research, the views of the stakeholders are seen as critical since they participated in the social programme and hence had an understanding of it. The researchers, therefore, had discussions with the residents (the stakeholders) and concluded that the reason for the reduction in crime rates had more to do with the increased police presence in the area than to do with the actual postcode marking. In an evaluation of a complex social programme, the realistic perspective on causation allows the researcher to identify how the programme is working and how it is failing.

Because realistic research is informed by explanatory causation, it is able to avoid some of the problems of using positivist designs with complex social programmes. As noted by Scott (2000), the positivist researcher seeks, ideally, to identify an unchanging causal power (for example, the chemical effects of penicillin are unvarying) and constant external conditions in which the causal power operates. Although this might be achieved in the closed system of laboratory conditions, outside, in the more open situation of complex social programmes, neither the causal power not the external conditions are constant. The First Schools Project involves individual human behaviour, relationships between individuals and the structural properties of the system and all of these can change across time. For example, individual therapists with different skills may leave or join the project, the relationship that an SLT has with a school may develop and changes in funding may lead to changes in the structure of the project. Moreover, the external

conditions of the First Schools Project – the schools, the education system, and the structure of the health service – also vary. So the constant conjunction of events that we think we have observed (for example, the First Schools Project leads to good Outcomes for children with language difficulties) may not be what it seems. It might be that only certain aspects of the First Schools Project such as the level of competence of the SLT or the regularity of the school visit that contribute to good language outcomes or the Outcomes might be facilitated by the Context (e.g. the organisation within the school) in which the project operates. In open systems, because two events occur in conjunction, we cannot say that object A causes event B unless we examine what aspects of A work and do not work and in what conditions A may or may not operate.

As traditional experimental methods are widely used in research in the health service (see Frederickson, 2002) I considered using them for the evaluation of the First Schools Project. The control of the external conditions, which positivist researchers seek, might have been achieved though a quasi-experimental design (Robson, 2002). As the First Schools Project was already running in the schools, I would have needed to identify matching schools where there was no SLT support in school but children received the traditional clinic based language support. It would then be necessary to compare the progress of children with language needs in those schools (the control group) with those in the First Schools Project schools (the experimental group) and if the schools were carefully matched then the effect of external conditions (e.g., the socio-economic status of the children) should be nullified. However, there would be many practical problems in matching the schools and the children since the variables for consideration would need to include the organisation of the schools, the levels of language needs of the children, their cognitive levels, their economic status and their parents' level of commitment and education. It would have been very difficult to achieve an acceptable match so that any differences between the experimental and control group could be attributed to the effect of the First Schools Project alone.

Moreover, even if it was possible to control the variables and the results indicated that the First Schools Project was associated with improved language skills, this would not necessarily mean that the former caused the latter (as can be seen in the

post-code marking study, discussed above). Realistic research methods seemed more appropriate for an intricate programme such as the First Schools Project since a realistic inquiry seeks, not only to establish regularities, but also to explain those regularities in terms of the conditions in which causal mechanisms produce outcomes. Realism offers an approach that is,

> "Sensitive to the local conditions of programme efficiency but then renders such observations into transferable lessons."
>
> Pawson (2002b)

3.2.v Understanding meaning in Social phenomena

As other researchers, the realist also accepts that causal powers can be material but also can be located in reasons and intentions. (For example the cause of marking a ballot paper with a cross is likely to be the voter's reasoning and beliefs about political parties). Understanding the meaning behind an action is, therefore, part of the realistic process. However, the realist shares with the interpretivist researcher the notion that it is very difficult to measure meaning and instead the realist researcher attempts to understand (or interpret) the meaning behind actions. Thus realistic research shares with interpretivism the notion that meaning is intrinsic to a social programme and should be accessed as part of the research process using appropriate methods.

This contrasts with the positivists who observe behaviour and sometimes do not question the intentions of the participants. In this view of science, human beings are 'subjects' and they are studied through the observation of their behaviour. Behaviourists, for example, use the methods of natural science and seek to eliminate any references to beliefs or purposes (Scott, 2000). Such an approach can lead to erroneous conclusions as illustrated in the example of crime prevention cited by Pawson and Tilley (1997) and discussed above. There the positivist researcher would have observed the postcode marking and the reduction in crime rates and would not have taken into account the intentions of the police officers or of the residents and the impact of their intentions on the intervention. Even when positivists do attempt to include intention, this is not always successful since beliefs have to be interpreted as a variable and participants may not always share the same understanding of the variable. For example, if a researcher, carrying out a census, asks participants to assign themselves to one category from a choice of

white, black or mixed race, the participants may refuse to accept such a system of categorisation which they see as racist and/or they may feel that they do not fit into any of these categories. It is very difficult to reduce the intentional aspect of human behaviour to variables that can be observed and measured.

3.2.vi The use of mixed methods

The methods used in realistic research are not constrained since the choice of method is defined by the object of study and what is to be learnt about it. Realistic research embraces both methods traditionally associated with a positivist experimental approach and those usually employed by constructivist researchers. Pawson and Tilley (1997) state clearly that the most important factor for the researcher in selecting the method is that it fits the theory under question. They claim that a realistic evaluation can use quantitative or qualitative data, it can be historical or contemporaneous, use small or large samples and so forth. Other non-realist researchers also support the use of mixed methods in the evaluation of complex social programmes. Greene, Lehn and Goodyear (2001), for example, note that complex and dynamic social phenomena can best be studied through the multiple perspectives of diverse methods, rather than through the limited lens of just one.

Pawson and Tilley (1997) note that, in a realistic inquiry, the use of a particular data collection strategy does not commit the researcher to its philosophical framework and, hence, the researcher can use empiricist methods but that does not mean that it should be interpreted within the positivist philosophy. My interpretation of realism's pluralist empirical inquiry, therefore, is that, although the researcher uses different instruments and different methods, this does not mean that he uses different methodologies and by implication, different paradigms. This is not a radical practice. In positivist research, for example, Blaikie (2000) notes that researchers use both qualitative and quantitative methods yet interpret them both within the positivist paradigm. It seems that I needed to choose the right methods for the different aspects of my research study but the interpretation of the results had to be within the ontological and epistemological assumptions of realistic research.

3.2.vii A realistic study

The discussion so far in this chapter has been an attempt to show that the principles underlying realism combine aspects of the philosophy of both positivism and interpretivism and thus seem to provide the basis for the most appropriate research methodology for the evaluation of the First Schools Project. Realism sees social phenomena as existing in the objective world (Miles and Huberman, 1994) and allows for the exploration of their complexity through the notions of stratification and emergence. The interpretation of causation means that the researcher has to try to understand and explain how Outcomes are generated. The following sections of this chapter aim to develop a practical method for interpreting realism for use in and evaluation of the First Schools Project.

3.3 Pawson and Tilley Model of Realistic Evaluation and the First Schools Project

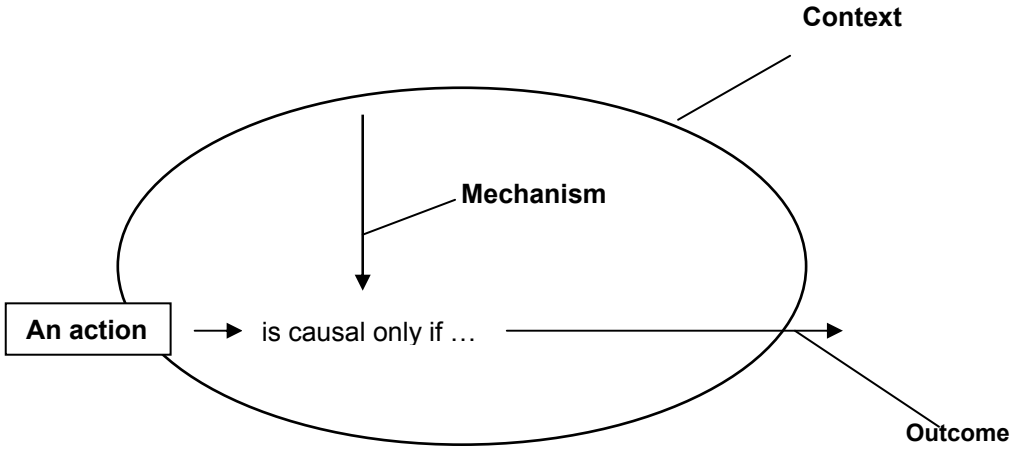
Pawson and Tilley's (1997) describe a model of realistic evaluation but the examples of how the model has been used generally come from the field of crime prevention. However, the authors do not suggest that their model should be prescriptive and instead offer it as a practical system for following the principles of realistic research when carrying out an evaluation. It seemed, therefore, that the model might be adapted for use in educational research. This section attempts to describe the model and how it was developed for use with the evaluation of the First Schools Project.

3.3.i The model

Pawson and Tilley give clear directions about the principles of realistic research. Generative causation is about Outcomes being explained by the action of particular Mechanisms in particular Contexts (Pawson and Tilley, 1997). This is represented diagrammatically (see figure 3.1) and can be explained with an example from chemistry. If the 'action' in the diagram is lighting gunpowder then the Mechanism might be the flame and the Outcome, the explosion. However, the occurrence of the explosion will depend upon the Context (for example, the chemical composition of the gunpowder and the conditions under which it has been stored). Realistic

research is not about observing regularities between an action and an Outcome (here the lighting of the gunpowder and an explosion) but rather about seeking an explanation for that Outcome through the Context. So, in the gunpowder example, the realistic researcher would say that the flame (the Mechanism) will ignite the gunpowder (the Outcome) if the gunpowder is of good quality and dry (the Context). My interpretations of these components of a realistic study, the Mechanisms, Contexts and Outcomes, are further developed, below, within the structure of the First Schools Project.

Figure 3.1: Generative Causation



…….. its Outcome is triggered by Mechanism acting in Context

(Pawson and Tilley, 1997, p58)

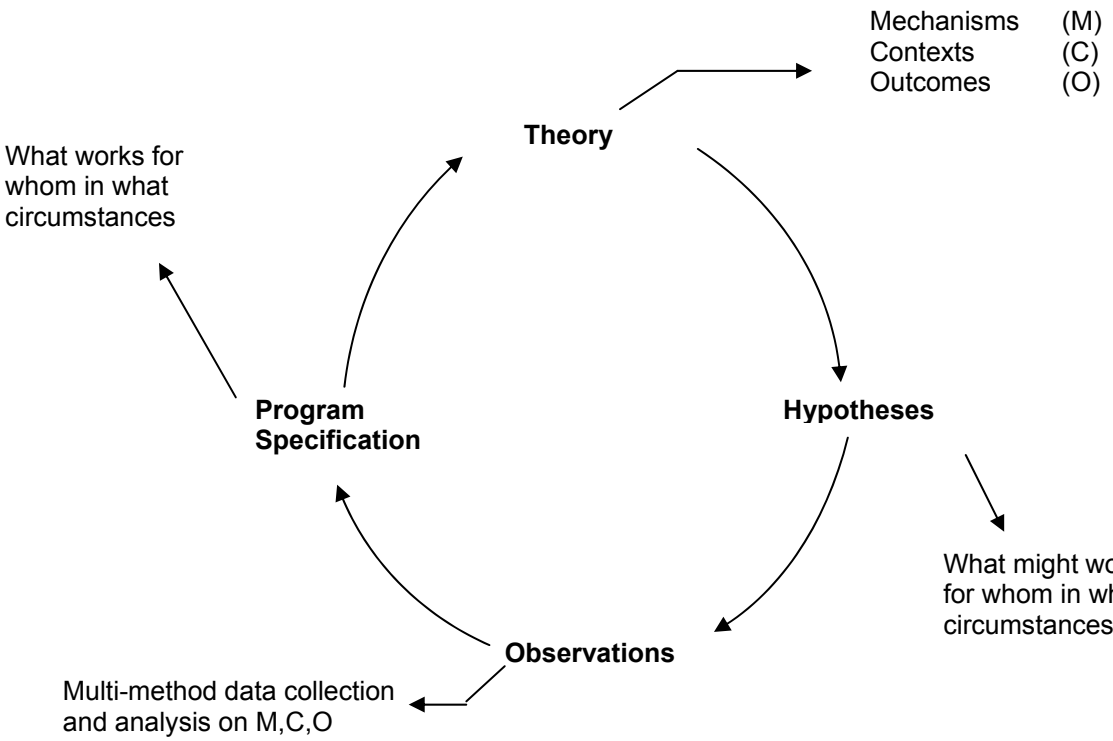
3.3.ii The research cycle

Pawson and Tilley (1997) aim to set their model within the traditional principles of research in the natural sciences. Thus, theories are framed in abstract terms and are about explaining regularities. Hypotheses are generated from theories and are tested through observations. It is in the way that the theories (and hypotheses) are constituted which distinguishes a realist design for,

> "Theories must be framed in terms of propositions about how Mechanisms are fired in Contexts to produce Outcomes. All else in the circumnavigation of inquiry follows from this."
>
> (Pawson and Tilley, 1997, p 85)

However, the way that conclusions are drawn, following the testing of the hypotheses, differs between traditional research and realistic research. The former is concerned with making generalisations and suggesting laws, whereas the realistic researcher is more circumspect in her conclusions and is concerned with 'specification', i.e., what works for whom in what circumstances. So, the realistic evaluation of the First Schools Project will not be about whether the project as a whole 'works' but rather, which Mechanisms of the First Schools Project, fired in certain Contexts produce which outcomes. Pawson and Tilley (1997) represent the research cycle diagrammatically (see figure 3.2).

Figure 3.2: The realistic evaluation cycle



(Pawson and Tilley, 1997, p85)

This model can be used as a basis for the research cycle of the evaluation of First Schools Project. It will be remembered that the research question was,

> Can the stakeholders provide evidence that the model of the First Schools Project is an effective way for SLTs and school staff to

> collaborate and does the model lead to good language and educational outcomes for children with language needs?

In order for this to become the realistic theory at the top of the research cycle (as represented in figure 3.2) it needs to be written in terms of Mechanisms, Context and Outcomes. Thus it becomes:

> Evidence provided by the stakeholders suggests in what circumstances (C) the First Schools Project (M) can be an effective way for SLTs and school staff to collaborate and for there to be good language and educational outcomes for children with language needs (O)

There will be one change to this model and that is in the nomenclature of the research cycle. Pawson and Tilley (1997) often use the term 'theory' for both the overall theory and for the hypotheses and seems that the term theory can be used for both the initial theory (in this study, the re-interpretation of the research question) and for the subsequent ideas which develop through the layers of the programme. For this reason, I will also use only the term 'theory'. In order to avoid confusion, the initial underlying theory will be called the 'underpinning theory' at all times. The theories which develop through the layers of the programme (i.e. the hypotheses in Figure 3.2) will be labelled the 'the Theories of the Inquiry'.

3.3.iii The evaluation of the First Schools Project as a realistic study

The remaining part of this chapter is a description of how I used the philosophy of realism and Pawson and Tilley's (1997) model to develop a plan for the research study of the evaluation of the First Schools Project. However, developing the plan was a complex task as realistic research is a multifaceted undertaking.

> "Unlike some of the natural sciences, we cannot isolate out components and examine them under controlled conditions. We therefore have to rely on abstraction and careful conceptualization, on attempting to abstract out the various components or influences in our heads, and only when we have done this and considered how they combine and interact can we expect to return to the concrete, many-sided object and make sense of it."
>
> (Sayer, 2000, p19)

The outline of the research plan can be summarised as follows.

1. The first undertaking was to understand and conceptualise the First Schools Project and then to abstract and define the object of study. This involved an appreciation of why the programme was developed and the circumstances in which it was being carried out. From this and from the use of information from previous relevant studies I was able to identify potential Contexts, Mechanisms and Outcomes.
2. I consulted with the participants in the project and again used information from literature in order to arrive at the Theories of the Inquiry that might explain the regularities.
3. Part I of the research study was concerned with understanding how the project was working and with identifying any regularities. Data was therefore collected with the aim of identifying connections between Mechanisms and Outcomes of the First Schools Project.
4. Part II of the research study research task was an attempt to explain how and why these regularities occurred. The aim was to explore both how the social world of the First Schools Project was stratified and the emergent powers. However, the focus of the inquiry was on the way that causal Mechanisms depended on the constraining and enabling effects of Context. As realists also recognise that there is a need to interpret meaningful actions, understanding the intentions of the participants was integral to understanding the project.
5. In the light of the research, the theories were reviewed and this led to new and modified theories.

Stages 1 and 2 in this plan are discussed in the rest of section 3.3. Section 3.4 describes the design and planning for the methods of data collection and review of the theories and, therefore, covers stages 3-5 of the research plan.

3.3.iv Understanding the First Schools Project

The first task for the researcher was to methodically analyse the First Schools Project in order to identify Contexts, Mechanisms and Outcomes

3.3.iv.aPrécis of the First Schools Project

Table 3.2: The intended process of the First Schools Project

Step 1 →	*Step 2* →	*Step 3* →	*Step 4* →
Problem Identification	*Consultation*	*The Project*	*Expected Results*

▪ High numbers of children were not attending appointments because their parents were unable to take them to the clinic
▪ Poor liaison between SLTs and schools
▪ No shared understanding of children's language difficulties
▪ Increasing numbers of children with language difficulties provided an impetus to meet their needs in a more creative ways
	▪ The SLTs held meetings with school staff in order to gather information about the kind of service they wanted.
	▪ National guidelines (including, subsequently, The Report of the Working Group, DfEE, 2000) suggested the need for collaborative working with education services
	▪ Professional guidelines (Communicating Quality, RCSLT 1996) recommended a service that provided a high degree of shared knowledge, skills and expertise amongst all those involved with the child
	▪ Research evidence, collected by the SLTs, suggested that children with speech and language difficulties made better progress if there was collaborative working between SLTs and schools
		▪ Based in a philosophy of collaborative working
		▪ Each school has a 'named therapist' who acts as the prime link between the speech and language therapy service and the school.
		▪ She visits the school regularly and carries out work with children with language difficulties in the school
		▪ There is an open referral system but children who are referred by the school are first discussed with the named therapist
		▪ Collaborative assessments involve the sharing of information between different professionals and parents.
		▪ Language targets are set as part of the child's whole educational provision.
		▪ The responsibility for the child's difficulties is shared between the school and the SLT with a clear allocation of tasks for all involved
		▪ Training and support is provided as appropriate
		▪ Children who have speech difficulties only continue to receive a clinic-based service
			▪ Regular liaison visits by the speech and language therapist
			▪ The school staff will have an understanding of language difficulties
			▪ School staff will be able to modify the learning environment to meet the needs of children with language difficulties
			▪ SLTs will have an understanding of how schools work and which interventions are practical
			▪ Liaison between the SLTs and other professionals and a sharing of information
			▪ Joint target-setting for the child involving different professionals and the parents
			▪ Agreed strategies for helping the child which are an integral part of his/her curriculum
			▪ Shared responsibility between the school, the SLT and the parents for meeting the language needs of the child
			▪ The involvement of parents at all stages
			▪ The child will make good progress in
			  ▪ language skills
			  ▪ literacy skills
			  ▪ social skills
			  ▪ behaviour

Pawson (2002c) offers a useful process for analysing how social programmes develop. The technique involves identifying the most salient features of each stage and making a synopsis of the programme's development. The aim is to give a clear picture of the path which the programme is expected to follow. Using Pawson's suggestions, I have created an outline of how the First Schools Project

was constructed (see Table 3.2). The First School Project was described in Section 1.1.i and many of the issues for change listed under 'Consultation', column two of Table 3.2, are discussed in Chapter 2.

3.3.iv.bMechanisms, Contexts and Outcomes for the First Schools Project

The model of realistic evaluation offered by Pawson and Tilley (1997) suggests that, if the researcher is to explain how a programme is working or failing, then it is necessary first to identify the Mechanisms, Contexts and Outcomes of the programme and the authors give basic definitions. I looked for further guidance and noted that, when discussing the complexity of realistic theories Pawson (2003) urges the researcher to focus on what he or she considers vital to the effectiveness of the project. I realised that by following such advice, I would be relying on my own judgement so I took care to ensure that there were good reasons underpinning the selection of Mechanisms, Contexts and Outcomes (The list of Mechanisms for the First Schools Project is included in Table 3.3)

I interpreted the description offered by Pawson and Tilley (1997) to mean that Mechanisms are the structures of a social programme. At a seminar, Pawson (2006) gave two questions to help to identify Mechanisms.

> "What is it about the programme that brings about change? What resources and reasons does it offer which may influence behaviour?"
> (Pawson, 2006)

In order to identify the structures of the First Schools Project, I therefore used, primarily, the booklet which described how the First School Project was set up and how it operated (Worcestershire SLT, 2002) but I also used the synopsis of the project (Table 3.2), discussions with the SLTs and information from earlier research studies (discussed in Chapter 2). Each Mechanism reflected information from all of these sources. So the third Mechanism in Table 3.3, for example, comes directly from the booklet and from the discussions with the SLTs but is also an interpretation of consequences of training and the effect of commitment from participants in collaborative working noted in Chapter 2 (sections 2.4.iv.b and 2.4.iv.e). I then selected those Mechanisms which I saw as most important to the project.

The term ‘Context’ refers to more than the geographical location of the project. Researchers need to take into account the prior set of social rules, norms, values and relationships, as well as existing levels of knowledge and understanding which all set limits on the programme efficiency (Pawson and Tilley, 1997). Contexts also operate at different levels. In order to select the Contexts, I again took into account, the booklet, the synopsis, the discussions I had had with the SLTs, but the literature review was the primary sources as it seemed important to consider Contexts that had be previously identified. Therefore, I considered all of the facilitators and barriers to collaboration discussed in section 2.4 as well as issues that had been identified from the models of collaborative working (see section 2.5) to be Contexts of the First Schools Project. Using all of this information, I chose those Contexts (see Table 3.3) that might be considered to be the most important social constraints on the First Schools Project.

Selecting the Outcomes was, in some ways, the most puzzling task because Outcomes can be achieved in the process of the social programme and become Contexts. Thus, if SLTs visit schools and talk to teachers then the Outcome might be a sharing of expertise between school staff and SLTs (the first Outcome listed in Table 3.3). However, shared expertise is also a Context. I decided to list the Outcomes in terms of the Project and in terms of the Child and, when selecting the latter, I used the information on the implications for children with language needs that had been identified in the literature review (see section 2.6). However, it should be noted that many of the Outcomes can also be Contexts and even Mechanisms.

I have listed the selected Contexts, Mechanisms and Outcomes for the First Schools Project in Table 3.3. I have also tried to represent how they are stratified and have structures and powers at different levels. Thus the main structures appear in italics and below most of the main items are listed some of their elements in bullet points. Some of the elements are then further subdivided. These elements can only be seen to be representational since there are many ways that each Context, Mechanism and Outcome can be analysed.

Table 3.3: Mechanisms, Contexts and Outcomes

Contexts	Mechanisms	Outcomes
DOH and DfEE initiative. Report of the Working party (2000) ▪ Communication is fundamental to learning ▪ The need for joint training between school staff and SLTs ▪ Emphasis on joint working ▪ Some Standards Fund money was available but there was no long-term funding *Guidelines from the Royal College of Speech and Language Therapists (RCSLT, 1996) recommend collaborative working with educational professionals.* *The medical model remains. Some education professionals believe that SLTs have the responsibility of 'curing' speech and language difficulties* *The school* ▪ The beliefs of the senior management team ▪ The whole school policy ▪ Whether school staff see the development of language skills as important in raising levels of attainment in the school ▪ Issues of time o Time for consultation with the SLT o Time for planning for school staff o Time allocated for either the teacher or the TA to carry out language programmes ▪ Training for school staff o Training for the whole staff o Training for TAs o Training for the classteacher o The amount of training can vary from one session to an accredited course ▪ Resources can be allocated by schools in different ways to meet the language needs of children o Teacher time to work with children o TA time to work with children o The purchase of books and programmes	*The SLTs' belief that responsibility for addressing the child's language needs is shared between the SLT, the school and the parents* *The SLTs have positive beliefs about working in schools* ▪ It facilitates collaborative practice ▪ Language skills are best developed in a meaningful environment ▪ SLTs should be involved in addressing a child's social and educational needs ▪ Children who do not attend clinics are able to access the service ▪ It is a way of empowering others ▪ Parents are provided with consistent information *Regular visits by the 'named therapist* ▪ The therapists level of training in working in schools ▪ The attitude and confidence of the therapist about working in schools ▪ The level of confidence of the SLT in sharing her professional expertise and allowing both education professionals and parents to share with the SLT the responsibility for the child's language programme ▪ The frequency and the length of time of the meetings ▪ The relationship between the therapist and the school staff *The referral* ▪ Children for referral are first discussed with the SLT ▪ The school uses the referral form *Assessment by the SLT* ▪ The quality of the classroom observation carried out by the SLT ▪ The information available from the teacher ▪ A quiet space for the SLT to work individually with the child ▪ The information supplied by the parent ▪ Information from other professionals (e.g. EPs, specialist teachers, TAs)	*Shared responsibility between SLTs. education staff and parents for meeting children's language needs* ▪ SLTs share their expertise with school staff and parents ▪ Teachers and parents share with SLTs the responsibility for meeting the language needs of the child *Collaborative working between SLTs, education professionals and parents* ▪ Parents and professionals work together and see the value of collaborative working ▪ Professionals and parents work out a method of regular communication between each other (e.g. telephone calls, emails, meetings) ▪ The child's progress is reviewed regularly by both professionals and parents in a collaborative way *SLTs have an understanding of education issues* ▪ Through professional development ▪ Through the experience of working in schools *An understanding of how children's language needs can be met in school* ▪ SLTs appreciate the competing pressures on teachers and develop ways of making language programmes a usable part of the curriculum ▪ Help for Teachers and TAs in understanding language needs *The school has an environment which allows the SLT to work effectively* ▪ SLTs are welcome in the classroom to observe children ▪ There is a quiet room for the SLT when she needs it. ▪ Parents are invited in to meet the SLT and are made welcome ▪ The senior management team is supportive of collaborative working

Context	Mechanism	Outcomes
The classroom has elements which contribute to the overall environment of the child with language difficulties ▪ The attitude of the teacher ▪ The teacher's level of expertise in language difficulties ▪ The amount of TA support ▪ The TAs level of training ▪ The character of the children in the class ▪ The age of the children ▪ Pressures from e.g. Ofsted, the curriculum or SATs	*Target Setting and Strategies set jointly by the SLT, the teacher, other professionals and the parents* ▪ The SLT has the time and skills for collaborative working ▪ The SLT's understanding of the curriculum ▪ The ability of the SLT to explain language targets and strategies so that the teacher can understand them as part of the education curriculum *SLTs offer training to school staff, often this is with a specialist teacher from the Learning Support Team* ▪ The quality of the training materials ▪ The ability of the trainers – both of the SLTs and the teachers. ▪ The amount of time given to training ▪ The level of the training *SLTs offer training to parents* ▪ The commitment of the SLT ▪ The SLT's ability to work with parents and deliver training ▪ The length of the training ▪ The level of the training *SLTs meet parents in school* ▪ The SLT's skill in working with parents. They might feel uncomfortable about being in school or that they may not feel welcome. ▪ The SLT's belief about shared responsibility and her skills in helping parents to understand about their responsibilities ▪ The SLT's skills in helping parents to understand their role in helping their child to develop language skills	*Practice by teachers and TAs that reflects their understanding of the needs of children with language difficulties* ▪ Teachers are able to accommodate the needs of children with language difficulties within their classroom environment ▪ Teachers are able to implement language programmes within the curriculum. Teachers are able to include social skills programmes within the curriculum ▪ Teachers are able to use behaviour management programmes which are appropriate for children with language difficulties ▪ TAs are able to support teachers in meeting the needs of children with language difficulties *Children with language difficulties have made progress in language, literacy, social and behavioural skills* ▪ Language skills can improve in a variety of ways o Children can use language for a greater variety of purposes (improved pragmatics) o They can understand more and make better use of syntax o Their vocabulary can increase ▪ Literacy skills can improve because of a child's better use of language o More able to read text o An increased understanding of text o More able to use phonics o Sequencing skills improve o Increased vocabulary ▪ A child's social skills can also develop in a variety of ways o They can use language for social interaction and for repairing conversations o They have a better understanding of social situations (e.g. the meaning of facial expressions)

<u>The Mechanisms</u> come from the structure of the First Schools Project. Above is a list of the most important Mechanisms with some of the layering which constitutes the Mechanism.
<u>The Context</u> is the web of social norms in which the Mechanisms operate. Again, the Contexts are complex so only some of the layers are shown
<u>The Outcomes</u> are the results of Mechanisms acting in Context. Again, they are complex and only some of the layering is shown

However, although the Contexts, Mechanism and Outcomes appear in 3 distinct columns, it should be noted that there is fluidity in where items (e.g. training between school staff and SLTs) are categorised according to the construction of the realistic theory.

3.3.v Developing the Theories of the Inquiry

A basic tenet of realistic research (discussed in section 3.2.iv) is "to explain interesting, puzzling, socially significant regularities" (Pawson and Tilley, 1997, p71). This does suggest that first the regularities need to be established and then the Theories of the Inquiry should be generated to explain them but this is not so in all of the research studies used to illustrate the model of realistic evaluation (Pawson and Tilley, 1997). For the First Schools Project, although there was information from the literature review which might indicate links between Mechanisms and Outcomes, there was no specific data making such links (e.g. the First Schools Project leads to improved language outcomes) on the project. Hence, I decided to identify the Theories of the Inquiry and then establishing the regularities would be part of the data collection that would contribute to an assessment of the appropriateness of the theories.

Earlier (section 3.3.ii) I had reinterpreted the research question as the underpinning theory at the top of the research cycle (as shown in Figure 3.2).

> Evidence provided by the stakeholders suggests in what circumstances (C) the First Schools Project (M) can be an effective way for SLTs and school staff to collaborate and for there to be good language and educational outcomes for children with language needs (O)

Realism assumes that each time a Mechanism operates it can meet with success or failure depending on the Context in which it operates. It is the task of the researcher to analyse the working of the programme and to discover the Contexts that produce successful Outcomes and those that induce failure (Pawson, 2002b). In order to do this, I needed to identify the Theories of the Inquiry (the hypotheses in Figure 3.2) and in doing this I followed the recommendations of Pawson and Tilley (1997) and began with a period of theory development. I collected information from the literature (set out in Chapter 2). During some of the discussions that I had with the SLTs in order to set up the research project (see

section 1.1) we had considered what might be, what Pawson and Tilley (1997) call, the 'folk theories' of the project i.e. the SLTs theories on why the First Schools Project was successful. Further, I needed to understand what was happening in the First Schools Project and how I might explain this. The Theories of the Inquiry then needed to be framed in terms of Mechanisms fired in Context to produce Outcomes. Thus, Theory of the Inquiry 7, which was about training for school staff, was one of the Mechanisms of the First Schools Project and an issue that the SLTs had often discussed. Also, the theory was framed to reflect issues from the literature review: the importance of training noted as a facilitator of collaboration (see section 2.4.iv.b) and the discussion, in the Harrow project (see section 2.5.i), of how training helped teachers to be more confident in reinforcing speech and language therapy aims (Shaw et al, 1996).

For advice in selecting the Theories of the Inquiry, I returned again to Pawson (2003), who, when discussing the complexity of realistic theories, urges the researcher to focus on what he or she considers vital to the effectiveness of the project. Pawson notes the impossibility of questioning all of the theories that would occur during the period of theory development but urges the researcher to justify their choice of theory. I chose those realistic theories that seemed to reflect the most important aspects of the First Schools Project and then carefully constructed the Theories of the Inquiry to include the information from the literature review and the beliefs of the SLTs. The list of Theories of the Inquiry was long (see Table 3.4) but it seemed that, had the list been shorter, it would not have included all of the aspects of the research project that were set out in the original research question (the theory at the top in Figure 3.2).

Table 3.4: The Theories of the Inquiry

	Context		Mechanism		Outcome pattern
Theory of the Inquiry 1 (General project)	A school where there is a positive attitude to meeting the needs of children with language difficulties (e.g. it is part of the whole school policy, teachers and TAs have undertaken appropriate training and parents are made to feel welcome)	+	SLTs make regular visits to schools and share their expertise with school staff	=	Children make progress in all aspects of language development, in literacy skills, in social skills, and in behavioural skills
Theory of the Inquiry 2 (Greater equity of provision)	Schools which are prepared to take on the responsibility of involving parents and of completing the referral form	+	SLTs working in school	=	Greater equity of SLT provision since fewer children 'do not attend' because they are unable to attend clinic appointments
Theory of the Inquiry 3 (Collaboration with parents)	Schools that feel that parents should be part of their child's education	+	SLTs invite in parents and meet them in school	=	Parents are able to work collaboratively with SLTs and school staff in the assessment of their child's needs and in devising strategies to help their child
Theory of the Inquiry 4 (Time)	A school where there is time for the SLT to talk to school staff	+	The SLT makes regular visits to the school	=	Communication between the SLT and the school is facilitated and a good working relationship is established
Theory of the Inquiry 5 (Shared understanding)	A school where staff have a good understanding of the needs of children with language difficulties	+	SLTs work in school	=	▪ Shared expertise ▪ Shared understanding of roles so that SLTs are able to make practical recommendations and schools have a greater understanding of strategies they need to adopt in order to meet the needs of children with language difficulties ▪ More willingness by both school staff and SLTs to adopt the advice of the other
Theory of the Inquiry 6 (Outside initiatives)	Government initiatives and guidelines from the RCSLT	+	The SLTs' belief that responsibility for addressing the child's language difficulties is shared between the SLT, the school and the parents	=	SLTs share their expertise with school staff and initiate ways of collaborative working
Theory of the Inquiry 7 (Training)	A school where the staff want to learn and where they are able to put into practice what they have learnt	+	SLTs deliver training to school staff	=	School staff develop an understanding of the needs of children with language difficulties and are able to meet those needs

	Context		Mechanism		Outcome Pattern
Theory of the Inquiry 8 (School facilitates work of SLT)	A school that facilitates the SLT in her work	+	The SLT assesses the child in school. This includes: ▪ 0bservation in the classroom and on the playground, ▪ individual work with the child ▪ and discussions with the child's teachers and parents	=	The SLT has a good understanding of the child's difficulties. She will also have a good understanding of how the school works and will be able to make recommendations that are practical to implement
Theory of the Inquiry 9 (Implications for wider group of children with language Needs)	A school that understands the special educational needs of its children and wishes to raise the academic standards of all of its children	+	SLTs work in schools and assessments and programmes are shared with the schools staff. SLTs also carry out training for school staff	=	Teachers learn to identify children with language difficulties and are better able to meet their needs. There are increasing numbers of children who have significant language difficulties but these difficulties are not severe enough to warrant SLT intervention. Teachers become more able to meet the language needs of these children
Theory of the Inquiry 10 (Sharing responsibility)	Schools which no longer retain the medical model and reject the belief that it is the responsibility of the SLT to deal with language difficulties	+	SLTs work in schools and explain to staff and parents how the needs of children with language difficulties can be met	=	Shared responsibility between SLTs, parents and schools staff for meeting the needs of children with language difficulties
Theory of the Inquiry 11 (IEPs)	Schools that want effective IEPs for their children	+	SLTs carry out collaborative assessments of the child's language difficulties in school	=	SLTs discuss IEP targets and strategies for the IEP
Theory of the Inquiry 12 (Level of training of SLT)	SLTs have little training for working in schools and their confidence to do so is low	+	SLTs working in schools	=	Negative Outcomes for children's language development

3.4 The Research Study: The Collection of Evidence to Support, Modify or Invalidate the Theories of the Inquiry

Once I had selected the Theories of the Inquiry, the next stage was to design a research study that would support, invalidate or modify them. There would be two parts to this inquiry: the first would be about establishing regularities within the Theories of the Inquiry; the second stage would be an attempt to explain those regularities.

3.4.i Establishing regularities

The first task of the research study was to find out what was happening in the First Schools Project, whether the Mechanisms were operating and whether Outcomes occurred in conjunction with the Mechanisms. For example, I needed to know whether regular school visits were happening and whether they were associated with e.g. improved language outcomes. As noted above (Section 3.3.v), in many of the examples given by Pawson and Tilley (1997), in order to establish regularities realistic researchers used existing data, which has often been collected over a period of time. However, as such data did not exist for the First Schools Project, and therefore had to be collected, the scope and the amount of data that could be used would be more limited, since the amount of data would be governed by the time and resources of the researcher. None-the-less, I was anxious that the collection of data should be as wide as it was possible since there might be other regularities than those proposed in the list of Theories of the Inquiry in Table 3.4 and I therefore framed the research inquiry to cover the Mechanisms and Outcomes more broadly than just those in the Theories of the Inquiry. The aim was to discover which Mechanisms and Outcomes were occurring in the First School Project and which of those were happening in conjunction.

When designing a realistic inquiry, Pawson and Tilley (1997) suggest that the questions that the researcher needs to ask are: who might know the data needed and how should they be asked. The authors emphasise that the stakeholders hold the information on a social programme and it is the task of the researcher to identify which stakeholders have expertise in the area which is being investigated. At this stage in the research process, the information needed was on Mechanisms and Outcomes in the First Schools Project. The stakeholders with the most knowledge on this seemed to be the school staff since they had experience of how the Mechanisms had worked in schools and of the Outcomes which had followed. It would not be possible to collect information on some Mechanisms and Outcomes included in the Theories of the Inquiry (e.g. the training of SLTs) from the school staff and that data would need to be collected in other ways but they would be able

to give information on most of the Mechanisms and Outcomes of the First Schools Project.

My intention was to collect information on the Mechanisms and Outcomes that were occurring and then to analyse the data in order to suggest which were occurring together. However, the question of how the stakeholders might provide this information was constrained by the resources of the researcher and hence a cross-sectional study of the First Schools Project with a single data collection seemed the most appropriate and the most suitable instrument for such a study with school staff seemed to be a questionnaire. This is described in Chapter 4.

3.4.ii Explaining the regularities

Chapter 5 is concerned with explaining regularities between Mechanisms and Outcomes. The Theories of the Inquiry (Table 3.4) were constructed to suggest explanations for the regularities and hence there was a need for data that would support, invalidate or modify the Theories.

As discussed above, the first question of a realistic researcher is, who can give me this information? Since I needed a rich range of explanations of how Mechanisms might lead to Outcomes in certain Contexts in the First Schools Project, then a broad range of stakeholders was required. The most appropriate instrument for such data collection would be interviews since these would allow the researcher to structure the data collection on the Theories of the inquiry and also enable respondents to give full and open answers. I used information on individual children with differing outcomes, some successful interventions by the SLTs and some unsuccessful as a means both of purposeful sampling and of focussing the data collection.

3.4.iii Reviewing the Theories

The final task, after all of the data had been gathered, was to review the theories. The quantitative information from the schools questionnaire and the qualitative data from the interviews were considered together. Each theory of the inquiry was

examined and the relevant data used to support, modify or discount the theory. This is described in the Chapter 6, together with the conclusions from the theories. Chapter 7 is a critique of the use of a realistic evaluation in education. (A summary of the process of data collection appears in section 6.1)

3.5 Conclusion

By choosing to use a realistic evaluation I had fulfilled the purposes of the researcher and the SLTs which were described in chapter 1 (see sections 1.1.ii and 1.1.iii). The SLTs wanted a research study that would inform their practice: a realistic evaluation would account for the complexity of the First Schools Project and help them to understand how some Contexts will lead to successful Outcomes and some will induce failure.

My purposes included working with the SLTs on the research inquiry and this had been achieved in the design of the study since the SLTs were included at all stages. My second purpose was to obtain results that could be generalised to other SLT services. By using realistic research, I hoped to be able to identify regular successions of events, to explain those regularities and thus understand how the Mechanisms of the First Schools Project work and under what conditions. It should then be possible to say how the Mechanisms of the First Schools Project might work in other frameworks (for example for another speech and language therapy service) as long as the Context in which each Mechanism operated was one that would lead to a successful Outcome.

This chapter forms the core of the research study. Justifying the use of realistic research was a challenging task but a realistic method does seem to provide a tool with which to evaluate the First Schools Project. Moreover, as realistic evaluations do not seem to have been used previously in educational research, then the development of the Pawson and Tilley model for use in educational evaluations would seem to be pioneering. It is hoped, therefore, that this will make an important innovatory contribution to knowledge by setting a pattern which others might follow.

CHAPTER 4

RESEARCH STUDY PART 1:

IDENTIFYING ASPECTS OF REGULARITIES USING A QUESTIONNAIRE WITH SCHOOL STAFF

4.1 Introduction

In the previous chapter I described why I had chosen to use the principles of realistic research for the evaluation of the First Schools Project. It was noted that generative causation is fundamental to realistic research, which seeks to explain regularities. The first task in a realistic evaluation, therefore, is to identify those regularities and in this study this meant establishing that Mechanisms and Outcomes included in the theories of the inquiry (described in section 3.4.i) occur together. The next task (described in Chapter 5) will be to identify Contexts which might explain those regularities.

The intention was to collect information on Mechanisms and Outcomes that were happening and then to analyse the data to see which were occurring together. This chapter follows the directions set by Pawson and Tilley (1997) (see section (3.4.i) and discusses first why the schools staff were identified as the most appropriate stakeholders to give the information needed. The reasons for choosing a questionnaire as an instrument of data collection are then considered and its development and distribution are described. The data collected is analysed and summarised in the results section of the chapter and the discussion section considers the reliability and validity of the data.

4.2 The School Staff and the Schools

As discussed in chapter 3 the staff of the First Schools seemed the most appropriate stakeholders to give information on what was happening in the First Schools Project since they would have experience of the project. Also, they would have more comprehensive information on many aspects of the progress made by children with language needs. However, not all of the staff in the First Schools would have information on the project since many staff would not have a child in their class who was known to the SLT. Hence, it seemed more appropriate to focus the information gathering on staff known to have been involved with the SLTs and to ask the SENCo to co-ordinate the data collection.

There were only 36 First Schools in the project and of those, seven were not included: five because they were very small and had had almost no speech and language therapy involvement and two because major changes in staff meant that there was no-one who would have any experience of the First Schools Project. The reason for leaving out these schools was that I could see no practical way of involving them because the staff would not be able to comment with any knowledge or experience about the First Schools Project. The remaining number of schools was 29, so it was possible to distribute questionnaires to them all and sampling of the total population was unnecessary.

4.3 The Questionnaire

The most effective way to collect information on the Mechanisms and Outcomes would be to use, what Blaikie (2000) terms, a cross-sectional study which would capture a still picture of the First Schools Project at one point in time. The data for the regularities would be limited in that it would not be collected over time but it would be the best that could be done with resources available to the researcher. Moreover, the school staff would be able to give information that reflected their experience of the First Schools Project. Also, as the information needed was an indication of which Mechanisms and Outcomes were happening, then the data could be quantitative. In subsequent stages it would be more appropriate to use a research design that would give a far richer picture of the First Schools Project. In

realistic designs, the researcher chooses the method which best fits the object of study and what is to be learnt about it (Sayer, 2000). The choice of quantitative methods was made because it was an efficient way of collecting of data on Mechanisms and Outcomes and should furnish the information that was required.

Using a questionnaire as a tool for the data collection would be appropriate for the school staff, who were a group of well-educated professionals and able to read and answer questions with competence. The questionnaire could, therefore, be self-administered. This would be an efficient way of gathering information (Gillham, 2000) and the respondents would also have time to consider their answers and to look up any information that was needed (Burton, 2000b). Also, the questionnaires could be returned anonymously, so that respondents should feel free to give honest answers. However, the problem with such a design would be ensuring that all of the respondents had a shared understanding of the questions, but this could be ameliorated by a meeting, held prior to the distribution, at which the questionnaire was explained.

There were, also, other practical reasons for using a questionnaire. As I had a good understanding of the First Schools Project, I believed that I could manage the rigidity of a questionnaire's 'fixed design' (Robson, 2002) in which the variables to be included and exact procedures would need to be specified in advance. Much of the data that was needed could be construed as factual (e.g. how frequently did the SLT visit the school) and, as noted by Gorard (2001), questionnaires are better at gathering facts than opinions, attitudes or explanations. Also, I knew that I needed to collect information on which Mechanism and Outcomes were happening and which were occurring together so the data to be collected was well specified. Moreover, as long as the questions were carefully constructed, the data should be manageable and could be processed using a computer package.

Texts on the design of questionnaires warn about problems with motivating the respondents to answer the questions (e.g. Gillham, 2000). I had concerns, therefore, about the response rate if the questionnaires were just sent out in the post without any preliminary explanation. Moreover, although anecdotal evidence suggested that school staff were positive about working with SLTs, there were also

indications that staff were uncertain about the details of the First Schools Project. I was concerned that staff could not give accurate answers about a topic of which their understanding was limited. Associated with this was the problem of respondents' understanding of the purposes of the survey. Robson (2002) describes how people will give answers to questionnaires which owe more to some unknown mixture of politeness, boredom and a desire to be seen in a good light rather than to their true feelings, beliefs or behaviour. Pawson (1996) suggests that respondents should understand the overall conceptual structure of an investigation and that this should be taught to participants in an interview situation. Such interviews are part of the explanatory aspect of realistic research (this forms the content of chapter 5) and the principles do not necessarily apply to the process of the questionnaire, which is about establishing regularities. However, it did seem that, if the respondents understood the purposes which underpinned the questionnaire, this would enable them to answer the questions in a meaningful way and, thus, enhance the validity of the results. So, if a meeting was held with school staff then it would be possible to remind them about the First Schools Project, explain the research study and thus enable the respondents to understand the underlying rationale of the inquiry.

4.3.i Designing the questions

As noted by Robson, one of the major problems in using a questionnaire is the practical and tactical matter of its design since the questions need to be both purposeful and understandable. Robson (2002) warns that variables in a cross-sectional study should be selected because of their relevance to the research study and so the answers to the questions needed to meet the goals of the research. Also, so that the questionnaire could be self-administered, the questions had to be easily read and quick to answer without compromising the quality and accuracy of the information gathered. My intention was to use the questions to discover what was happening in the First Schools Project (the Mechanisms and Outcomes) and then to interrogate the data in order to identify which were happening in conjunction through correlations using the Statistical Package for Social Sciences (SPSS). (The questionnaire appears in full in Appendix 4.)

This part of the study focussed the data collection on information about all of the Mechanisms and Outcomes in all of the First Schools Project since there might be regularities, other than those included in the theories of the inquiry (see Table 3.4), which could be significant. In order to identify the variables that should be included (and hence the subjects for the questions) I used a comprehensive booklet on the First Schools Project, produced by the speech and language therapy service (Worcestershire SLT, 2002). This set out clearly how the First Schools Project was to be delivered in schools and from it I was able to deduce the variables that should be operating. In principle, each pertinent statement in the booklet needed to be turned into a question about a Mechanism. However, there was some limitation as the school staff would have no knowledge of some aspects of the First Schools Project (for example, the level of SLT training) so questions on these areas were not included. The relevant part of the booklet that was used was the policy section (see Appendix 3).

Robson (2002) notes that each question has, not only to be relevant to the purposes of the research, but also to gain the co-operation of the respondents and to elicit valid information. Following these criteria, a few statements could be converted to questions relatively easily. For example 7.4 in the booklet states 'Training/support will be provided as appropriate. Training may be provided in school on an informal basis. All schools are able to access training through the First Schools Project or the Language for Learning Project.' This was included in section 8 in the Questionnaire

> Which services has the speech and language therapy service given to your school?
>
> (You may tick more than one)
>
> General advice for teaching children with language needs ☐
> Training ☐
> Training from 'Language for Learning' ☐

More generally, the statements in the booklet needed some alteration. For example the statement "Joint target-setting ensures that … approaches/strategies are integrated across the child's full learning experience," is open to different

interpretations. The respondent might be unsure about the exact nature of 'approaches/strategies' and the term 'the child's full learning experience' is also vague but Burton (2000c) argues that a good question needs to mean the same to every respondent. Teachers who had worked with SLTs would be familiar with a child's language programmes and these include approaches (e.g. using visual prompts) and strategies (e.g. games for developing language skills). Similarly, the term curriculum is more specific than 'the child's full learning experience'. Thus, the question became 'We are able to include language programmes as an integral part of the curriculum' (see Appendix 4) since this was simple and easy to understand. However, as can be seen from this example, interpreting the phrases from the booklet into questions that were more specifically phrased involved a reinterpretation of ideas. In constructing the questions, the aim was to maintain the elements of the original statement while also supplying information relevant to the purposes of the research.

In a few cases statements were changed when they were turned into questions. As, for example, the statement 'Each school has a "named therapist" who acts as the prime link between the school and the speech and language therapy service,' provides an example. A question about whether the school had a named therapist would be redundant since respondents would have been told that each First School had a named therapist at the meeting at which the questionnaire was distributed. So, by inserting the question, 'Do you know the name of the 'named' speech and language therapist for your school?' I hoped to explore how familiar the respondents were with the named therapist. I was also aware that respondents might answer 'no' even if they had worked with the named therapist but just could not remember her name, however, I trusted to the common sense of the respondents and that they would not respond so literally.

Cohen et al (2000) warn against making questions simple that are then ambiguous. This is probably a valid criticism of the named therapist question but for this question, I felt that the simplicity was more important than the slight ambiguity inherent in the way that the question was framed. However, when constructing all of the questions, I was aware of the difficulty of ambiguity and tried to ensure that questions would be interpreted in the same way by all respondents (Burton, 2000c)

through the instructions at the beginning of the questionnaire and also through discussions at the meetings.

There was just one question that was open. (See Appendix 4, Questionnaire, section 2, Q4, "How do you decide which children you can refer to the speech and language therapist? Can you indicate the criteria you use?".) The aim here was to tease out the criteria that school used. But, by leaving the questions open, I hoped that this might allow school staff to show some insight into how they construed speech and language needs. The First Schools project was predicated on a belief of the SLTs that speech and language needs have a pervasive negative effect on all aspects of the child's development. The open question would give school staff the opportunity to express their own beliefs about how they understood speech and language needs. However, this did mean that the data from this question had to be processed in a different way.

The questions considered so far in this section have been mainly about Mechanisms although, as discussed in Chapter 3, there is some fluidity between Mechanisms, Contexts and Outcomes. For example, question 4 section 4, ("In our school targets and strategies for children with language difficulties are set jointly with the speech and language therapist." see Appendix 4), could be about a Mechanism or it could be about an Outcome. However, the questions that related more specifically to Outcomes from the First Schools Project were mostly within sections 5 and 6 of the questionnaire (see Appendix 4). For the subject matter of these questions, I used information from the literature review (Chapter 2), where I discussed how language needs could impact on a child's literacy, social and behavioural skills. So, it seemed that the First Schools Project should result in improved language, literacy, social and behavioural skills in children.

How to measure the progress made by the children was problematic. Firstly there was no uniform baseline information, so I would have to rely on information from individual schools. Results from objective measures such as reading tests or language tests might not be available in all schools and would, anyway, give only a narrow interpretation of a child's progress. For example, a word reading test could not be said to reflect all aspects of a child's progress in literacy. Moreover, such

objective tests do not exist for measuring progress in behavioural or social skills. I decided, therefore, to ask teachers to use their judgement on progress that children had made even though many writers (Gorard, 2001, for example) are sceptical about the quality of information from these kinds of responses. The advantage of such a method would be that it would use the teachers' full professional knowledge. So, they might record as 'good' a very small amount of progress in literacy that was made by a child who was supported by the First Schools Project but had very severe language needs whereas, such progress might not even be recorded on standardised tests. The disadvantage of the method was different teachers would use different standards to measure progress but this effect could be ameliorated by using a using a scale for the responses.

A Likert scale (Likert, 1932) was used for measuring the responses to Outcomes and also for some of the responses to questions about Mechanisms which involved the judgement of the respondents. In all cases, the questions were in the form of a statement and the respondents had four possible answers: strongly agree, agree, disagree or strongly disagree (see Appendix 4). The purpose of using these broad measures of agreement and disagreement was to reduce the effect of the different standards used by different teachers. For example, question 3 in section 5 is, "Children with speech and language difficulties have made good progress in their literacy skills" (see Appendix 4) and the child used in the response to the question is, again, the one discussed above who has made a very small amount of progress in literacy despite significant language needs. One teacher might see this as small progress, another as quite good but both are likely to use the classification 'agree' to the statement in question 5.3.

Thus, the questions were chosen to represent Mechanisms and Outcomes, of which school staff had knowledge, and this met the research objectives of this part of the study, which were to identify regularities within the First Schools Project. An attempt had been made to ensure the reliability of the data by selecting questions that were simple and any ambiguity was minimal (Burton, 2000c). Cohen et al (2000) suggest that the validity of questionnaire data lies in its accuracy. The way that the questions were framed made them easy to answer and there seemed no reason why the respondents would not answer accurately and honestly (for

example, exaggerated answers would not lead to extra funding). Burton (2000b) notes that if a self-administered questionnaire is to be effective then it has to be easy to use, so care was needed with the wording and with the arrangement of the questions. Following the principles of the Plain English Campaign (1995) the questions were all phrased positively and of simple grammatical construction as this makes them easier to read and to interpret. At the beginning of the questionnaire there were instructions about how the questions should be answered (see Appendix 4). The questions were in sections that followed the pattern of an SLT intervention and each section was laid out clearly. The spacing did make the questionnaire quite long (6 pages) but each page was quick to complete.

4.3.ii Piloting the questionnaire

Robson (2002) emphasises the importance of pilot studies in fixed design studies since, as the design is fixed, it has to be right before the data collection begins. It is important to establish that the questions are understandable and unambiguous and that the data relates to the research theory (Gillham, 2000,). However, as the total population of schools to be included was very small (29), it did not seem practical to exclude from the main study the two or three schools that would be needed in a pilot study. It was necessary to find another way of ensuring that the design of the questionnaire was right.

Instead, I used the skills of others who would be able to make useful contributions to the research design. EP colleagues read the questions and commented on their relevance to the purposes of the research. The SLTs read the questions to ensure that they reflected the nature of the First Schools Project. I also had extensive advice from the NHS research advisor on how to give clear instructions, on the layout of the questionnaire and on the structure of the questions. In this way I was able to ensure that the questions were readable, the instructions were clear, I had included the right questions and I would be able to analyse the results. By not having a pilot study, I was unable to collect information on the likely response rate. However, as the number of schools to be surveyed was small and there was close contact between the SLTs and the schools, it seemed likely that the response rate would be high.

4.3.iii Distributing the questionnaire

In order to distribute the questionnaires meetings were held for school staff. These provided opportunities to remind the school staff about the First Schools Project and to explain to them the purposes of the questionnaire. The aim was to teach the respondents about the overall concept of the investigation so that, when answering the questions, they could understand the research framework for the questionnaire. Also, through the meetings, the school staff might feel more included in the research study; they would gain a better understanding of the purposes of the questionnaire and, hopefully, be more motivated to respond to it. Further, the meeting would ensure that this part of the research study followed the principles of ethical research as set out by the British Psychological Society (BPS, 2007) in that all those who completed the questionnaire would do so willingly and with an understanding of the purposes behind it.

From the responses to the invitations to the meeting, almost all of the schools were expected to send at least one representative. There were two meetings, held in two consecutive weeks in May on different days of the week and at the first meeting, there were representatives from 12 schools. However, just before the time when the second meeting was to begin, there was a huge and prolonged storm. Hence attendance was far lower than expected and there were representatives from only 8 schools (so 9 schools did no attend either meeting). Generally, the SENCo attended but from some schools the headteacher, teaching assistants and/or classteachers also attended.

During the first part of the meeting the head of the speech and language therapy service described the First Schools Project (see Appendix 5). This might seem unnecessary as most of the staff were participating in the project on every working day. However, collaborative working between SLTs and school staff had been ongoing for years and it was necessary to remind the school staff about when this way of working had been adopted formally, about the reasons for the change and about the structure of the First Schools Project. I then talked about the research project and explained that it was motivated by governmental and professional

guidance which advocated closer working relationships between speech and language therapy services and education. I also discussed the meaning of 'collaboration'. I did not explain about realistic research and the need for explanations since this was not relevant at that time. I just explained that the research project was about how professionals can work more closely together.

At the end of the meeting, I directed the respondents, that when they were completing the questionnaire, they should think about work that had been done with a child (or children) who were known to the SLT and who had identified speech and language problems. What they would be considering would be the assessment of the child's speech and language needs, interventions to help the child and Outcomes for that child. The aim was for school staff to make judgements based on current and past cases which were part of the First Schools Project. However, section 6 was an exception as I wanted to explore whether the operations of the First Schools Project would lead, indirectly, to better Outcomes for children who had less severe language needs than those that warranted direct SLT involvement. When answering section 6, respondents were, therefore, directed to consider children with language needs that were less severe and hence they were not known to the speech and language therapy service. All of this guidance was also detailed in the instructions to the questionnaire (see Appendix 4).

The school representatives were given the questionnaire to take away and it was suggested that they (usually the SENCo) should discuss the responses with the whole school staff and the answers to the questions should reflect their views. There was no system within the questionnaire for checking whether or not the responses did reflect the views of the school staff or simply those of the SENCo but there were indications that the former happened. Many of the schools sent more than one representative to the meeting and all seemed anxious to have their views heard. Also, anecdotal evidence from SENCos suggested that they had consulted with other staff members. Questionnaires could be completed anonymously or respondents could give the name of the school. Completed forms could be sent through the post or given to the school SLT or EP. (Again all of this is included on the questionnaire, see Appendix 4.)

Questionnaires, therefore, were given out to representatives from the 20 schools that attended the meetings. I then telephoned each of the remaining schools and spoke to the SENCo. We discussed the First Schools Project and the purposes of the questionnaire. Hence, although no representative from the school had been able to participate in the meetings, respondents had been reminded about the First Schools Project and they also had a good understanding of the purposes underlying the research study. All respondents were assured that, whether or not they gave the name of their school, all data would be analysed anonymously.

4.4 Results from the Questionnaire

Returns were received from 26 schools and each questionnaire had been completed by the SENCo. This is a response rate of 90%. Although respondents could be anonymous all but one gave the name of the school. The questionnaire was divided into 8 sections. Questions in the first section were designed to elicit details about the school and about who was completing the questionnaire. Sections 2-8 were about different stages in an intervention when a SLT is working with a school. The responses to sections 2-8 were analysed using the SPSS software package. This gave percentages of responses to each question. The full text of the questionnaire and the analysis of the responses to each question are given in Appendix 4.

It should be noted that some schools failed to respond to certain questions. This was infrequent and the number of nil responses varied from 5 to 1 for a question. Where the percentage is not based on all 26 responses, the number of responses is indicated with *n*=. The following is a summary of the results to each section.

4.4.i Questionnaire, Section 2: Asking for the speech and language therapy service

- All but one of the respondents knew the name of their 'named' SLT.
- 18 (86%) of the schools that responded to the question (*n*= 21) had a liaison visit once a term or more frequently.
- 23 (92%) respondents found the referral form useful (*n*=25).

Question 4 of this section (which was about referral to the speech and language therapy service) was the only open-ended question and it was completed by all but 2 of the schools. I transcribed all of the responses (see Appendix 6) and the following is a summary. It seemed to me that respondents showed that they had a sophisticated understanding of language needs. Some used screening tests to identify language needs others noted children's difficulties with understanding and following instructions or problems with social and behavioural skills. Many of the schools did say that speech difficulties were a criterion for referring to a SLT but none offered this as the only category.

4.4.ii Questionnaire, Section 3: Assessing speech and language needs

- All 25 of the schools that responded found the assessment carried out by the SLT to be useful. (*n=25*)
- The table below shows the frequency with which other professionals are involved in an assessment.

Table 4.1: Number of schools who report that a professional, other than a SLT, has been involved with assessment of a child's speech and language needs

Professional	Frequency (and percentage) of involvement
SENCO	25 (96%)
Teaching assistant	23 (88%)
Classteacher	25 (96%)
Parent	22 (85%)
Educational psychologist	16 (61%)
LBSS teacher	22 (85%)
CSSS teacher	9 (31%)

(n=26 unless stated otherwise)

- All schools also felt that assessments carried out in school and by different professionals gave greater insight into a child's language needs.

- All schools found assessments done by SLTs in school more useful than those done in clinics.
- 20 (95%) schools (*n=21)* agreed that assessments carried out in clinics are more useful.

4.4.iii Questionnaire, Section 4: Intervention

- The table below shows the frequency with which professionals are involved in setting targets for children with speech and language needs.

Table 4.2: Number of schools who reported different professionals involved in setting targets for children who have speech and language needs

Professional	Frequency (and percentage) involvement
The SLT	25 (96%)
SENCo	24 (92%)
Teaching assistant	11 (42%)
Classteacher	25 (96%)
Parent	8 (31%)
Educational psychologist	11 (42%)
LBSS teacher (*n*=25)	16 (64%)
County specialist support service teacher	8 (31%)

(n=26 unless stated otherwise)

- Only 13 (56%) schools that responded agreed that strategies set by the SLT (without consultation) are relevant in the classroom. (*n*=23)
- 21 (81%) schools set targets jointly with the SLTs.
- All of the schools that responded agreed that targets and strategies set jointly with the SLT are relevant to the curriculum and practical in the classroom (*n*=25).
- 22 (85%) schools said that they could include language programmes as an integral part of the curriculum.
- All schools that responded found equipment and resources loaned by the SLT useful and they had been able to make use of them (*n*=25).

- The table below shows the frequency with which professionals are involved in suggesting strategies for children with speech and language needs.

Table 4.3: Number of schools who reported that different Professionals were involved in suggesting strategies for children who have speech and language needs

Professional	Frequency (and percentage) of involvement
SLT	26 (100%)
SENCo	23 (89%)
Teaching assistant	12 (46%)
Classteacher	20 (77%)
Parent	4 (15%)
Educational psychologist	13 (50%)
LBSS teacher	20 (77%)
CSSS teacher	10 (39%)

(n=26 unless stated otherwise)

4.4.iv Questionnaire, Section 5: Outcomes for children who had SLT involvement

- The table below shows outcomes for children who have the involvement of the SLT

Table 4.4: Outcomes for children who have had SLT involvement

Outcome	Number (and percentage) of schools that agreed or strongly agreed.
Good progress in language skills	25 (96%)
Good progress in social skills	23 (88%)
Good progress in literacy skills (*n*=25)	21 (84%)
Good progress in behaviour skills (*n*=22)	19 (86%)

(n=26 unless stated otherwise)

- 22 (85%) schools thought that collaborative working with the SLT had been a factor in any success in working with the children with speech and language needs

4.4.v Questionnaire, Section 6: Outcomes from collaborative working with SLTs for children with language needs but who are not known to the speech and language therapy service

This section was about the group of children who had language needs but they were insufficiently severe to warrant intervention from the SLT. Instructions for respondents concerning this section are included in section 4.3.iii.

Table 4.5: Outcomes for children whose language needs are less severe language needs and who are not known to the speech and language therapist

Outcome	Number (and percentage) of schools that agreed or strongly agreed.
Improvement in language skills (*n*=24)	19 (79%)
Improvement in social skills (*n*=24)	18 (75%)
Improvement in literacy skills (*n*=24)	18 (75%)
Improvement in behaviour skills (*n*=23)	15 (65%)

(n=26 unless stated otherwise)

4.4.vi Questionnaire, Section 7: Facilitating the work of the speech and language therapist

- 23 (88%) schools had a quiet room available for the use of the SLT
- All of the schools said that the SLT was welcome to observe in the classroom.
- In 21 (81%) of the schools the SENCo and/or classteacher were given protected time to talk to the SLT.
- In all of the schools the headteacher and/or the senior management team were reported to be in support of collaborative working with the SLT.

4.4.vii Questionnaire, Section 8: Services given by the speech and language therapy service to schools

Table 4.6: Services to schools

Service	Number (and percentage) of schools who had received the service.
Assessment of individual children	25 (96%)
A greater understanding of an individual child's SEN	17 (65%)
Teaching targets for individual children	22 (85%)
Teaching strategies for individual children	22 (85%)
Work with small groups of children (*n*=25)	6 (24%)
General advice for teaching children with language needs (*n*=25)	21 (84%)
Training (*n*=25)	15 (60%)
Training from 'Language for Learning' (*n*=24)	18 (75%)

(n=26 unless stated otherwise)

4.5 Discussion of the results

Since the results from the questionnaire are only part of the whole research study the following discussion will be mainly about the reliability and validity of these results. There will also be some consideration of implications for the remainder of the research study but the discussion of the results in relation to the overall research question (see section 1.2) will be in Chapter 6.

4.5.i Issues of reliability and validity

The reliability of quantitative data is measured by its consistency over time and over similar samples (Cohen et al, 2000). I have set out the method by which I collected the data in detail with the intention that another researcher could, if they wished, replicate the process. However, it is impossible to say whether results, collected in this way, would be equivalent.

Aspects of the validity of the data can be assessed in a more definite way. When discussing the validity of postal questionnaires, Cohen et al (2000) stress that the sample must be representative and not skewed. When the questionnaire was distributed, there was no sampling as all of the schools who were to be part of the study were included. Moreover, the response rate of 90% was very good. Burton (2000b) suggests that response rates as low as 20% for postal questionnaires are common. Mertens (1998), however, says that a response rate of around 70% is generally acceptable as long as the respondents and non-respondents are similar. I knew the three non-responding schools and they were of similar size and socio-economic status to the schools who did respond and there seems no reason to expect their responses to have been very different. The responses from the 90% of schools in the First Schools Project, therefore, would seem to represent the views of the whole population.

However, as discussed in Section 4.2, 7 (19% of the total number) schools which were covered by the First Schools Project were excluded from the study. It will be remembered that 5 of the schools were very small and had had no SLT support and these schools may have had negative views on the project which had brought them no benefit. The practical issues of including the 7 schools remain but, had it been possible to overcome these issues, it may have been that the results from the questionnaire would have been quite different.

Another gauge of validity suggested by Cohen et al (2000) is that of the accuracy of the data. The way that the questionnaire was organised helped respondents to give precise responses since they took the questionnaires back to their schools and completed them after consulting with their colleagues. Thus, they would have had access to all of the information they needed for answering the questions. Also, there were no apparent alternative agendas for the respondents (for example, completing of the questionnaire and exaggerating the level of need would give them no advantages).

However, respondents cannot give accurate information if they misunderstand the questions and there is some evidence that this happened, notably in section 3 of the questionnaire, which was about whether it was better for SLTs to asses children in school

or at the clinic (see Appendix 4). In response to question 3 in this section, all schools (*n*=26) found assessments done by SLTs in school more useful than those done in clinics but 95% of schools that responded to question 5 (*n=21)* agreed that assessments carried out in clinics are more useful (see Results, section 4.4). There is a clear contradiction in these answers. The difficulty may have been that the second question did not include the qualification, more useful '*than those done in schools'*. It is possible that this, and perhaps more, misunderstandings, may have been evident and could have been corrected had there been a pilot study. However, there is some justification for the clarity of the questions as they were framed on the questionnaire, since they were all carefully read by several different individuals (see section 4.3.ii). Also, most of the questionnaires were returned via the school SLT and informal feedback suggested that the respondents did not report any difficulties in understanding the questions and in answering them directly.

Another threat to validity was probably the meetings that were held to distribute the questionnaires. In Section 4.3.iii there is an explanation that the meetings were held in order to remind participants about the structures of the First Schools Project and also to inform them about the purposes of the research study and the questionnaire. Although, by holding the meetings, I had involved the respondents and this probably led to the very high response rate, it did seem that the meetings may have also influenced the school staff in favour of the First Schools Project. When I read back through my notes following the meeting, I realised that the head of the speech and language therapy service had been very enthusiastic about the First Schools Project in her presentation and that I had been equally positive in my discussion of the reasons for the research study. It will be remembered, also, that those schools who were unable to attend the meeting also received an encouraging telephone call from me. It may be that the meetings and the telephone calls influenced the respondents' thinking and contributed to the positive results. This was particularly noticeable in the Outcomes (sections 5 and 6 of the questionnaire, see section 4.4.iv and 4.4.v) where the information depended upon the respondents judgement. I do not believe that the results were altogether invalid, since the questionnaires were completed by SENCOs several days after the meetings. My concern is that the meetings and telephone calls may have exaggerated the level of positive responses. However, had the meetings and telephone calls not happened, then the response rate might have been nil.

Finally, to be of use, a questionnaire also needs to have the potential to answer the purposes of the researach. This, it will be remembered, was about identifying Mechanisms and Outcomes of the First Schools Project that occurred together (see section 4.1). As described in section 4.3.i, I attempted to ensure that the questions reflected the Mechanisms and Outcomes by designing them to reflect the structures of the First Schools Project. Also, through the meetings and telephone calls, I had tried to ensure that the respondents understood the purposes of the research. However, the results from the questionnaire seemed to show which Mechanisms and Outcomes were happening but failed to identify which occurred in conjunction since the answers to all of the questions were positive. For example: 18 (86%) of the schools that responded to the question (*n*= 21) had a liaison visit once a term or more frequently; all 25 of schools that responded found the assessment carried out by the SLT to be useful; all of the schools involved the SLT in setting targets for children with language needs and 19 (79%, *n*=24) schools reported an improvement in language skills. Thus there were no conjunctions between specific Mechanisms and Outcomes (e.g. frequent visits from the SLT and good outcomes in language skills) that were statistically significant (from the SPSS analysis) or even indicated by the data. The results were too homogenous and there was no sufficiently negative data (e.g. schools where there were infrequent visits from the SLT and children made no progress in language skills) which could be used to make a comparison. The results show that, in general, the First Schools Project (as defined by the questionnaire) led to good Outcomes (as indicated by school staff) for children with language needs but it was not possible to interrogate the results in order to find evidence to support particular regularities.

Although Henwood (2004) warns that validity is not inherent in a clearly delineated set of procedures, other writers (for example Cohen et al, 2000), stress that, for quantitative data, the careful observance of procedures does contribute to validity. It is, therefore, important to consider whether the schools questionnaire was, what Robson (2002) terms, a ‘good’ questionnaire, which he claims should:

- provide a valid measure of the purposes of the research
- gain the co-operation of respondents
- elicit accurate information.

The results would seem to meet these criteria in part. This section of the study was about which Mechanisms and Outcomes were happening and which were occurring in conjunction with each other. As discussed above, the responses to the questionnaire seemed to give a good enough answer to the first part of the research question but failed to adequately reply to the second part. The questionnaire did seem to gain the cooperation of the respondents as demonstrated in the high response rate to the questionnaire. However, the accuracy of some of the information may have been compromised by positive feelings towards the First Schools Project that had been generated by the way in which the questionnaire was distributed.

4.5.ii Developments from the results

Although they did not show any particular regularities, the results indicated that, in general, the First Schools Project (as defined by the questionnaire) was associated with good outcomes for children with language needs (as identified by the SENCos). The SLTs were very pleased with the very positive results from the questionnaire and believed that they reflected the very effective model of working of the First Schools Project. As a researcher, I had some reservations about the results which are discussed below.

The SLTs (had they not been briefed in realistic research) might have expected the evaluation to end with the results from the questionnaire. If this had been a traditional positivist study, in principle (as discussed in section 3.2.iv), the conclusion might have been that the First Schools Project leads to good Outcomes for children with language needs and that it should be universally adopted as a method of working for all speech and language therapy services. However, generative causation is fundamental to a realistic evaluation and the realistic research seeks to explain why event A (in this study, the First Schools Project) is followed by event B (good Outcomes for children) and this would be the next stage of the research study.

Also, the universally positive results from the questionnaire presented me with some problems as a realistic researcher since the results offered no opportunity for me to consider different theories. For example, had there been schools where the SLT did not visit regularly and also in these schools, the children did not make progress in language skills, this would have suggested a theory to explain the importance of regular visits. However, the advantage of these results was that they did not disprove any of the theories of the inquiry that I had constructed (see Table 3.4) since all of the mechanisms and all of the outcomes included in the questionnaire were happening. I have illustrated this by listing the Mechanism and Outcomes of the theories (it will be remembered that this section of the study did not include Contexts) and with each there are relevant results that support them, written in blue italics (See Table 4.6).

As can be seen from Table, the results do not cover all aspects of the Mechanisms and Outcomes of the questionnaire and that, in part, is because the school staff were not asked questions of which they had no knowledge. (For example, they were not asked about whether children failed to keep clinic appointments which was part of the Outcome of theory 2). Another reason for the limited amount of data lies in the design of the questionnaire. The quantitative data gave information which related to aspects of the Mechanisms and Outcomes in part only. However, such data can be included in a meaningful way in a realistic study which acknowledges that social phenomena are made up of elements and powers at different levels (see section 3.2.iii). Hence the results of the questionnaire can be construed as elements in the Mechanisms and Outcomes. However, the researcher also has to take into account how these elements combine with other elements that might alter the nature of the Mechanisms and Outcomes. For example, the Mechanism for Theory of the Inquiry 5 (see Table 4.6) includes elements from the questionnaire (e.g. regular school visits) but there are other elements (e.g. the amount of time that the SLT has for talking to staff) which were not included in the questionnaire. If one of these elements were negative (e.g. the SLT had no time to talk to staff) then this might affect the whole nature of her work in school and the Outcomes from it.

Table 4.7: Results which indicate that Mechanisms and Outcomes included in the Theories are happening

	Mechanism	Outcome pattern
Theory of the Inquiry 1 (General project)	SLTs make regular visits to schools and share their expertise with school staff *86% of schools had a liaison visit from the SLT at least once a term*	Children make progress in all aspects of language development, in literacy skills, in social skills, and in behavioural skills *Results, Tables 4.4 and 4.5*
Theory of the Inquiry 2 (Greater equity of provision)	SLTs working in school *All schools found the assessments carried out by SLTs useful* *96% of schools involved the SLT in target setting* *100% of schools involved the SLT in suggesting strategies* *In 84% of schools, SLTs shared general advice for teaching children with language needs*	Greater equity of SLT provision since fewer children 'do not attend' because they are unable to attend clinic appointments *Results Tables 4.2 and 4.3 show that a range of people (including parents) are involved in target setting and suggesting strategies*
Theory of the Inquiry 3 (Collaboration with parents)	SLTs meet parents in school *Not included in the questionnaire*	Parents are able to work collaboratively with SLTs and school staff in the assessment of their child's needs and in devising strategies to help their child *85% of schools involved parents in the assessment of their child's language needs* *31% of school involved parents in target setting* *15% of school involved parents in suggesting strategies*
Theory of the Inquiry 4 (Time)	The SLT makes regular visits to the school *86% of schools had a liaison visit from the SLT at least once a term*	Communication between the SLT and the school is facilitated and a good working relationship is established *All but one of the respondents knew the name of their 'named' SLT* *100% of schools found the assessment by the SLT useful* *96% of schools involve the SLT in target setting for children with language needs* *100% of schools involve the SLT in suggesting strategies for children with language needs*
Theory of the Inquiry 5 (Shared understanding)	SLTs work in school *All schools found the assessments carried out by SLTs useful* *86% of schools had a liaison visit from the SLT at least once a term* *96% of schools involved the SLT in target setting* *100% of schools involved the SLT in suggesting strategies* *In 84% of schools, SLTs shared general advice for teaching children with language needs*	Shared expertise Shared understanding of roles so that SLTs are able to make practicable recommendations and schools have a greater understanding of strategies they need to adopt in order to meet the needs of children with language difficulties More willingness by both school staff and SLTs to adopt the advice of the other *Results from questionnaire, section 2, Q4 which showed that schools had a good understanding of language needs when referring a child to the SLT*

	Mechanisms	Outcome patterns
Theory of the Inquiry 6 (Outside initiatives)	The SLTs' belief that responsibility for addressing the child's language difficulties is shared between the SLT, the school and the parents *Not included in the questionnaire*	SLTs share their expertise with school staff and initiate ways of collaborative working *Results Tables 4.1 and 4.2 show that a range of people are involved in target setting and suggesting strategies*
Theory of the Inquiry 7 (Training)	SLTs deliver training to school staff *SLTs gave general advice to84% of schools* *SLTs delivered training to 60% of schools* *75% of schools had training from the Language for Learning Project*	School staff develop an understanding of the needs of children with language difficulties and are able to meet those needs *Results, Tables 4.4 and 4.5 show that children with language needs made good progress*
Theory of the Inquiry 8 (School facilitates work of SLT)	The SLT assesses the child in school. This includes: Observation in the classroom and on the playground Individual work with the child Discussions with the child's teachers and parents *Not included in the questionnaire*	The SLT has a good understanding of the child's difficulties. She will also have a good understanding of how the school works and will be able to make recommendations that are practical to implement *Not included in the questionnaire*
Theory of the Inquiry 9 (Implications for wider group of children with language difficulties)	SLTs work in schools and assessments and programmes are shared with the schools staff. SLTs also carry out training for school staff *86% of schools had a liaison visit from the SLT at least once a term* *In 84% of schools, SLTs shared general advice for teaching children with language needs* *SLTs delivered training to 60% of schools*	Teachers learn to identify children with language difficulties and are better able to meet their needs. There are increasing numbers of children who have significant language difficulties but these difficulties are not severe enough to warrant SLT intervention. Teachers become more able to meet the language needs of these children *Results, Tables 4.4 and 4.5 show that children with language needs made good progress*
Theory of the Inquiry 10 (Sharing responsibility)	SLTs work in schools and explain to staff and parents how the needs of children with language difficulties can be met *86% of schools had a liaison visit from the SLT at least once a term*	Shared responsibility between SLTs, parents and schools staff for meeting the needs of children with language difficulties *Results Tables 4.2 and 4.3 show that a range of people (including parents) are involved in target setting and suggesting strategies*
Theory of the Inquiry 11 (IEPs)	SLTs carry out collaborative assessments of the child's language difficulties in school *Results Tables 4.1 show that a range of people (including parents) are involved in assessment*	SLTs discuss IEP targets and strategies for the IEP *In 96% of schools SLTs were involved in target setting* *In 100% of schools SLTs were involved in suggesting strategies*
Theory of the Inquiry 12 (Level of training of SLT)	SLTs working in schools *86% of schools had a liaison visit from the SLT at least once a term*	Negative Outcomes for children's language development *No evidence from the questionnaire*

4.6 Conclusion

The questionnaire had supplied information about how the First Schools Project was working. For some evaluations this could have been the end of the process and the conclusion might have been that the social programme was associated with successful outcomes, in so far as they were identified by the questionnaire. Yet it is not possible to make such generalisations about a complex social programme, and, were the First Schools Project to be adopted by another speech and language therapy service, practising in a different environment, then it is unlikely that the model would work as well. However, for a realistic evaluation this is only the beginning of the process. The survey had shown that some parts of the Mechanisms of the First Schools Project occur alongside some parts of successful Outcomes. The next task, which is the subject of the following chapter, would be to try to understand why Mechanisms produce Outcomes in certain Contexts.

CHAPTER 5

RESEARCH STUDY PART 2:

A STUDY TO COLLECT DATA THAT WILL SUPPORT, MODIFY OR INVALIDATE THE THEORIES OF THE INQUIRY USING INTERVIEWS WITH SLTS, PARENTS AND SLT/TEACHER PAIRS

5.1 Introduction

As discussed in Chapter 3, realistic research is about explaining how Mechanisms acting in Context produce Outcomes. Part I of the research study was an attempt to find out which Mechanisms and which Outcomes occurred together and this was achieved, in a limited way, by the schools questionnaire with schools staff and described in Chapter 4. Part 2 of the study, described in this chapter, is about explaining any causal link between Mechanisms and Outcomes and about understanding the influence of Context. In order to try out explanations, and following the process of realistic research, I had selected those theories which I felt were the most critical to the process of the First Schools Project (see section 3.3.v) and framed them in terms of Mechanisms, Contexts and Outcomes (see Table 3.4). The purpose of this part of the research study, therefore, was to collect from the stakeholders (the SLTs, the parents and the SLT/teacher pairs) information, which could support or refute the theories and to do this, I needed to explore with them how some Contexts might lead to successful Outcomes and others might induce failure (Pawson, 2002b).

As in Chapter 4, the description of the research study in this chapter follows the guidance of Pawson and Tilley (1997). The first task was to choose the stakeholders and the SLTs, teachers and parents were identified. The Methods section describes how the chosen instrument for data collection, the realistic interview, was used to collect the data from the stakeholders. In the Results

section there are explanations of how the data was summarised under the theories. Then follows a discussion of the validity and reliability of the data. (There is a diagrammatic summary of the data collection in section 6.1)

5.2 Identifying the Stakeholders

In order to explain how a social programme is working, Pawson and Tilley (1997) describe how the researcher should use the insight and understanding of the stakeholders and should help them to reach their own theories and explanations. To be able to do this, I needed a wide group of stakeholders who, together, would have the expertise to create a rich picture of aspects of the First Schools Project. However, as it was not practical to use all of the stakeholders, I needed a method of purposeful sampling.

In their work, Pawson and Tilley (1997) often write about studies within studies where there is some contrast in either the way the programme is implemented or in the Outcomes. An example is the realistic evaluation of the Priority Estates Project (quoted in Pawson and Tilley, 1997), where the contrast in the type of housing is used to examine what works and in what circumstances in the project. I, too, was looking for explanations for the success or otherwise of the First Schools Project and it seemed that, if I used contrasting individual cases, some successful interventions by the SLTs and some unsuccessful, then this could be a means of both sampling and focussing the data collection. The stakeholders would be those who had knowledge of the cases (the parents, the SLTs and the teachers of the individual children who had been identified as successful or unsuccessful cases). Discussion could be guided by the theories of the inquiry and stakeholders could begin by considering explanations for the positive or negative Outcomes of their individual case and this could broaden to explanations about the success or lack of success of the First Schools Project.

In order to contribute relevant information the stakeholders would need knowledge of an identified case as well as knowledge of the project. So, the selection of the successful and non-successful cases set the boundary around those who would be participants and within this boundary there were the SLTs and the parents and

teachers of the children (identified as cases) and each group would hold different knowledge on the First Schools Project. The aim, in using different groups of stakeholders, was to develop, what Pawson and Tilley (1997) note as a cross-fertilisation between different interpretations of the social programme (i.e. the First Schools Project).

I decided not to include the children in the research study and, by so doing, I realised that I might lose information from some important participants in the First Schools Project but I was concerned about how I would collect data from them. These children were young (maximum age, 9 years) and, as noted by Owen, Hayett and Roulstone (2004) children of this age can be shy, they can repeat what they have heard from others or say what they think they are supposed to say. Moreover, the children also all had language difficulties so, in order to interact with them in a meaningful way, I would need to follow the advice of Owen et al (2004) and first assess their ability to understand and to communicate. I therefore felt that involving the children would extend the workload of the project and make it unmanageable.

5.2.i The SLTs

As I had already taken the folk theories (Pawson and Tilley, 1997) from the SLTs as part of the construction of the project theories (see section 3.3.v) and, also, the SLTs had been co-researchers throughout the research study, there was a possibility of circularity in the process if I asked them again for their views on the of the Theories of the Inquiry. On the other hand, since the SLTs made their initial suggestions, I had collected information from other sources (e.g. the literature review) and I had structured the final design of the theories of the inquiry (see section 3.3.v) without further support from them. Also, when we discussed the realistic theories, we would be using information from the contrasting cases. Hence, when they considered the Theories of the Inquiry with me, they would be doing more that re-confirming their original ideas.

Pawson and Tilley (1997) suggest that as the practitioners translate the social programme into practice, they will have specific ideas about what works within the programme (M), they are likely to have experience of successes and failures and

they will have some awareness of the conditions in which the programme works. Pawson and Tilley (1997) indicate that practitioners will have specific knowledge, based on their own experience but cannot be expected to abstract and generalise their knowledge of the programme. However, while I accepted that the SLTs would be able to discuss specific cases, I felt that they would also be able to discuss the First Schools Project more widely. They had all participated in the change in practice from working in clinics to working in schools, or they had joined the project soon after its beginning, and they were all used to considering how the project was working.

However, there was still, possibly, a significant problem with data from the SLTs, which came from the strong beliefs they held about the value of the First Schools Project and these beliefs might influence their views of the project and hence the theories about it. None-the-less, I felt that, as long as I was aware of this restriction within the data, I could still obtain further useful and insightful views from the SLTs on the appropriateness of the theories.

5.2.ii The parents

Since one of the intentions of the First Schools Project (see section 1.1.i.e) was to involve parents in a collaborative process with the SLTs and the school in meeting their child's language needs, it was important to include the views of the parents in the data collection. When discussing the contribution of the stakeholders, Pawson and Tilley (1997) suggest that they can be categorised into participants and practitioners and that the participants are more likely to be sensitive to the Mechanisms of the programme than to other aspects. However, the parents could be seen as both participants and practitioners since they would be participating in the project and also supporting their child. Hence, I expected that their knowledge would be wider than just the Mechanisms and that they would be able to consider other aspects of the project (e.g. the Context of how the school implements language programmes) although it seemed probable that any explanations would be construed in terms of their experiences of their own child.

However, there might be a difficulty with collecting information from parents as they can see themselves as apart from professionals and might feel intimidated by participating in a research study. In order to reassure them, I asked the SLTs, when they initially applied to the parents for permission to use data on their child in the research study, to discuss with them what their role would be and to explain to them the questions I would be using in the interview (see Appendix 10.) I hoped, too, that this would enable them to consider what they wanted to say to me and give them the confidence to express their views. Also to help the parents to feel more relaxed about the interview, I conducted all of the meetings in their homes and at a time that was convenient to them.

5.2.iii The teachers

The teachers could be seen more as practitioners than participants (following the categorisation of Pawson and Tilley, 1997) since they had an equal role with the SLTs in meeting language needs. They might have experience of only one or two children who were known to the speech and language therapy service but through training, discussions with the SLT and the schools questionnaire, they would have a more extensive understanding of the First Schools Project. I anticipated that they would, therefore, be able to generate explanations (i.e. Contexts) for the Outcomes of the Theories of the Inquiry.

However, there was a problem with information from the teachers since they had already been involved in the schools questionnaire and I needed to ensure that they did not feel they were repeating the same information. I felt that a different approach might help the teachers to consider different views and decided to interview together the teacher and SLT, who were involved in an individual case. In this way, I anticipated that they could compare and challenge each other's opinion and this might give further insightful data into the appropriateness of the Theories of the Inquiry.

5.3 Selecting the Contrasting Cases

The first task towards information gathering in this stage of the research was the selection of the contrasting cases, since this defined the stakeholders who would be included in the inquiry and set a boundary around the data collection. This is purposive sampling (as defined by Miles and Huberman, 1994) since the selection was made to ensure that the data was relevant to the conceptual framework of the research study. The aim in using the contrasting cases was to help the stakeholders to focus on successful and non-successful Outcomes in the First Schools Project and to consider explanations for these Outcomes. In so doing, I was taking a sample of cases but there was no intention that data on the individual children would be used directly. Hence, the purpose was not that the sample should be representative of the whole population of the children involved in the First Schools Project but rather it was a selection of cases that would stimulate the stakeholders into considering how the First Schools Project was working and to examine Contexts and Mechanisms that might facilitate or obstruct the Project. So, for example, I was not looking at whether child A had TA support everyday and made progress in language skills. Instead, I wanted stakeholders, using the information they had on child A (and other information from the First Schools Project), to theorise about whether a child who had regular support from a TA (M) who had been trained by an SLT (C) made good progress in language skills (O). None-the-less, I was aware that the sample of children was very small and very selective and, even though the cases were used only as a catalyst for discussion and that stakeholders also used other information, the impact of the limitations of the sampling had to be acknowledged in any discussion of the data.

As I did not have access to information on the children's language needs and progress, the selection of successful and non-successful cases would have to be done by the SLTs. We had a meeting to discuss this phase of the research (described in Appendix 7). A decision was made to change the term 'non-successful case' to 'less successful case' since the SLTs felt that they would not have completely unsuccessful cases as all children generally made at least some progress. We considered at some length what made a successful intervention and also used earlier work we had done together on a successful intervention (see

Appendix 8). The SLTs discussed positive outcomes in terms of the child and in terms of enhanced collaborative working. From these discussions, I wrote a questionnaire for the SLTs[1] which would give structure to their choice of cases and identify SLT perceptions of Outcomes of the First Schools Project. (See Appendix 9 for the full SLT questionnaire.) The questions assigned the criteria for success into two sets: success in terms of the child (e.g. The child made good progress in his/her use of social language) and success in terms of the project (e.g. Regular liaison meeting with school staff). For the less successful cases the criteria became negative, e.g., 'The child made poor progress in language skills'. All of the questions were open ended which allowed the SLTs to interpret their criteria for successful and less successful cases in their own way.

At the end of the meeting, we decided that each SLT would choose cases of which they had a good understanding, as we would be discussing their explanations for success or non-success in some detail. They would also consider whether the parents would be willing to meet with me. Within these limitations, they would identify their most successful and least successful case using their own judgement. I realised that each SLT might use very different criteria in their choice but that was not significant as each case would include a variety of successful and non-successful outcomes from the First Schools Project and each case might then stimulate discussion on a number of the Theories of the Inquiry (see Table 3.4).

Once the SLTs had chosen their contrasting cases, I needed to be able to access further information on them in order to understand the cases and to use them to prompt discussion on the theories. Such information could be obtained from the case files via the SLTs (as I was not allowed direct access) and I therefore extended the questionnaire to include such data. For example, Theory of the Inquiry 2 (see Table 3.4) was about parents being unable to attend appointments in clinic but could attend in school, so information from the questionnaire on the number of times a parent had not attended a meeting with an SLT would be helpful as a prompt in discussion on the theory (see Appendix 9).

[1] In order to distinguish the two questionnaires that are used in this research study, the questionnaire described in Chapter 5 is called the SLT questionnaire and the one discussed in Chapter 4 is called the schools questionnaire

At this stage in the research study, I was looking for a rich description of the First Schools Project so many of the questions in the SLT questionnaire were open and would yield qualitative data. Some of the responses in the second section of the questionnaire included numerical data but, as the samples were very small and did not pretend to represent the parent population (all of the children on the caseloads of First Schools Project SLTs), such numerical data could not be analysed statistically and needed to be interpreted descriptively.

When obtaining permission from parents for the use of information on individuals it was important to follow the ethical guidelines set out by the British Psychological society. Moreover, I also had to ask for permission to carry out this aspect of the study from the NHS and had to submit, to the local NHS trust research committee, a brief research proposal and information about how I intended to ask permission from the parents. In order to accomplish the latter, I wrote a leaflet for the parents which described the project, what they had to do and how the data would be used anonymously (see Appendix 10 for the parental information). Once the SLTs had selected appropriate cases, they discussed the leaflet with parents. If they were happy to participate, they were asked to sign the consent form which also included a brief description of the study and their role in it. I retained the names and addresses of the parents so that I could make arrangements to meet them but once the parent interviews were completed, I destroyed all personal data.

5.4 The Instrument of Data Collection and a System of Data Analysis

5.4.i The realistic interview

The interview, as noted by Cohen et al (2000), enables participants to discuss their interpretations of phenomena and to express how they regard situations from their point of view. Moreover, as an EP of many years standing, I had experience of talking with people and helping them to express their views openly. I was used to listening (rather than talking), to using clear and non-threatening questions and to facilitating frankness and thus had the skills, noted by Robson (2002), needed for interviewing. I used different formats for the interviews for the different groups of

participants and, for clarity and to avoid repetition, the details of the structures of the interviews are described in the methods section of this chapter.

However, as this was part of a realistic study, the interviews would follow the principle of 'theorising the interview' (Pawson, 1996). This means that the realistic theory should focus and prioritise the inquiry. So, the basis of the interview is the researcher's theory (here the Theories of the Inquiry) and the purpose of the interview is for the interviewee to confirm, falsify or refine the theory and thus to achieve a cross-fertilisation of ideas. The first stage in the interview is the *teacher-learner function* in which the researcher teaches the overall conceptual structure of the investigation to the respondent so that they are left in no doubt of the underlying purpose of the research task. The respondent needs to be able to understand the general theoretical ground that is being explored and to have a clear idea of the concepts that the researcher wishes to discuss. The second stage in the interview is the *conceptual refinement function*, when the respondent offers their own thinking on the researcher's theories and is given the opportunity to clarify their thinking. As the realistic interview progresses, the respondent is offered a formal description of the parameters of their thinking followed by opportunity to explain and clarify their thinking (Pawson and Tilley, 1997, Pawson, 1996). In a realistic interview the purposes and the agenda are shared between the interviewer and the respondent and, hopefully, this not only enables respondents to express their views with confidence, but also facilitates the enhancement of their thinking.

There were some limitations in using interviews as a research tool. Cohen et al (2000) note that an interview is not a simple exchange of pure information but a social encounter which shares many of the features of everyday life. For example, as in everyday life, some respondents will feel uneasy while others will be more trusting; meanings that are clear to one will be relatively opaque to another. I knew that such constraints of everyday life would be part of the interaction and that, when processing the information, I needed to be aware that the respondents had different beliefs and a wide variety of understanding. A further criticism might be that my own positive views on the First Schools Project might influence the way I conducted the interviews but I ensured that such views were moderated by being a reflective practitioner. Moreover, in order to assist in the reliability of the data, I set out the

design of the interviews clearly (see section 5.5) in order to make transparent what I had done.

5.4.ii Using qualitative research methods

There were many reasons why a qualitative design suited both the SLT questionnaire and the interviews since they would be used to explore how stakeholders in the First Schools Project understood and interpreted the project. Blaikie (2000) notes that qualitative methods allow participants to develop their ideas and give their own, personalised view of the world. Also, as discussed by Miles and Huberman (1994) qualitative research is conducted in a field or life situation so the phenomenon under study is embedded in its framework. This allows the researcher to understand latent and non-obvious issues and, in this part of the study, I needed to explore all perspectives on how the First Schools Project was working. Further, a feature of qualitative research is its richness and holism (Miles and Huberman, 1994) and my aim was that the stakeholders would give me 'thick descriptions' that would allow me to gain an overall view of the First Schools Project. Moreover, qualitative data is also well suited for locating the meaning that people place on events and I needed to understand how the participants saw any link between Mechanisms and Outcomes in the First Schools Project. Finally, an aspect of this section of the research project was to gain further understanding of the results from the schools questionnaire and qualitative data can be used in order to validate, explain and illuminate the quantitative data.

5.4.iii Interpreting the qualitative data

Although they give clear principles about collecting the views of the stakeholders, Pawson and Tilley (1997) are less clear in how to aggregate the data. In their example on post-code marking (described in section 3.2.iv), they state that the researchers interviewed the stakeholders and they give the conclusion but there is no indication about how the conclusion is reached. The researchers may have analysed the interview data in detail or they may have come to an insightful understanding which led to their conclusion. For guidance on how to interpret

qualitative data I therefore looked to other authors and selected Miles and Huberman (1994).

When discussing the design of qualitative research, Miles and Huberman (1994) stress that the sampling of the data should not be random but purposive and enable the researcher to satisfy her specific needs in a research study. In this part of the study, the need was to organise discussions that would consider the appropriateness of the Theories of the Inquiry. Thus, the data would be collected in phases from the different groups of stakeholders who would each give information based on their distinctive expertise (Pawson and Tilley, 1997). Miles and Huberman (1994) note that, when all of the data comes from within the bounded framework (in this study, the boundary is descried by the First Schools Project), then, even though the data is collected from different sources (for the First Schools Project, the parents, SLTs and SLT/teacher pairs), it is coded and analysed together. Miles and Huberman (1994) recommend, in essence, three parts to the process of collecting and analysing the qualitative data: reducing the data, analysing the data and conclusion drawing and verification. The processes of reducing and analysing the data are described in detail in the Methods section below. The verification of the data forms the Discussion of this chapter but the drawing of conclusions is not considered until Chapter 6 when the accuracy of the theories is assessed using all of the data from the research study.

The first step in data reduction, the simplifying and abstracting of information, was begun during the interviews. I decided not to record verbatim, transcribe and then summarise the data but, instead, to write a summary of the data at the interview. I used my knowledge of interviewing and frequently checked with the interviewee, throughout the interview, that I had interpreted her views correctly. As an EP, I had experience of taking notes that summarise and are objective and thus felt able to produce a written account during the interview that accurately reflected the discussion. However, I was also aware of the dictum from Cohen et al (2000) that any transcribing is inevitably interpretive and tried to ensure that my interpretations resulted in data that would be useful for the research study. I knew, too, also from Cohen et al (2000), that transcribing has the potential for data loss, distortion and the reduction of complexity. So, soon after the interview (usually on the same day)

I read through and checked my notes for accuracy and then included any reflections I had about the interview (for example, if the parent seemed angry). By so doing I hoped both to reflect the discussion accurately and also to retain some aspects of the interview as a social encounter.

Two sections of the data, those from the SLT questionnaire and from the parent interviews, would be based on information from single cases and it would be meaningful to combine this data. I intended to use the SLT questionnaire data in discussions with the parents and, by analysing it with the data from the parent interviews (which, I anticipated, would be based only on their child) it would contribute to the explanations and theories the parents developed.

5.5 Methods

The questionnaire for the SLTs can be seen as preliminary to the collection of data from the interviews, since its purpose was to identify the successful and non-successful cases and to allow the SLTs to describe the cases. Interview data was then collected in three phases: The first phase was the interviews with the SLTs, the second phase was the interviews with the parents and the third phase was the joint SLT-teacher interviews. How the data was analysed forms the last part of this section of the chapter.

5.5.i Preliminary: The SLTs questionnaire

At the time that this part of the research was carried out there were 6 SLTs working on the First Schools Project and each was to nominate two cases: a successful case and a less successful case. In fact there were only 10 cases nominated, as 2 SLTs could not identify a less successful case and this may have led to some imbalance in the data. All of the parents who were approached gave their consent for the involvement of information from their child's file so there was no need to look for second choice cases. Once they had permission, the SLTs completed the questionnaire in their own time using information from the children's files. After I had received and read the questionnaires, I had a meeting with each SLT to check that my interpretation of their responses was correct.

5.5.ii Phase 1: Interviews with the SLTs

I then met each SLT to discuss the theories (see Table 3.4). In order to have some consistency in the structure of these meetings, I used a prompt to remind me of the pattern of the meeting (see Appendix 11). However, because I maintained a flexible stance, each interview developed very differently according to the level of experience of the SLT, their beliefs about the First Schools Project and the cases they had chosen.

The interviews followed the principles of 'theorising the interview' (Pawson, 1996 and discussed above in section 5.4.i). For the teacher-learner stage of the interview, I wrote the theories of the inquiry (from Table 3.4) in rugby ball form (as in Figure 3.1) on sheets of A3 paper (4 theories to a page) in order that the SLTs could read and understand them. We then discussed them using information from the cases as a prompt but also considered information from the SLTs wider experience of the First Schools Project. As I anticipated (see section 5.2.i), the SLTs could not only discuss individual cases, but were able to work out their own ideas and theories about the First Schools Project. I helped them to develop their views through a process of checking that I had understood correctly and sometimes challenging what they said and thus we engaged together in the process of conceptual refinement. The reason for using such a large piece of paper was so that I could write down the SLTs comments against the relevant theory and they could check that they agreed with my interpretation of their comments, thus limiting any affirmative bias on my part. Moreover, by using this technique, I could assign the information immediately into Contexts, Mechanisms and Outcomes. For example, an SLT agreed with Theory of the Inquiry 4 but also offered some comments on it, which are shown in Table 5.1. Sometimes the comments from SLTs were in the form of theories. For example, one SLT discussed a school where there had been large amounts of training on meeting the needs of children with language difficulties but it had little impact on the teachers' practice in the classroom. She used this information to suggest a new theory under Theory of the Inquiry 7, "If SLTs deliver training (M) in an unreceptive school (C) then staff do not use the skills they have learnt" (O).

Table 5.1: An SLT's comments on Theory of the Inquiry 4

	Context		Mechanism		Outcome patterns
Theory of the Inquiry 4 (Time)	A school where there is time for the SLT to talk to school staff	+	The SLT makes regular visits to the school	=	Communication between the SLT and the school is facilitated and a good working relationship is established
SLT's comments	Good schools always give their teachers protected time to talk to the SLT You can always go to the classroom to talk to the teacher but then it is far more difficult to have a useful discussion				This develops as you work in a school for a long time: • There is greater clarity of the SLT role • More accepting of shared roles • Staff become more skilled

5.5.iii Phase 2: Interviews with the parents

I had hoped to interview all 10 parents of the cases identified by the SLTs but two parents (both from successful cases) were unable to participate. However, as there were 2 extra positive cases (see section 5.5.i), I interviewed an equal number of parents from successful and unsuccessful cases. When I arranged the interview with the parents I invited both or either one to attend but, in every case, I met with only the mother. The length of the interviews varied greatly from 10 minutes to 1½ hours as parents had very differing amounts of knowledge of their child's language needs and how they were helped in school. All of the parents participated willingly and, when I visited them, they seemed pleased to see me.

Again the interviews followed the principles of theorising the interview (Pawson, 1996) but in a different way from that used with the SLTs. In the teacher-learner phase I avoided detailed descriptions of Theories of the Inquiry (from Table 3.4) as I felt that complicated explanations would be disconcerting for parents. Instead, I discussed with them that I was interested in the way that SLTs and schools were working together. So that we both had an understanding of their child, we discussed, in broad terms, his/her language needs and the kind of help s/he was receiving in school using the parent's knowledge and I used information from the SLT questionnaire (e.g. the progress that the child had made). In the conceptual-refinement phase of the interview I asked five general questions which were

designed to focus the discussion on explanations (Contexts) for Outcomes of the First Schools Project. The questions were.

- What help has the SLT given that has gone well for your child?
- What has not worked well?
- What help has your child had in school that has been successful?
- What has not been successful?
- Is there anything different that you would have liked?

(These questions had already been given to the parents by the SLTs, see Appendix 10.) With each question I also used prompts and provided extra information but, as anticipated, the parents were able to develop their own suggestions and talked with understanding about their children and explanations for Outcomes but did not move to more general explanations (e.g. children make better progress when the SLT sees them in school). The mother of Bill, who had taken a great interest in the First Schools Project, was the one exception and talked more widely about the project but even her explanations and theories were based in her experiences with Bill.

The following is an example of an exchange with a parent. However, as discussed above (see section 5.4.iii), I did not record verbatim what was said but made notes at the interview. What follows is, therefore, a reconstruction but it conveys the meaning of the exchange if not the actual words. The parent, in response to the question about what had gone well, talked about the progress her child had made since she began school. The conversation then developed as follows (with my explanations in italics and in brackets).

Parent: When we went to the clinic K (child) went shy and wouldn't say anything. But in school, she's in her own environment. She doesn't notice the SLT because she is seeing her in her own (the child's) surroundings. *(Context explaining a successful outcome)*

Researcher: So you think it is better *(O)* if a child is seen by the SLT *(M)* in school rather than in the clinic *(C). (Researcher's check on meaning and interpretation and relating it to Theory 2)*

Parent: Oh yes. K's speech is coming on quite well now. (O) Also you can have meetings with the SLT at school which is much easier than going to the clinic. *(Context explaining successful Outcome, related to Theory 3)*

This exchange exemplifies how parents could give their interpretation and explain (i.e. suggest Contexts for) Outcomes for their children.

5.5.iv Phase 3: Interviews with the SLT-teacher pairs

I had hoped to complete 10 interviews with SLT-teacher pairs for each of the contrasting cases but, at this stage in the First Schools Project, the SLTs were understaffed and did not have time for this. I therefore carried out only 6 SLT-teacher interviews for the 6 successful cases. Hence, data from this section could further increase the imbalance between the successful and unsuccessful cases. All of the interviews were attended by the child's classteacher.

Again I used a prompt to ensure that each interview followed the same structure (see Appendix 11) and, again, they were based on the principles of theorising the interview. The SLTs already had an understanding of the Theories of the Inquiry (see Table 3.4) that I was testing as the interviews of the SLT-teacher pairs all took place after the SLT interviews, so, in order to avoid them repeating themselves, the format of the interview was changed form that used with the SLTs. During the teacher-learner process we discussed the First Schools Project and my realistic theories about it and the SLTs helped with their understanding of the research process. However, the theories did not form the basis for the discussions and instead I asked open questions about what had gone well and what had not gone well and again I used further questions in order to allow both the SLT and the teacher to achieve conceptual refinement. Sometimes, if they were relevant, I introduced specific theories but, more often the SLTs and teachers developed their own ideas. Both the SLTs and the teachers responded to my questions and what ensued was a very interesting and thoughtful dialogue. There was disagreement quite often but, after discussion, they were able to reach a consensus which I was able to record. These were the teachers and SLTs from the positive cases and they were generally encouraging about the practice of the other but there was also criticism. I felt that these discussions gave an insight into how the First Schools Project was working and allowed the interviewees to try to reach explanations for the Outcomes.

Below is an example of an interchange between myself, an SLT and a teacher. Again, it is not verbatim as I did not record the interviews in that way. However it does convey the process of the discussion and the meaning of what the participants said.

(The teacher was talking about what had gone well.)

Teacher: We had excellent training course from E (another SLT) for the TAs *(M)*. They found it hard but they learnt a lot. The TAs can now carry out what the SLT wants them to do *(O)*.

(This discussion continued and we discussed how staff training can lead to good Outcomes for children with language needs.
The interchange then developed as follows.)

Teacher: Some teaching staff feel disempowered and feel that they should have the knowledge which is held by the TAs. *(C)*

SLT; But when we tried whole school training in language needs *(M)* this was resisted by the staff. They did not want to attend the sessions, they were sceptical about anything we said and they failed to implement any changes in their practice *(C)*

Teacher: At that time, we had a lot of training in other areas and the staff were suffering from training overload. Staff also thought that training for SEN was not their responsibility but the responsibility of the SEN department. *(C)*

SLT: Also the teachers don't seem to see the importance of language difficulties and attention and listening skills. *(C)*

Researcher: It seems to me that what you are saying is that training for school staff (M) can be a very effective means of helping children with language needs to make progress (O) but that training is only effective if the trainees are receptive to the training (C). *(Theory which supports Theory 7, Table 3.4)*

Teacher: Absolutely. And the senior management is resistant too. They don't see the importance of language needs. *(C)*

(And the discussion turned to the Context of issues with senior management)

This interaction demonstrates how the SLTs and teachers exchanged ideas and were able to offer explanations which could be construed as Mechanisms, Contexts and Outcomes.

5.5.v Analysing the data

The data from this part of the research study was small and appears in its entirety in Appendices 12 -15. Hence it did not warrant the use of a computer software

package and, instead, I used normal word processing facilities. As discussed above (see section 5.5.v), the method that I used was based primarily on the recommendations of Miles and Huberman (1994) but I also incorporated some suggestions from Robson (2002)

5.5.v.a Key Codes

These are determined prior to the collection of data (Robson, 2002). The key codes for this research project were the Theories of the Inquiry (see Table 3.4) and they gave the basic structure to the collection of data.

5.5.v.b Codes

The aim of coding is to order the data in an efficient data-labelling system so that it can be easily retrieved and worked upon (Miles and Huberman, 1994). The codes are derived from the key codes and, for this data, they were Contexts, Mechanisms and Outcomes.

5.5.vi Coding the data

5.5.vi.a Data from Phase 1, STL interviews

During the interviews with the SLTs, we had written the responses given by the SLTs onto the charts of the theories. I then typed these in tabular form under the Theories of the Inquiry (see example in section 5.5.ii). As this had all been discussed at the time of the meetings, the data had all been divided into Contexts, Mechanisms and Outcomes and allocated to theories. Sometimes the comments from SLTs were complete realistic theories. For example, one SLT commented that the longer she worked in a school, then the greater clarity there was of roles and responsibilities and the teachers became more skilled and this could be construed as a theory (See Table 5.2). These new theories were placed in the table under the appropriate original Theories of the Inquiry. Hence, the above new theory was placed under Theory of the Inquiry 4 (See Appendix 12). All of the information appears in Appendix 12 as there was no further data reduction from the meeting notes to the ordering of the data in tabular form.

Table 5.2: Theory of a respondent

	Context	Mechanism	Outcome pattern
Theory of the Inquiry 4 (Time) Phase 1 New theory 4.ii	Longer time period that the project runs	The SLT makes regular visits	Greater clarity of roles and responsibilities. School staff become more skilled

5.5.vi.b Data from Phase 2, parent interviews and from the SLT questionnaire

As predicted, the data from the parent interviews was focussed on individual cases and, therefore, it could be analysed alongside the data from the SLT questionnaire (which was also about individual children). As a way of ordering the data (and preserving anonymity), I created individual names for each of the children and recorded, under each name, the data from the SLT questionnaire and the data from the parents for that child. I followed the coding system (Mechanisms, Contexts and Outcomes) to analyse the comments from the parents but the information from the SLT questionnaire did not lend itself to this kind of ordering so remains in the form in which it was collected (see Appendix 13). I then did further analysis of the information from the parent interviews, following the same method described above for the information from the SLT/teacher pairs, and placed the data in tabular form under the Theories of the Inquiry (see Appendix 14).

5.5.vi.c Data from Phase 3, interviews with SLT/teacher pairs

The data from this phase of the research study appears in Appendix 15. During the interviews, I wrote notes as the SLTs and teachers talked and typed them, usually on the same day, putting the comments under headings of Contexts, Mechanisms and Outcomes (The example of the exchange in section 5.5.iv shows how I annotated comments.) As discussed in Chapter 3, there is some fluidity between Contexts, Mechanisms and Outcomes and where data (for example, teachers not implementing practices to help children with language needs) is categorised depends upon the realistic theory in which it is framed. This can also be illustrated from the exchange in section 5.5.iv, part of which I have construed as two possible realistic theories in Table 5.3. As can be seen from my contribution to the

exchange (section 5.5.iv), the teacher and the SLT were discussing explanations for (i.e. the Context of) the Outcome of progress made by children with language needs. Therefore, I allocated, 'They (staff) failed to implement any changes in their practice' to a Context. However, had the discussions been within the framework of a different realistic theory (see Table 5.3), the same data might have been considered as an Outcome. So, I annotated the meeting notes with Ms, Cs and Os, on the basis of the ideas of the discussion in which they were contained.

Table 5.3: Illustration of how data can be construed differently under different theories

	Context	**Mechanism**	**Outcome pattern**
Realistic theory used by SLT/teacher pair	*The trainees do not want to attend the sessions, they are sceptical about anything said and they fail to implement any changes in their practice*	Training for school staff	Children with language needs do not make progress
Possible alternative realistic theory	*Trainees are not receptive and do not want to attend training sessions*	Training for school staff	*Staff are sceptical about anything said and they fail to implement any changes in their practice*

I then copied the comments from the meeting notes and arranged them, in tabular form, under the appropriate Theory of the Inquiry (taken from Table 3.4). Sometimes the comments provided information about more than one Theory of the Inquiry. For example, 'SLT helped teachers to use visual timetables and to use photographs and symbols' fitted under both Theory 7 (training) and Theory 5 (shared understanding).

There were many responses coded under Theory of the Inquiry 5, shared understanding, (see Appendix 15, pp iv-vii) and particularly under the Context. Miles and Huberman (1994) describe how, if there is a large amount of data in a code, this might need to be subdivided into elements in order to process it accurately. So, I subdivided the Contexts for Theory of the Inquiry 5 into three elements which were: statements about practice in school, statements about a child's needs and statements about resources and school organisation. I coded the Outcomes for Theory of the Inquiry 5 into two elements: Outcomes for the child and Outcomes for the First Schools Project.

When transcribing and analysing the interview data, I also considered whether the interviewees might not have been open in what they said since their responses might have been measured by talking to me. However, for both the SLT interviews and the SLT-teacher interviews, the participants were confident and able to talk about the subject matter with authority and therefore I had no concerns that the data might be compromised by such factors as timidity, a lack of honesty or a lack of understanding on the part of the respondents. On the other hand, at the beginning of the interviews, the parents were far less confident and often seemed puzzled by my involvement and the purposes of the research study. However, through discussion and explanation, I was able to facilitate their comments and, when I transcribed the interviews, I felt confident that the contributions that the parents made were honest and founded in a good levels of understanding of the topics they discussed.

5.6 Results

Central to their approach to the analysis of qualitative data suggested by Miles and Huberman (1994) is the display in which the data is presented visually and systematically. The difficulties in this process (and discussed below) are ensuring that the summary accurately reflects the data that has been collected and also answers the purposes of the research (here, validating or disproving the theories). This is still the descriptive stage of the study, but when the data is presented in this orderly way it can then be used for drawing conclusions (see next chapter).

Sorting and coding the data had used only the categorising skills of the researcher and there had been no real need to make complex judgements about the relevance of the material or to reduce it significantly. However, the material now needed to be summarised so that it could appear in a systematic display (Miles and Huberman, 1994). There was insufficient data for such techniques as marking significant concepts and recording the number of times they occurred and the summary of this data had to depend on the researcher's judgement. Therefore, I took very seriously Robson's (2002) advice on the deficiencies of the human analyst: I was careful not to ignore information that conflicted with my ideas, I took into consideration the reliability of the sources and I did not discount any information. Moreover, once the

summaries were completed, in order to check on the reliability of my judgement, I referred again to the meeting notes to ensure that my summary in the data display reflected the views of the stakeholders.

The purpose of collecting the data had been to verify, modify or disprove the Theories of the Inquiry and hence the display needed to be designed so that the summary of the data could be used to reflect on them. I decided that the display should be made up of twelve tables, each headed with a Theory of the Inquiry (taken from Table 3.4) and to place below a summary of the data that pertained to it. Because the different groups of stakeholders held different kinds of knowledge, the information that they gave was complementary, the phases in the data collection were retained. Thus, against phase 1 in the tables is a summary of the views from the SLT interviews, against phase 2 there is a summary of the parent views and the SLT questionnaires (it will be remembered that not all of this data lent itself to coding under Ms, Cs and Os) and against phase 3 is a summary of the views from the interviews with the SLT-teacher pairs. The aim in summarising the data for each cell of the tables (see Tables 5.4-5.15) was to reflect all of the data in that code. So, for example, in the first cell below the Context of Theory of the Inquiry 1 (see Table 5.4) is a précis of all that was said in the SLT interviews about the Context of the Theory of the Inquiry 1. Finally, I also recorded on the data display pertinent quotes (from any of the phases) where they were appropriate and, in a few cases, my own comments about the results. As can be seen from the tables below, for some phases, there was no data that pertained to Contexts or Mechanisms or Outcomes for some Theories of the Inquiry or for a whole theory.

Table 5.4: Theory of the Inquiry 1 and a summary of the views of the stakeholders

	Context		Mechanism		Outcome pattern
Theory of the Inquiry 1 (General project)	A school where there is a positive attitude to meeting the needs of children with language difficulties (e.g. it is part of the whole school policy, teachers and TAs have undertaken appropriate training and parents are made to feel welcome)	+	SLTs make regular visits to schools and share their expertise with school staff	=	Children make progress in all aspects of language development, in literacy skills, in social skills, and in behavioural skills
Phase 1: Data summary	• The importance of a positive attitude by the whole school was emphasised by SLTS • If the classteacher is positive, she can have a significant effect even if the rest of the school is negative				
Phase 3: Data summary	• When the First Schools Project was established, the schools were involved and consulted. • Transport issues when children were expected to attend clinic		• When parents used to go to the clinic there was no contact with the school		• Schools can become empowered to address language difficulties themselves
Phase 2: Data summary	Parents who felt that their child had made progress often commented that their child went to an 'excellent school' where the teachers had worked well with the SLT Children at therapy sessions at the clinic had refused to participate because they were shy. The 'Criteria for success' given by one SLT attributed the success of the child wholly to the mechanisms of the First Schools Project and none in terms of the child. (No parent information available for that child)				
Significant Quotes	If children have a significant level of need it can work in a mainstream school but only if there are many facets in place (parent)				

Table 5.5: Theory of the Inquiry 2 and a summary of the views of the stakeholders

	Context		Mechanism		Outcome pattern
Theory of the Inquiry 2 (Greater equity of provision)	Schools which are prepared to take on the responsibility of involving parents and of completing the referral form	+	SLTs working in school	=	Greater equity of SLT provision since fewer children 'do not attend' because they are unable to attend clinic appointments
Phase 1: Data summary					There are still problems with children who do not attend school regularly e.g. traveller children Also problems with 'speech' children who do not attend the clinic

Table 5.6: Theory of the Inquiry 3 and a summary of the views of the stakeholders

	Context		Mechanism		Outcome pattern
Theory of the Inquiry 3 (Collaboration with parents)	Schools that feel that parents should be part of their child's education	+	SLTs invite in parents and meet them in school	=	Parents are able to work collaboratively with SLTs and school staff in the assessment of their child's needs and in devising strategies to help their child
Phase 1: Data summary	In most cases, parents are seeing the SLT in school and there is a positive working relationship between parents, schools and SLTs. Some parents do not come to school to see the SLT. There are difficulties where schools do not have a good working relationship with parents		SLT meeting parents in school was always seen as very positive		In most cases (successful and unsuccessful) SLTs are agreeing work with parents and they are carrying it out
Phase 3: Data Summary	SLTs often noted negative relationships between parents and the school				Meeting parents in school is more 'user friendly' and leads to better outcomes
Phase 2: Data summary	The number of times the parents met the SLT or had telephone contact varied. For the successful cases the number of contacts ranged 0-18. For the unsuccessful cases the range was 0-9. One SLT noted on her questionnaire that there was less contact with parents now that the child was in school than there had been when he was pre school and attended the clinic. Many parents described how SLTs had sent resources home (mechanism) so they were able to work with their children. 6 parents reported good liaison between home, school and the SLT (O)				
Significant Quote	If parents do not come to school to meet the SLT, they can become left out of the process. Parents can feel that meeting their child's language difficulties is the responsibility of the school (SLT)				
Comment	In one school only, they were antagonistic to the SLT meeting the parent in school and the school did not make time for a meeting so the SLT had to see the parent at the clinic.				

Table 5.7: Theory of the Inquiry 4 and a summary of the views of the stakeholders

	Context		Mechanism		Outcome Pattern
Theory of the Inquiry 4 (Time)	A school where there is time for the SLT to talk to school staff	+	The SLT makes regular visits to the school	=	Communication between the SLT and the school is facilitated and a good working relationship is established
Phase 1: Data Summary New Theories					
4.i	Teachers have not been informed that SLT is coming	+	SLT makes a regular visit to schools	=	No meeting with teachers or meeting is unsatisfactory
4.ii	Longer time period when SLT and school work together	+	SLT makes regular visits to school	=	Greater clarity of roles and responsibilities. School staff become more skilled
Phase 3: Data Summary	Most schools make time to talk to the SLT and this is seen as important by all parties Schools wanted more SLT time		Problems when SLT was unable to visit schools frequently enough and schools felt that they were not having enough feedback on what they were doing		

Table 5.8: Theory of the Inquiry 5 and a summary of the views of the stakeholders

	Context		Mechanism		Outcome pattern
Theory of the Inquiry 5 (Shared understanding)	A school where staff have a good understanding of the needs of children with language difficulties	+	SLTs work in school	=	• Shared expertise • Shared understanding of roles so that SLTs are able to make practical recommendations and schools have a greater understanding of strategies they need to adopt in order to meet the needs of children with language difficulties • More willingness by both school staff and SLTs to adopt the advice of the other
Phase 1: Data Summary	Negative school contexts • Staff unwilling to co-operate with SLT • They see SLT as quite separate • No TA time for language work				

	• No time for school staff to meet with SLTs SENCo has no dedicated time		
	Context	**Mechanism**	**Outcome pattern**
Phase 3: Data summary	<u>Within Child Factors</u> E.g. being late or absent. Such factors have an impact on outcomes for the child <u>Expertise of school staff</u> • Staff were working with other professionals e.g. LBSS, EP in order to meet language needs • Shared understanding and expertise between teachers and SLTs • Teachers showed a good level of understanding of language needs • Teachers had the expertise to use general strategies (e.g. appropriate language levels) to ensure that children with language needs were able to access the curriculum. • There was some criticism which focussed on poor levels of expertise amongst teachers <u>School Organisation</u> • There was discussion about the availability of TA support	Much evidence that the First Schools Project was happening. SLTs were visiting schools regularly, helping schools to deliver language programmes, reviewing children's progress and contributing to IEPs	Evidence that children were making good progress. There were improved language skills, better reading and SATs scores and children were developing social skills
Phase 2: Data Summary	Parents praised the expertise of school staff and the way that they work with SLTs. The only criticisms were about insufficient support from SLTs. Many parents described regular support from the SLT for their child All children had complex needs and needed specialised support Information from SLT questionnaire showed that, in all of the successful cases, the schools had worked collaboratively with SLT and school staff had developed their expertise. For 3 of the 4 unsuccessful cases, there was criticism from the SLTs of practice in the schools		
Significant Quotes	Everything is brilliant (parent) The parents sent in a box of chocolates for the 'team'. That sums up the working relationship that we have (teacher). The parent of a child with complex difficulties but who was in mainstream school described how she had appealed to an SEN tribunal requesting to have the number of speech and language therapy hours written into the child's statement of SEN. In the end, she withdrew the appeal and accepted the principles of the First Schools Project. She said that her child had 1:1 speech and language therapy session for assessment and monitoring only and intervention work was done by the school. But, because of the collaboration between the SLT and the school, her child had made 'brilliant' progress in language skills.		
Comments	There were criticisms of school and SLT practices but these actually supported the theory. For example one teacher explained the lack of progress that children with language difficulties made by the fact that teachers do not see the importance of language difficulties and listening and attention skills. Here she was explaining the negative Outcome by the absence of the Context and thus she was supporting the theory.		

Table 5.9: Theory of the Inquiry 6 and a summary of the views of the stakeholders

	Context		Mechanism		Outcome pattern
Theory of the Inquiry 6 (Outside initiatives)	Government initiatives and guidelines from the RCSLT	+	The SLTs' belief that responsibility for addressing the child's language difficulties is shared between the SLT, the school and the parents	=	SLTs share their expertise with school staff and initiate ways of collaborative working
Phases 1 & 3: Data Summary	Not seen as important by either SLTs or school staff				
Comment	This issue was only mentioned at phase 1. The parents and the SLT-teacher pairs saw external influences as unimportant				

Table 5.10: Theory of the Inquiry 7 and a summary of the views of the stakeholders

	Context		Mechanism		Outcome pattern
Theory of the Inquiry 7 (Training)	A school where the staff want to learn and where they are able to put into practice what they have learnt	+	SLTs deliver training to school staff	=	School staff develop an understanding of the needs of children with language difficulties and are able to meet those needs
Phase 1: Data Summary	Training for school staff is effective only if staff put the theory into practice				
Phase 3: Data Summary			Most schools had had training in language needs which was well rated by the schools In one school there had been no whole school training since staff felt that language needs were the responsibility of the SEN staff		Training for schools staff led to a shared understanding
Significant Quote	If you deliver training to an unreceptive staff then they do not put it into practice (SLT)				

Table 5.11: Theory of the Inquiry 8 and a summary of the views of the stakeholders

	Context		Mechanism		Outcome pattern
Theory 8 (School facilitates work of SLT)	A school that facilitates the SLT in her work	+	The SLT assesses the child in school. This includes: • Observation in the classroom and on the playground • Individual work with the child and discussions with the child's teachers and parents	=	The SLT has a good understanding of the child's difficulties. She will also have a good understanding of how the school works and will be able to make recommendations that are practical to implement
Phases 1 & 2: Data summary	Where comments were made they suggest that the work of the SLT is facilitated				
Comments	Parents made no comments on this theory and the other groups gave it only a little attention				

Table 5.12: Theory of the Inquiry 9 and a summary of the views of the stakeholders

	Context		Mechanism		Outcome pattern
Theory of the Inquiry 9 (Implications for wider group of children with language difficulties)	A school that understands the special educational needs of its children and wishes to raise the academic standards of all of its children	+	SLTs work in schools and assessments and programmes are shared with the schools staff. SLTs also carry out training for school staff	=	Teachers learn to identify children with language difficulties and are better able to meet their needs. There are increasing numbers of children who have significant language difficulties but these difficulties are not severe enough to warrant SLT intervention. Teachers become more able to meet the language needs of these children
Phase 1: Data Summary					SLTs described outcomes for children with less severe language difficulties • Teachers used strategies that were successful for a child known to the SLT with other children who benefited from this • TAs worked with groups of children, not just those with serious language difficulties
Phase 3: Data summary	SLTs and teachers described how there were large numbers of children entering school who had significant language difficulties. One school said that a third of the intake had language difficulties		When the SLT is in school she can advise about other children informally		If schools are able to meet the needs of children with identified language difficulties, this has a positive effect on the levels of attainment of other children

Phase 3: Data summary	Parents noted that the TA worked with a group of children (not just their child). Also parents felt that the work of the SLT was of benefit to all children
Significant Quotes	It has been a privilege to have B (a child with severe language difficulties) in my class and, as a consequence, I am a better teacher (teacher).

Table 5.13: Theory of the Inquiry I0 and a summary of the views of the stakeholders

	Context		**Mechanism**		**Outcome pattern**
Theory of the Inquiry 10 (Sharing responsibility))	Schools which no longer retain a medical model and reject the belief that it is the responsibility of the SLT to deal with language difficulties	+	SLTs work in schools and explain to staff and parents how the needs of children with language difficulties can be met	=	Shared responsibility between SLTs, parents and school staff for meeting the needs of children with language difficulties
Phase 1: Data Summary					• The practice of shared responsibility can be facilitated by the relationship that the SLT has with the teacher • SLTs cannot always change the philosophy of the school but if they work in a school over a prolonged period, the school can come to realise that they need to work collaboratively
Phase 3: Data Summary	There are equal working relationships between SLTs and teachers with shared responsibility between teacher, SLT and parents		SLTs believed that the longer they work in schools, the more schools adopt the idea of shared responsibility		Schools can say, 'What can <u>we</u> do?'
Phase 2: Data Summary	The success of one case (Jill) was due to the positive working relationship between school and the SLT who shared responsibility for her progress in all aspects of school life. Jill made good progress in language and literacy skills with little support from home. The lack of success of one case (Ellie) was attributed by the SLT to a lack of experience of children with language needs by the school and their unwillingness to share responsibility with the SLT. In their contribution, Ellie's parents said that they did not see doing language work with Ellie as their responsibility				
Significant Quote (Theory from SLT)	Schools which retain the medical model and believe that it is the responsibility of the SLT to deal with language difficulties	+	SLTs work in schools and explain to staff and parents how the needs of children with language difficulties can be met	=	Schools 'just follow the processes' but do not see that they need to become involved. They really believe that all that is necessary is for the SLT to see the child. <u>One school only</u> where HT believes that individual work should be done by SLT in clinic and not in the school

Table 5.14: Theory of the Inquiry 11 and a summary of the views of the stakeholders

	Context		Mechanism		Outcome pattern
Theory of the Inquiry 11 (IEPs)	Schools that want effective IEPs for their children	+	SLTs carry out collaborative assessments of the child's language difficulties in school	=	SLTs discuss IEP targets and strategies for the IEP
Phase 1: Data Summary	Teachers have to be skilled and committed		SLTs share (rather than 'give', which suggests that the responsibility lies with the SLT) information with the school		If SLTs just send in recommendations they are often rejected because they have not been agreed jointly

Table 5.15: Theory of the Inquiry 12 and a summary of the views of the stakeholders

	Context		Mechanism		Outcome pattern
Theory of the Inquiry 12 (Level of training of SLT)	SLTs have little training for working in schools and their confidence to do so is low	+	SLTs working in schools	=	Negative outcomes for children's language development
Phase 1: Data Summary	The SLTs talked at length about the skills they needed and even the most recently qualified said that they were not prepared in training for work in schools				
Significant Quotes New Theory (SLT)	SLTs need more knowledge and experience of working in schools when they are training Induction for newly qualified SLTs should include: • shadowing of SLTs with experience of working in schools • access to resources and ideas		SLTs working in schools		SLT can be confident and assertive and establish her professional role. They are able to leave behind their own agenda and see what works for the school
	SLT is a very skilled practitioner. She is always at the end of a phone. She always returns calls. She always knows what she is talking about. She is one of the best people I have ever worked with (parent).				

5.7 Discussion

This discussion will be limited to a consideration of the data collected in Part 2 of research study (i.e. the data described in this chapter). The first topic will be a consideration of whether the purposes of the research for this stage of the study have been answered. This will be followed by an assessment of the quality of the data and then its reliability and validity as qualitative data will be assessed. A discussion of the theories and of the realistic evaluation methodology will be delayed until Chapter 6, when they will be considered within in the framework of the overall research design and all of the data collected in the research study.

5.7.i Meeting the purposes of the research

The aim of data gathering in Part 2 of the research study was to use information from contrasting cases to stimulate discussions between the researcher and SLTs, parents and SLT/teacher pairs to provide information that would support, modify or invalidate the Theories of the Inquiry and, in general, this happened. Each group of stakeholders brought their individual expertise to the interviews and were able to comment on different aspects of the theories. Unfortunately, this does not mean that the data adequately answered the aims of Part 2 and a glance at the tables in the results section shows the blanks where there is no data for some Contexts, Mechanisms, Outcomes and even Theories of the Inquiry.

However, the weighting of the data has to be considered within the bounds of a realistic research and Pawson and Tilley (1997) acknowledge that, in a realistic study, different stakeholders bring with them different knowledge and this has also affected the balance of data under the theories. For example, there is far more data recorded under Theory of the Inquiry 5 (Shared understanding) because all of the respondents had an interest in how the schools and SLTs were working and could talk about it (see Table 5.8). In contrast, the SLTs talked at length about Theory 12 and the need for SLT training for working in schools whereas the other respondents only commented on the high level of skills demonstrated by the SLTs (See Table 5.15). It is, therefore, not the volume of data only that gives weight to conclusions about the theories and it is as important that all of the data was given by respondents who were honest and knowledgeable in the fields they chose to

discuss. So, for example, it is possible to draw conclusions both about Theory 5 (where there is a large amount of data) and also about Theory 12 where there is a smaller amount of data but it was given by those who have expertise in that field

Where data is missing, this can be accounted for, in part, by the design of the study. For some theories (e.g. Theory 6, Outside Initiatives, see Table 5.9) there is almost no data and this arose because there were no stakeholders who had the relevant expertise to comment. Knowledge of outside initiatives (such as, Provision of Speech and Language Therapy Services to Children with SEN: Report of the Working Party, DfEE, 2000) and how they were incorporated into school policy might be held by members of school senior management team. However, this group of stakeholders were not included since the experimental design involved only those who had knowledge of a contrasting case. (There is discussion on the number of theories included in the research study in Chapter 7.)

Another reason for the deficiency in the amount of data, and thus for the inadequacy of responses under certain theories, lay in the way that I chose to interpret the design of realistic interviews. In phases 2 and 3, I decided, in the teacher-learner phase of the interview, not to specify the theories but to explain the aims of the research project more generally and I then used quite broad questions. I chose this design since I believed that, if the interviewees drove the agenda, they (and particularly the parents) would not feel uncomfortable in answering more direct questions on topics of which they might have little knowledge and give data which might have been of less value. Hence, I discussed the topics chosen by the interviewees and then checked with them how they related to the Theories of the Inquiry (see sections 5.5.iii and 5.5.iv). However, it is possible that I could have been more directional in my interventions and not compromised the accuracy of the data from the interviewees and yet been able to guide the discussion towards more of the theories. For example, parents and SLT/teacher pairs are likely to have had views on Theory of the Inquiry 2 (Equity of Provision, see Table 5.5) and these could have been explored in the interviews in phases 2 and 3. It seems that a more careful design might have led to a wider spread of data collection.

5.7.ii The quality of the data

Both Robson (2002) and Miles and Huberman (1994) stress the importance of assessing the quality of qualitative data. I therefore re-assessed the methods used for data collection and analysis using questions suggested by Robson (2002) with the assumption that if the data were of a high quality, then this would contribute to validity. The questions considered were about how representative was the data and whether there was a researcher effect.

The initial collection of the data needs to be a representative sample but also the summary for the tabular display needs to be representative of the data collected. Choosing contrasting cases was a purposive way of sampling and the intention was not to use the information on the cases directly but to use it to stimulate discussion on the Theories of the Inquiry. So, although the cases were not representative of the children involved in the First Schools Project, the choice of cases did answer the purposes of the research. However, the cases were chosen by the SLTs and their choice may have been motivated, perhaps unconsciously, by their strong beliefs in the First Schools Project. Certainly, in the criteria for success or non-success (in response to the SLT questionnaire, see Appendix 13) they were more likely to attribute problems of failure to Contexts (for example, schools and children) rather than to Mechanisms (which were the structures of the First Schools Project). A further bias towards positive support for the First Schools Project may have come from the way that the research study developed: there were six successful cases and only four less successful cases and also the SLT/teacher interviews were based on the successful cases only.

Data can also be non-representative if participants are biased or dishonest in what they say. I was particularly concerned that the SLTs might be influenced by their positive beliefs but, following their interviews, I was left with the impression of a very thoughtful and insightful group of people who were able to give a rich and detailed picture of the First Schools Project and who were able to review the First Schools Project and criticise it where necessary. For example, when discussing Theory of the Inquiry 3 (Collaboration with Parents) the SLTs noted that sometimes the First Schools Project led to less contact with parents (see Table 5.6). Other stakeholders also seemed open about the First Schools Project and, for example,

one parent, whose child was achieving lower standard scores in language skills than two years earlier (and, therefore, might be expected to be critical), attributed this to within child factors and had nothing but praise for the Mechanisms of the project.

The standard of the data collection and its summary depends greatly on the judgement of the researcher and, throughout this research study, I have been aware that I have always been closely associated with the First Schools Project. However, at all times I was aware also that, although I needed *empathy* in order to understand fully what respondents were telling me, I did not need *sympathy*, which might have clouded my judgement (Hammersley, 2000). So, I was as vigilant as possible in checking that I was objective in the collection of data (see sections 5.5 and 5.6). In order to summarise the data I have detailed how I used my experience of note-taking at meetings, I then carefully read and coded the data and placed it under the theories and then tried to ensure that the final displays (Tables 5.3 – 5.115) were representative of all of the data. Although I have a belief in the First Schools Project, I have been aware of that belief at all times and tried to ensure that it has not influenced the way that I have conducted the research inquiry.

5.7.iii The validity of the data

Assessing the validity of the data for this section of the research study needed care since this was a qualitative study carried out within the framework of realistic research and so processes for establishing validity in positivist and interpretivist research were not altogether appropriate. I therefore chose to follow ideas from both Miles and Huberman (1994) and Cohen et al (2000) and used internal and external validity since these are applied in both quantitative and qualitative research.

Internal validity seeks to demonstrate that the data collected makes sense and is credible and thus the findings must accurately describe the phenomena being researched. In part this was accounted for in the quality of the data but Hammersley (1992, quoted in Cohen et al, 2000) suggests further criteria for assessing the validity of small amounts of data. I attempted to ensure the

credibility of the data by helping interviewees to understand the purposes of the research and by supporting them to ensure that they had the confidence to express their views. I also checked with them about relating what they said to the theories. As discussed above, *the kind and amount of evidence* that I collected was not enough for the level of theorising since there was insufficient data for the number of theories. Possible ways of extending the data collection were discussed above (section 5.7.i) and will be further developed in Chapter 7. I had designed the data collection in order to support or invalidate the theories but this *kind of claim from the research* could not be altogether sustained.

External validity refers to the degree to which the results can be generalised to a wider population. However, this needs interpretation for a realistic research where the purpose is not to look for universal truths but rather for what works (M) for whom (O) in what circumstances (C) (see section 3.2.iv). Thus the theories (see Table 3.4) were framed in Contexts, Mechanisms and Outcomes in order to explain aspects of the First Schools Project. Within the limits of the data that was gathered, there is an indication that some of the theories have validity. For example, the data coded under Theory 12 (The need for SLT training) supports the theory (see Table 5.15). However, external validity will be further developed for the whole research study in Chapter 6

5.7.iv Reliability

Reliability in traditional research is about replicating the process and achieving the same results. However, although the strength of qualitative research is its use of social interactions and the uniqueness of the data, this does not mean that qualitative researchers should not strive for replication in the design and execution of their research. An effective way of controlling for reliability (as noted by Silverman, 1993) is to have a highly structured interview with the same format, sequence of words and questions for each respondent. However, I rejected this design as I wanted an open-ended interview that would allow the interviewees to demonstrate their unique view of the world (Cohen et al, 2000). Instead, I controlled for reliability by detailing how the interviews were conducted (see sections 5.4.i and 5.5). I also detailed how the data was coded and summarised.

In qualitative research, strict replication is unrealistic since, although the researcher can set out in detail what she did, another researcher, following the same instructions, might collect quite different data. Following this construct, it can be said that the process of data collection and data analysis used in qualitative research stage of this study achieved some degree of reliability.

5.8 Conclusion

The aim of this stage of the research inquiry was to use the contrasting cases to stimulate discussions and then to use the data to support or invalidate the theories. The positive aspect of the process of this stage of the research was that the data collected seems to have some credibility in that the interviews followed a systematic process and the data analysis was methodical. However, other aspects of the research process were less satisfactory. The primary difficulty was in the sampling, since, by limiting the stakeholders to those involved in the contrasting cased, this excluded areas of expertise held by other stakeholders (e.g. senior managers in schools). Hence, (as in Part 1 of the research, the schools questionnaire) the data covers only some aspects of the theories. Moreover, as the process developed, there was more discussion based on successful cases than on less-successful cases. Chapter 6 brings together the data from Parts 1 and 2 of the research process and reviews the theories again. The chapter also discusses the overall evaluation of the First Schools Project.

CHAPTER 6

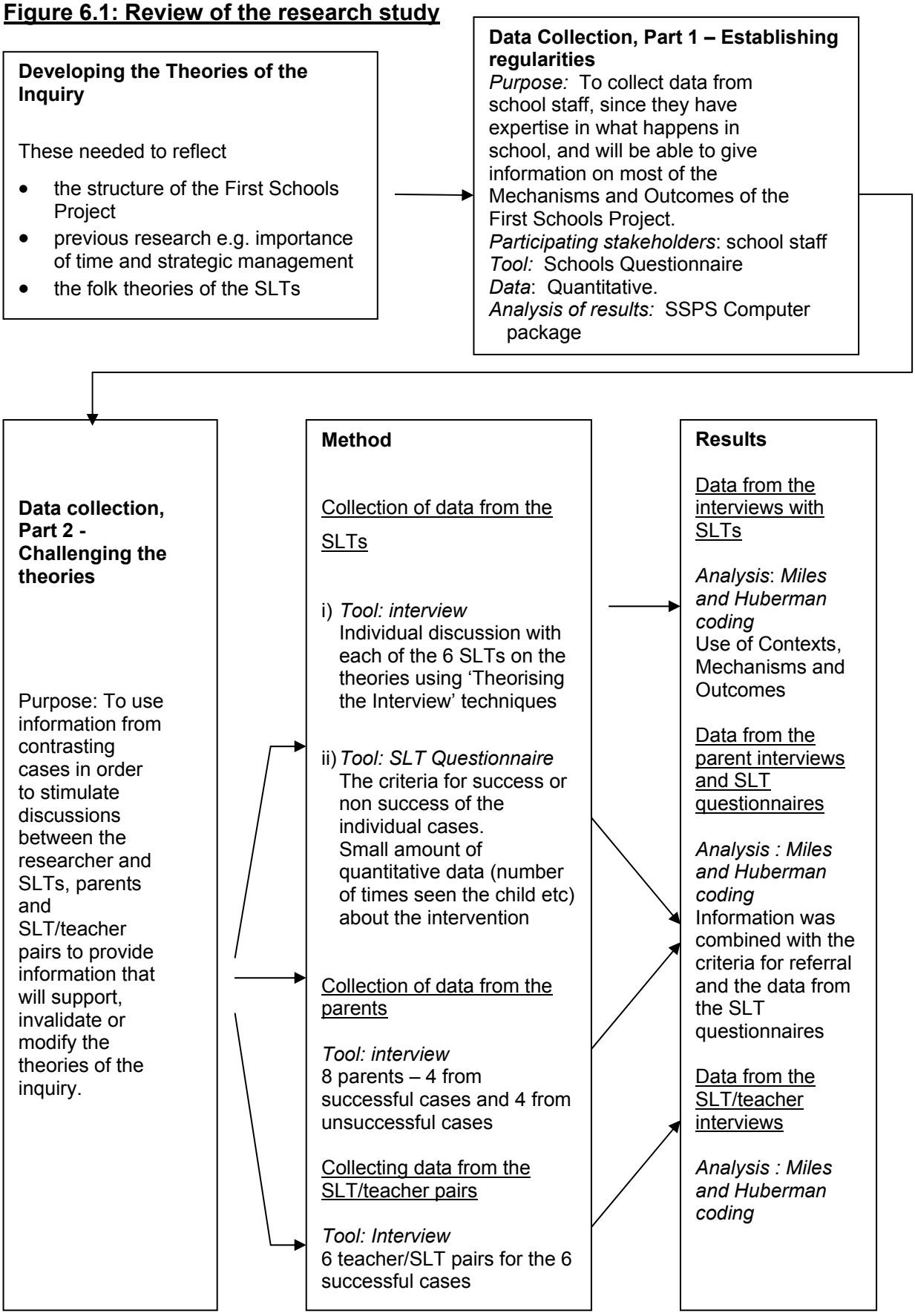
RESULTS FROM ALL OF THE RESEARCH STUDY AND CONCLUSIONS FROM THE THEORIES

6.1 Introduction

The purpose of this research study has been to attempt to evaluate the effectiveness of the First Schools Project by explaining Outcomes in terms of Mechanisms acting in Contexts. In order to do this, Theories of the Inquiry were constructed (see section 3.3.v). Part 1 of the research process involved establishing regularities between Mechanisms and Outcomes and this was described in Chapter 4. Part 2 considered evidence that might be used to support, modify or invalidate the Theories (see Chapter 5) and so the data was listed under the appropriate theory. A summary of how the data was collected and analysed in both parts of the research study is shown in Figure 6.1

This chapter aims to explain how the results from both Chapters 4 and 5 were combined and used, together with evidence from the literature review, in order to assess which aspects of the Theories of the Inquiry might be upheld and which might be said to be unsupported. As a result of this process some Theories remain unaltered, some are changed and some are discarded and conclusions are then drawn about the evaluation of the First Schools Project. Finally, there is some consideration of how the evaluation of the model of the First Schools Project might be used more widely by other speech and language therapy services as both Health and Children's Services move towards integrated services. Chapter 7 reviews the process of realistic evaluation in this study and considers possible future use in education research.

Figure 6.1: Review of the research study



The data that is used in this chapter comes from the results section of both Chapter 4 (which is summarised in Table 4.7) and from Chapter 5 (Tables 5.4 – 5.15). The tables in Chapter 5 are an attempt to summarise all of the data from the qualitative research study but, in order to fully review the Theories of the Inquiry, I have, when needed, also referred back to the Appendices and the full details of the interviews. In both chapters the validity of the data was discussed and it seemed that the process of data collection had been adequate (see sections 4.5.1 and 5.7). However, also in both parts of the research study, the data was insufficient to validate some of the Theories of the Inquiry with any certainty.

In order to make sense of the available data, I have used my skills as a psychologist and a researcher. Clarke (2004), when discussing traditional psychological research, claims that it is bound by notions of what is a real science and that academic psychologists are not individuals who understand people but individuals who understand the technicalities of doing psychology. He claims that practising psychologists doing research should use their insightfulness as well as information that has been collected in a scientific way. Clarke (2004) continues,

> Rigour is not everything. Saying only what you can say with (a high degree of) certainty is often less important and less useful than doing the best you can with the information available, and in the time available.
>
> (Clarke, 2004, p84)

I have followed this advice and, for each theory, I have made clear the source of any data. The alterations to the theories come from my interpretation of the appropriate data.

6.2 A Summation of the Results and a Review of the Theories of the Inquiry

Each Theory of the Inquiry (see Table 3.4) is considered in turn. Changes to the theories are shown below each theory and are in blue italics.

6.2.i Theory of the Inquiry 1 (General Project)

There is evidence from Part 1 (see Table 4.7) that one aspect of the Mechanism (regular school visits) and the Outcome (children making progress) are happening although there was no specific data collection, in either part of the research study, of what 'sharing SLT expertise' (the second aspect of the Mechanism) might be. A contributory factor to the development of Theory of the Inquiry 1 was the evidence from the literature review (see section 2.4.iv.a) to suggest that a whole school policy is an important facilitator for collaborative working (C). However, the teachers in their interviews (see Appendix 15) talked only from the perspective of a classteacher and did not refer to school policy. On the other hand, there is evidence from the SLTs (see Table 5.4, Phase 1) that the First Schools Project could work even if only the classteacher were committed to it. It may be that the ideal Context is when the importance of meeting the needs of children with language difficulties is incorporated into the school policy, but the First Schools Project can still be effective if only the child's classteacher is prepared to work with the SLT. Also relevant to Theory of the Inquiry 1 was the way that the First Schools Project was developed, since this seemed to contribute to schools' connection to the project. In the SLT/teacher interviews, teachers emphasised that schools felt involved in the First Schools Project because they had been there at the beginning and participated in the way it was structured (see Table 5.4, Phase 3).

Table 6.1: Theory of the Inquiry 1, Final Version

	Context		Mechanism		Outcome Pattern
Theory of the Inquiry 1 (General Project)	*The ideal context* is a school where there is a positive attitude to meeting the needs of children with language difficulties (e.g. it is part of the whole school policy, teachers and TAs have undertaken appropriate training, parents are made to feel welcome). ▪ *A possible successful context is also a committed classteacher.*	+	SLTs make regular visits to schools and share their expertise with school staff	=	Children make progress in all aspects of language development, in literacy skills, in social skills, and in behavioural skills
Theory 1A (new theory)	*Schools are involved in the construction of the project*		*New ways of collaborative working are developed*		Schools feel committed to the project

My interpretation of the data available is that there is evidence for agreement with the Mechanisms and Outcomes of Theory of the Inquiry 1 but the Context can be extended. The data on the development of the project can be construed as a new realistic theory. All of this is incorporated into the final Theories of the Inquiry 1 and 1A.

6.2.ii Theory of the Inquiry 2 (Greater Equity of Provision)

Data collection on this theory was limited. There is evidence from the school's questionnaire (see Table 4.7) that the Mechanism (SLTs are working in schools) is happening but I know only anecdotal evidence from the SLTs that would sustain the Outcome (fewer children are missing appointments). (I understand that the speech and language therapy service holds information that would support the Outcome but I was unable to access this directly as it was not part of the research proposal that I submitted to the NHS, see section 5.3.)

Although the evidence in the literature review was equivocal (see section 2.6.i), it seems probable that, in general, children with speech only difficulties do not have associated difficulties in literacy. Certainly it was partly for this reason that, when the First Schools Project was established, it was decided that children with speech difficulties should be seen in clinic (M) (see section 1.1.i.e). However, the SLTs, in their interviews (see Table 5.5), discussed how, it might be necessary to see these children in school as they were not always attending clinics, something which, I understand, could be supported by quantitative information held by the speech and language therapy service.

Also discussed by the SLTs (see Table 5.5) were concerns about children (for example traveller children) who do not attend school regularly. Such children often miss seeing the SLT when she visits school even though the school does all it can to ensure the child's attendance. The Mechanism (seeing children in school) seems appropriate but schools need to address the issues of school attendance in order to ensure a successful Context for operation of the First Schools Project.

When reviewing the theory, I have acknowledged that there is no data for the Outcome but made the assumption (based on my knowledge of the First Schools Project) that it is happening. I have, therefore, modified only the Mechanism.

Table 6.2: Theory of the Inquiry 2, Final Version

	Context		Mechanism		Outcome Pattern
Theory of the Inquiry 2 (Greater Equity of Provision)	Schools which are prepared to take on the responsibility of involving parents and of completing the referral form	+	SLTs working in school *with all children with language difficulties including, when necessary, those with speech only problems*	=	Greater equity of SLT provision since fewer children 'do not attend' because they are unable to attend clinic appointments (NB, no evidence was collected directly to support the accuracy of this Outcome)

6.2.iii Theory of the Inquiry 3 (Collaboration with Parents)

There were concerns, expressed by the schools and by the SLTs about the level of involvement of parents.

- The issue of parental collaboration was not explored directly in the literature search but many of the collaborative projects discussed in section 2.5 involved parents
- Results from the schools questionnaire lend some support to the Outcome of parental collaboration (see Table 4.7)
- If SLTs are going to work individually with a child in school, they write and invite the parents to come and meet them in school. Not all parents attend and, if the SLT does not have time to contact them by telephone or the parents cannot be reached (M) then they can be left out of the process of supporting their children (see Appendix 12, data from SLT interviews)
- From the case studies it seemed that the level of parental involvement (C) cannot fully explain Outcomes for their children. The parents of one child (see Jill, Appendix 13), who had made excellent progress in language skills, had very little involvement in meeting their child's language difficulties. Yet the mother of a child, whose language skills had declined relative to increase in age, was very actively involved in supporting her child both at home and through the school (see Jim, Appendix 13).

- SLTs were concerned about the negative relationships in some schools between teachers and parents and felt that this hindered effective collaborative working relationships (see Table 5.6).
- All participants generally agreed that the theory could be upheld. However, from both SLT interviews and the SLT-teacher interviews it seems that the most efficient way of ensuring more parental involvement is for the schools to take a more active role in helping parents to meet the SLT in school. This is reflected in changes in the theory.

Table 6.3: Theory of the Inquiry 3, Final Version

	Context		Mechanism		Outcome Pattern
Theory of the Inquiry 3 (Collaboration with Parents)	Schools that feel that parents should be part of their child's education. *Schools support SLTs and help them to meet parents in school*	+	SLTs invite in parents and meet them in school	=	Parents are able to work collaboratively with SLTs and school staff in the assessment of their child's needs and in devising strategies to help their child

6.2.iv Theory of the Inquiry 4 (Time)

This theory is about SLT time and liaison time. School time for language programmes or TA hours is included in theory 5. In the literature review, time was identified as a facilitator of collaboration (see section 2.4.iv.c). There was also evidence from the schools questionnaire that the Outcome (as interpreted by the questionnaire) was happening (see Table 4.7). Data from the schools questionnaire also indicated that in most schools there was protected time for the SENCo and/or classteacher to meet with the SLT (see section 4.4.vi) and this was seen as very important in the SLT/teacher interviews (see Table 5.7). Teachers in the SLT interviews (see Table 5.7) wanted more SLT time but this was a factor that was outside the framework of the First Schools Project since the power to increase SLT provision lay with the local health authority.

Theory 4 is a simple theory and there is data, from both stages of the research study and from the literature review, that can be used directly to support it. The data therefore, upholds the theory.

Table 6.4: Theory of the Inquiry 4, Final Version

	Context		Mechanism		Outcome Pattern
Theory of the Inquiry 4 (Time)	A school where there is time for the SLT to talk to school staff	+	The SLT makes regular visits to the school	=	Communication between the SLT and the school is facilitated and a good working relationship is established

6.2.v Theory 5 (Shared understanding)

This developed as the most complex of the theories because the evidence that emerged from the different aspects of the research project illustrated the layering within the theory and also the elements and powers within the Context, Mechanism and Outcome. Although there was general agreement with the Theory of the Inquiry by all participants, much of the evidence supported the theory with more specific Contexts, Mechanisms and Outcomes. I have therefore changed the structure of the theory. (In order to help explain the changes, I have included the original form in the table below.) 'Practical recommendations' moves from an Outcome to a Mechanism and I have placed strategies used by the school in the Context. I have then developed the theory at different levels, using the themes that came from the interviews but also included evidence from all of the research study. There is extensive information that relates to Theory 5 and below each of the new theories is indicated the source of the data which formed the basis of the judgements I made in re-ordering the theories.

Table 6.5: Theory of the Inquiry 5, Final Version and New Theories

	Context		Mechanism		Outcome Pattern
Theory of the Inquiry 5 (Shared Understanding) *(Original)*	A school where staff have a good understanding of the needs of children with language difficulties	+	SLTs work in school	=	Shared expertise. Shared understanding of the roles so that SLTs are able to make practical recommendation and schools have a greater understanding of strategies they need to adopt in order to meet the needs of children with language difficulties. More willingness by both school staff and SLTs to adopt advice from the other
Theory of the Inquiry 5 (Shared understanding) *(Final Version)*	A school where staff have a good understanding of the needs of children with language difficulties *and they implement appropriate strategies for the support of these children*	+	SLTs work in school ▪ *They help teachers with general classroom strategies which can be used for all children with language difficulties* ▪ *SLTs carry out assessments and discuss targets and strategies for individual children but do not do individual 'therapy'* ▪ *SLTs discuss their suggestions with the classteacher so that she can incorporate them into the child's IEP. The ideal is for the SLT and the teacher to write the IEP together* ▪ *Schools need regular visits this means visits once every term or every half-term*	=	▪ Shared expertise ▪ More willingness by both school staff and SLTs to adopt the advice of the other ▪ *Good outcomes for children with language difficulties in language and learning skills*
Comments	All of the stakeholders discussed how a receptive school (C) can lead to shared understanding, better practice in the school and good outcomes for children (O). The SLTs in their interviews talked about problems if teachers failed to collaborate (see Table 5.8, Phase 1) and hence the addition to the Context. The development of the Mechanism came from discussions with the SLT/teacher pairs on what SLTs do in schools and what was most useful (summarised in Table 5.8, Phases 3). Also, the views of a parent (see Table 5.8, Phase 2), which summarised what SLTs do contributed to the second bulleted point under Mechanism. The Outcomes are from the Results section of Chapter 4 and substantiated by information from discussions with the SLT/teacher pairs.				
Theory of the Inquiry 5A (New theory, within child factors)	*A child with language difficulties has other needs (e.g. poor attention skills, a lack of cooperation, learning difficulties, comes to school late, has poor attendance)*	+	*SLT works in schools*	=	*Within child factors (e.g. levels of motivation, level of cognitive ability) can have a significant effect (positive or negative) on language outcomes*
Comments	In their questionnaire, the SLTs generally ascribed a lack of success to factors within the child (C) (see Appendix 13 and Table 5.8) and, in the phase 3 interviews (see Table 5.8), SLTs and Teachers felt that factors associated with the child (C) (e.g. poor attendance or being late) could explain poor progress in language skills.				

	Context		Mechanism		Outcome pattern
Theory of the Inquiry 5B (New theory, level of resources within school)	*Schools have varying amounts of resources (e.g. TA time, access to training)*	+	*SLT is aware of the resources and priorities of the school and supports the teacher in meeting the needs of the child within those limitations*	=	*The classteacher is able to implement appropriate support*
Comments	In the SLT/teacher pairs interviews there was discussion (see Appendix 15) about problems with implementing specific language programmes if there are insufficient resources or no TA time (C) (see New Theory 5.vii, Appendix 15). They considered how SLTs need to take into account school resources (C) when making suggestions about interventions				
Theory of the Inquiry 5C (New theory, good expertise within the school)	*There is evidence that schools can develop a good context for meeting language needs.* ▪ *The school has clear aims about supporting the needs of children with language difficulties* ▪ *Teachers modify the curriculum appropriately* ▪ *Schools accommodate differences within their system e.g. allowing a child to stay out of assembly*	+	*SLTs work in schools and share knowledge and expertise*	=	*Good working environment for children with language difficulties*
Comments	Items in the Context came from the SLT/teacher interviews (see Table 5.8) and how the Contexts explained the Outcome also came from the same interviews				
Theory of the Inquiry 5D (New theory, collaborative working)	*The school has a positive attitude to language needs and good collaborative working with other professionals e.g. the EP or the LBSS teacher*	+	*SLTs work in schools*	=	*True collaborative working including a sharing of responsibility, expertise and understanding and leading to good language and learning outcomes for children*
Comments	This theory was not based on particular discussions (although there was much said to support it) but, rather, it was my interpretation of everything I had heard in all of the interviews (see Appendices 13,14 and 15, under Theory 5)				
Theory of the Inquiry 5E (New theory, non-collaboration)	*A school where they do not prioritise the needs of children with language difficulties and do not co-operate with the SLT.*	+	*SLTs visit the school and tries to make suggestions that are practical for the schools to implement*	=	*No collaborative working and poor language and learning outcomes for children.*
Comments	When the SLTs considered the theories in phase 1 of the data collection, they talked about the Outcome (no collaboration and little progress made by the child) if schools failed to understand the importance of language needs and do not assimilate advice and training from the SLT (C). Some schools had extensive training in how to meet the needs of children with language difficulties but staff were not using the skills they have learnt (see Appendix 12, Phase 1, New Theory 5.1)				

6.2.vi Theory of the Inquiry 6 (Outside Initiatives)

In the literature review, it was noted that there had been many government initiatives recommending collaboration between SLTs and education (see section

2.3) so it seemed logical to include this theory. Results from the schools questionnaire indicated that a range of people were involved in target setting and suggesting strategies for children with language needs (i.e. Mechanisms and Contexts were happening). However, from Part 2 of the research study, because of the method of sampling and the way that the interviews were conducted, there was no data that might support the Context of this Theory of the Inquiry. However, it includes an important Context for explaining how the First Schools Project might work. Hence, I have retained the Theory of the Inquiry, while acknowledging that it cannot be reviewed since the data from the research study does not either support or challenge the theory.

Table 6.6: Theory of the Inquiry 6, Final Version

	Context		Mechanism		Outcome Pattern
Theory of the Inquiry 6 (Outside initiatives)	Government initiatives and guidelines from the RCSLT	+	The SLTs' belief that responsibility for addressing the child's language difficulties is shared between the SLT, the school and the parents	=	SLTs share their expertise with school staff and initiate ways of collaborative working

6.2.vii Theory of the Inquiry 7 (Training)

Evidence from the schools questionnaire (see Table 4.7) indicated that school staff were being trained by SLTs. Discussions in Part 2, Phase 1 and Phase 3 (see Table 5.10) indicated that the training (M) was generally seen as effective if the staff were receptive (C) and led to a shared understanding of language needs, between school staff and the SLT, and improved practice in schools (O) (see Appendix 15). The SLTs noted that training was ineffective if the staff were unreceptive. The available evidence seems to support Theory of the Inquiry 7 and it can remain unchanged.

Table 6.7: Theory of the Inquiry 7, Final Version

	Context		Mechanism		Outcome Pattern
Theory of the Inquiry 7 (Training)	A school where the staff want to learn and where they are able to put into practice what they have learnt	+	SLTs deliver training to school staff	=	School staff develop an understanding of the needs of children with language difficulties and are able to meet those needs

6.2.viii Theory of the Inquiry 8 (School facilitates the work of the SLT)

There was evidence from the schools questionnaire that schools were facilitating the work of the SLT (e.g. 88% of schools, n=26, had a quiet room available for the SLT and 100% of schools, n=26, welcomed the SLT into the classroom (see section 4.4.vi). However, (as with Theory of the Inquiry 6) the sampling and the way the interviews were conducted meant that there was no data to explain Theory of the Inquiry 8 from Part 2 of the research study. None-the-less, the theory is retained in its original form since its context is supported by the data from Part 1 of the research study.

Table 6.8: Theory of the Inquiry 8, Final Version

	Context		Mechanism		Outcome Pattern
Theory of the Inquiry 8 (School facilitates work of SLT)	A school that facilitates the SLT in her work	+	The SLT assesses the child in school. This includes: observation in the classroom and on the playground, individual work with the child and discussions with the child's teachers and parents	=	The SLT has a good understanding of the child's difficulties. She will also have a good understanding of how the school works and will be able to make recommendations that are practical to implement

6.2.ix Theory of the Inquiry 9 (Implications for the Wider Group of Children with Language needs)

In Chapter 2 there was discussion of how the prevalence rate for children with language needs varies depending upon how language needs is defined. However, there was general agreement amongst researchers (see section 2.2.ii) that the prevalence rate was high and I noted that, in the schools of the First Schools Project, there were high numbers of children with language needs that were less severe and who were not known to the SLT. Theory of the Inquiry 9 was designed to reflect a belief that underpinned the First Schools Project which was that the project would empower teachers to meet the needs of this larger group of children with language needs. There is support from the schools questionnaire (see Table 4.5), that children with less severe language needs were making progress. In the interviews with the SLT/teacher pairs there were many comments about the increasing numbers of children with language difficulties and the necessity of making provision for them within the classroom (see Table 5.12 for a summary). The teachers explained how they were able to use, with the whole class, the

information they had learnt through having a child with significant language needs in their class (C). This had led to better Outcomes for all children with language needs. The Theory of the Inquiry, therefore, remains unchanged in substance, although it has been re-ordered to make the Context more detailed and the outcomes clearer.

Table 6.9: Theory of the Inquiry 9, Final version

	Context		Mechanism		Outcome Pattern
Theory of the Inquiry 9 (Implications for Wider Group of Children with Language Needs)	A school that understands the special educational needs of its children and wishes to raise the academic standards of all of its children. *This includes increasing numbers of children who have language needs that are serious but not severe enough to warrant SLT intervention*	+	SLTs work in schools and assessments and programmes are shared with the school staff. SLTs also carry out training for school staff	=	Teachers learn to identify children with language needs and are better able to meet those needs.

6.2.x Theory of the Inquiry 10 (Sharing responsibility)

Evidence from the schools questionnaire lends support to the Outcome of this theory: that professionals and parents are working together and sharing expertise (see Table 4.1). In general, all of the stakeholders agreed that supporting children with language needs was not just a task for the SLT (C) and this could account for shared understanding of roles and responsibilities between the SLT, parents and schools (O). However, there was some indication (see Table 5.13) that, even if a parent is not fully involved, a child can still make progress if the school is committed to the process. There was negative evidence to support the theory from the SLT interviews (see Table 5.10) where there were suggestions that some schools did not see language needs as their responsibility (C) and then Outcomes for the children were less successful even though the SLT continued to work in school (M). As the bulk of the evidence supports the theory I have left it unchanged but I have also included a theory about when schools retain a medical model to reflect the views of the SLTs.

Table 6.10: Theory of the Inquiry 10, Final version and New Theory

	Context		Mechanism		Outcome Pattern
Theory of the Inquiry 10 (Sharing Responsibility)	Schools which no longer retain a medical model and reject the belief that it is the responsibility of the SLT to deal with language difficulties	+	SLTs work in schools and explain to staff and parents how the needs of children with language difficulties can be met	=	Shared responsibility between SLTs, parents and school staff for meeting the needs of children with language difficulties
Theory 10 (New Theory, When Schools Retain the Medical Model)	*Schools which retain a medical model and believe that it is the responsibility of the SLT to deal with language difficulties*	+	*SLTs work in schools and explain to staff and parents how the needs of children with language difficulties can be met*	=	▪ *Schools 'just follow the process' but do not see that they need to become involved. They really believe that all that is necessary is for the SLT to see the child.* ▪ *One school only where HT believes that individual work should be done by SLT in clinic and not in the school*

6.2.xi Theory of the Inquiry 11 (IEPs)

Following the discussions with the stakeholders it became apparent that this theory is really a layer in theory 5 (which is about shared understanding) and developed to be about how the First Schools Project operates in schools. Results from the schools questionnaire indicate that the Outcome is happening (see Table 4.7). However, explanations for the Outcome had more to do with teacher time, skill and expertise than with schools wanting effective IEPs (see Appendix 12). The Context of the theory has therefore been changed and it has been re-numbered to reflect that it is part of theory 5.

Table 6.11: Theory of the Inquiry 5F, Final version

	Context		Mechanism		Outcome Pattern
Theory of the Inquiry 5F	*Schools where teachers have skills and expertise as well as time for meeting the SLT*	+	SLTs carry out collaborative assessments of the child's language difficulties in school	=	SLTs discuss IEP targets and strategies for the IEP

6.2.xii Theory of the Inquiry 12 (Level of training of SLT)

Evidence to support this theory came only from the SLT interviews as it was only in this framework that there were stakeholders with the expertise to comment upon it. The theory provoked a great deal of discussion from the SLTs (see Appendix 12, Theory 12) and the responses of the SLTs underlined the advantages of the researcher being known to them and trusted by them (discussed in Chapter 1). They talked freely about how poorly prepared they were for working in schools by their initial training; about their lack of confidence when they began working on the First Schools Project and about on-going problems of status and recognition. They also talked about the knowledge they needed about schools (e.g. about the National Curriculum) in order to be effective. The SLTs might have been less willing to give such information to a researcher from the NHS (who might hold influence) and would probably have not had enough trust in a researcher who was a stranger to be so honest (Hockey, 1994). The SLTs did say that their skill levels had improved with training and experience. The younger SLTs, who had joined after the beginning of the First Schools Project, talked very positively about the induction they had received and how that had prepared them for work in schools. As one SLT noted, the inexperience of an SLT is no reason for not working in the model of the First Schools Project since SLTs can have training. The theory remains, therefore, unchanged in its meaning but it is re-phrased positively to reflect the information from the SLTs.

Table 6.12: Theory of the Inquiry 12, Final version

	Context		Mechanism		Outcome pattern
Theory of the Inquiry 12 (Level of training of SLT)	*SLTs with a high level of training in school processes and experience of working in schools*	+	*SLTs working in schools*	=	*Good collaborative working relationships and good language and learning outcomes for children with language difficulties*

6.3 Reflections on the Final Theories of the Inquiry

Before any conclusions are discussed it is important to consider aspects of the research process which might have compromised the content of the final theories. There follows, therefore, a brief review of the data collection, some consideration of

the mechanisms, which have remained largely unchanged and a discussion of the structure of the final theories.

The first consideration is whether the final Theories of the Inquiry can be deduced from the data that was collected. Throughout this study I have explained my choice of research methods and I attempted to follow them carefully. However, as discussed above, data that could be used to uphold, modify or disprove the complex theories was limited. (Chapter 7 includes discussion on the appropriateness of the methods of data analysis.) It might seem, therefore, that, although the final theories are an honest attempt to make sense of the data and of the First Schools Project, those theories are based in only restricted evidence (although, in Chapter 7, there will be a discussion of how much the researcher should use his own judgement in realistic research). The structures of the final theories are the best that can be done with the available data.

A second aspect of the final theories is that there is no radical change and they are similar in substance to the original theories (see Table 3.4). It might be argued that I was a researcher who was biased in favour of the First Schools Project, developed theories to support it and then set out to collect data that would uphold the theories. Pawson (2002a), when discussing the choice of theories to explore, suggests that some theories are simply true and do not need further investigation. It is possible that, in order to justify the First Schools Project, I had chosen the 'simply true' theories. However, throughout this study, I was aware of my positive feelings about the project and endeavoured to recognise them and to control any confirmatory bias towards it (see e.g. discussion of analysing qualitative data, section 5.6). An explanation for the constancy of the theories might lie in the way that they were developed. I did not begin to construct the theories until the research study was in progress and by then I had knowledge from the literature review, from the SLTs, and from an understanding of the First Schools Project and the theories were chosen to reflect the main structures of the project (see section 3.3.v). It might be that the theories of the inquiry were written with some insight and, thus, the data collected generally supported them.

While the theories changed a little in substance, there was almost no change in the Mechanisms. This might be attributed, at least in part, to the way that the contrasting cases were selected in the second stage of the research study. As discussed in Chapter 5 (see section 5.7.ii) the cases were chosen by the SLTs and, in the criteria for success or non-success (of the intervention), they were more likely to attribute failure to factors within the child or the school (i.e. Contexts) than to the project itself (i.e. the Mechanisms). The nature of the cases chosen may have influenced, at least in part, the discussions with other stakeholders so that they did not question the Mechanisms. However, it did seem that the stakeholders were positive about the structure of the First Schools Project and did not offer explanations that involved a change in Mechanisms. (For example, no-one suggested that SLTs should not be involved in target-setting for children with language needs.) Stakeholders frequently wanted more from the First Schools Project (for example they said that they wanted more SLT time) but none criticised the Mechanisms of the project.

6.4 Conclusions from the Theories of the Inquiry

In Chapter 2 (section 2.5) models of collaborative practice between education and speech and language therapy services were discussed. Timmins and Miller (2007) discuss how, in traditional evaluations, the emphasis is often on the Outcomes and this was the case in the models considered in Chapter 2. For example, an aim of the Haringey project was to, “devise a model (M) that would meet the communication needs of children” (O) (Lennox and Watkins, 1998, p13) and the evaluation was about the model’s effectiveness. The constraints of such an approach were discussed in Chapter 3. By being realistic, the evaluation of the First Schools Project aimed to extend traditional parameters since the evaluation sought, not just to identify successful Outcomes but to explain the circumstances in which those outcomes can be expected to occur. Although the data collection was limited, the findings indicated that the First Schools Project (M) could lead to successful Outcomes in certain circumstances. This is summarised in Table 6.13. The data may not have given what Miles and Huberman (1994) describe as a ‘thick’ description of the project but the conclusions have credibility in that they endorse

other researchers (as discussed in Chapter 2) who have identified similar factors which facilitate collaborative working.

Table 6.13: Contexts which facilitate successful Outcomes from the First Schools Project

Context		Mechanism		Outcome Pattern
The ideal school context is one where the whole school recognises the importance of meeting language needs and is committed to collaborative working. However, it is possible that a committed classteacher might be effective (for the time that the child is in her class) even if the rest of the school is less involved				
Greater equity of provision since children attend appointments with the SLT because they are held in school				
When SLTs work in schools there can be good collaborative relationships between teachers, the SLT and parents as long as parents choose to engage in the process.				
SLTs have sufficient time to visit schools regularly and time to talk to staff and parents when there.				
Schools prioritise and have a good understanding of language needs. Schools are prepared to implement appropriate strategies • Schools recognise within child factors can since these can have a significant effect on learning outcomes. • Suggestions from the SLT and strategies for supporting children are practical and within the resources of the school. • Schools develop expertise in meeting the needs of children with language difficulties and create a good learning environment for them. • Schools develop good collaborative working with other professionals e.g. EPs.	+	The First Schools Project	=	Positive language and learning Outcomes and good collaboration
School staff have training in meeting language needs and they implement what they have learnt				
Teachers understand how to meet the needs of children with recognised language difficulties and can generalise their skills in order to meet the needs of those children who have significant but less severe language difficulties				
SLTs and schools have a shared understanding and shared responsibility for meeting the needs of children with language difficulties				
SLTs have training and support to work in schools				

The above is a summary of the information included in Tables 6.1 – 6.12 and represents the conclusions of the research inquiry

6.5 Transferring the First Schools Project to other SLT services

One of the purposes of this research study (see section 1.1.ii) was, if the model of the First Schools Project were shown to be effective, to recommend it for use with other speech and language therapy services. Had this study followed the design of traditional research it could have accepted the results of the schools questionnaire and within the limits of the data, concluded that the First Schools Project provides a successful model for speech and language therapy services to follow. However, it is likely that, if other services adopted the First Schools Project in such circumstances they would not be equally successful since, as noted by Pawson (2002b), social programmes are multifaceted phenomena which work in only limited conditions. This study, (within the limits of the data collection) has recognised such conditions in that it has identified facilitating and blocking Contexts. Because the evaluation has been realistic it provides the information for other practitioners, who wish to adopt the First Schools Project, so that they are able to identify the local conditions needed for programme efficiency. As noted by Pawson (2003),

> "We learn the transferable lessons about programme *theories* rather than about the programmes *per se*."
>
> (Pawson 2003, pp 479)

However, while the research study has been progressing, recent legislation (The Children Act, DfES, 2004, Every Child Matters, DfES, 2004 and the National Service Framework for Children, DoH, 2004, all discussed in section 2.3) has become influential for both Local Authority Children's Services and for health professionals who work with children. The main impetus from 'Every Child Matters' is that professionals should work in a 'team around the child'. The response of the Royal College of Speech and Language Therapists (Gascoigne, 2006) is to recommend that SLTs should identify language needs "as part of, or with reference to, the appropriate multidisciplinary team" (Gascoigne, 2006, p6). Moreover, there is also the recommendation that, when SLTs work to meet the child's needs, this should be part of the wider team working with the child. The suggestion here is that collaboration should not be between services (the First Schools Project was about collaboration between schools and the speech and language therapy service) but between individuals working within a team.

At present, it is unclear how the 'team around the child' will be structured but what is certain, is that policy makers, within both children's services and health, will be looking for effective models of collaborative practice to underpin the work of the teams. This innovatory study is, therefore, opportune since it has demonstrated the effectiveness of realistic evaluation in educational research; it has provided an alternative view on how social programmes operate and demonstrated the importance of Context by identifying the conditions in which the programme (the First Schools Project) was able to operate successfully. Moreover, the Contexts identified in this research study (which facilitated or blocked the success of the First Schools Project) might provide the basis for theories of how other ways of working (M) might lead to successful Outcomes in future evaluations of collaborative practice in children's services. The timely contribution to knowledge that is made by this study is that it has demonstrated that realistic evaluation is an effective tool for assessing social programmes in education and the research has provided policy makers with a template for evaluating collaborative practice within the developing integrated services.

6.6 Conclusion

The strength of the realistic approach is that the focus is on factors which influence Outcomes, rather than just on Outcomes. However, the problem with such an approach is that social programmes are complex and operate at different levels, so collecting evidence to explain Outcomes is (as discussed in design of this study, see section 3.3.iii) a multifaceted task. This study has been a first attempt to use realistic evaluation in education and the scope of the data collection has been sufficient to indicate how certain aspects of the First Schools Project are working and to suggest some explanations for Outcomes. Moreover, the study has demonstrated the effectiveness of using realistic methods in that they identify the Context in which the programme can operate effectively. Following recent legislation, models of collaborative practice such as the First Schools Project may no longer be so relevant but the study makes an important and timely contribution to knowledge in that it provides a effective template for evaluating models of collaborative practice that are currently developing within children's services.

CHAPTER 7

A REVIEW OF THE USE OF REALISTIC EVALUATION AND CONCLUSIONS ABOUT ITS USE IN EDUCATIONAL RESEARCH

7.1 Introduction

There are two ways in which this inquiry might be considered to be original: in the evaluation of the First Schools Project as a model of collaborative working and in the use of a realistic evaluation in education. The previous chapter was a critical review of the first of these strands and this chapter focuses on the innovative use of realistic evaluation. There is discussion of the developments and modifications that were considered necessary in order to fit Pawson and Tilley's (1997) model for use in education and consideration of modifications to the model for future use. The use of realistic evaluation in educational research is assessed.

7.2 A Review of the process of the Realistic Evaluation

The purpose of this section is to review the use of realistic evaluation in order to demonstrate its effectiveness as a methodology for educational research. Using Pawson and Tilley's(1997) model in education research was pioneering since it had been used, previously, mainly in the field of crime prevention. In order to discuss the value of realistic evaluation, the organisation of the literature review and each stage of the research process (the stages were identified in section 3.3.iii) is considered. There is discussion of the development and refinement needed at each stage to modify the guidance of Pawson and Tilley (1997) in order to adapt their model of realistic evaluation for educational research.

7.2.i The literature Review

In their book, Pawson and Tilley (1997) do not suggest specific ways of conducting a literature review but elsewhere (e.g. Pawson, 2004) there is advice on assessing evidence from previous research. I structured part of the literature review (see sections 2.4 and 2.5) in order to directly support a realistic evaluation. By identifying possible Contexts and 'good explanations' (Pawson, 2004) I was able to use the evidence from the literature directly in the construction of the Theories of the Inquiry. In section 3.3.v, I described how selecting these theories was a challenging task as there seemed to be an infinite number of possible explanations. Although I was guided by other sources (e.g. the 'folk theories' of the SLTs), the information from the literature review was pivotal in the choice of the Theories of the Inquiry. Moreover, the theories chosen were appropriate in that they provided a focus for the research study and the inquiry did not stray into irrelevant or false explanations. (How most of these realistic theories were little modified or supported from the evidence from this research study was discussed in section 6.3.) It seems that, by interrogating previous studies in a realistic way, I was able to arrive at explanations for the First Schools Project (the Theories of the Inquiry) that provided a sound basis for the realistic evaluation.

7.2.ii The design of the realistic evaluation

In section 3.3.i, I reproduced Pawson and Tilley's (1997) conception of Mechanisms acting in Contexts to produce Outcomes and this gave me a clear underpinning principle for the research study. I also used the diagram of the cycle of research (see figure 3.2) in order to understand the research process, but I did make an alteration to the terminology in that diagram. When they introduce the research cycle, Pawson and Tilley make a distinction between an overall theory and subordinate hypotheses which come from the theory. However, they do not maintain this clear distinction in subsequent writing. They often do not use the term hypothesis at all (for example in description of the post-code marking project, discussed in section 3.2.iv). At other times the term hypothesis is used but interchanged with theory. For example, when discussing the prison education project Pawson and Tilley (1997)reflect on 'a pair of theories' which are 'the high engagement hypothesis' and the 'mediocrity hypothesis' and then, part way through

the study they report the emergence of 'neophyte theories' not new hypotheses. Hence, I feel that by using only the term 'theory' and not using 'hypothesis', I avoided some of the confusion that seems to arise from using both terms.

There is an alternative model of programme evaluation which is used by Pawson (2002c) in his evaluation of the implementation of Megan's Law, which is the 'theories-of-change' model. For this method the programme is conceptualised as a theory and the programme theory is presented as a chain of stages as it passes through initial activities, intermediate and long term outcomes. In order to analyse and understand the First Schools Project, I used part of the theories-of-change model (see section 3.3.iv.a) and identified the stages in the chain of the development of the Project (see Table 3.2). Researchers using the theories-of-change model seek to collect data that will identify flows and blockages at each stage in the chain.

> "The evaluation consists of putting a microscope to each stage, making process observations to see if the theories conform to actuality."
> (Pawson, 2003 pp 473)

Like realistic evaluation (Pawson and Tilley, 1997) the theories-of-change model is based in the philosophy of realism and seeks to identify Contexts that will facilitate or prevent Outcomes. However, it was developed for social programmes where there is a long and complex implementation chain (as with Megan's Law, Pawson 2002c) whereas most educational practitioners are concerned with assessing the effectiveness of discrete programmes (e.g. interventions to help children to read, Solity, 2002). Hence, the model of realistic evaluation, described by Pawson and Tilley, (1997) and developed for use with the First Schools Project, is more apposite. This study, by adapting the realistic evaluation model for use in education, has pioneered a method which should have value for future researchers who wish to assess educational practice.

Pawson (2006) has described how the theories-of-change model can be used for systematic reviews of evidence-based policy where researchers consider the results of previous inquiries. It would seem, therefore, that this model does have a place in educational research for the examination of educational policy but such

investigations are more likely to be carried out at a local or central government level rather than by individual practitioners.

7.2.iii Understanding the programme

The process of analysing the programme (set out in Table 3.2) was adapted from the Theories-of-Change model of evaluation yet it provided the researcher with a good understanding of the development and structure of the First Schools Project and helped with the identification of the Theories of the Inquiry (see Table 3.4). Analysing the progress of the First Schools Project proved to be a useful addition to the process of the realistic evaluation

However, in contrast, while it was important to understand what constituted a Context, Mechanism or Outcome in the First Schools Project, listing them in detail provided information that was irrelevant and did not seem to make a significant contribution to the progress of the research study. I could find no specific guidance on selecting Contexts, Mechanisms and Outcomes but followed the advice on choosing theories and therefore listed, what seemed to me, to be those Contexts, Mechanisms and Outcomes which were important for the effectiveness of the First schools Project. However, this comprehensive and extensive list was of limited use when I developed the Theories of the Inquiry (discussed in section 3.3.v), since I relied more on other sources of information (e.g. the literature review, discussed in section 7.2.i) than on the lists of Ms Cs and Os. Also, as the study continued, I realised that such categorisation is not always helpful as there was fluidity between Contexts, Mechanisms and Outcomes. In order to understand the nature of Ms, Cs and Os for their study, it is probably necessary to identify examples of each but listing them in detail does not contribute purposefully to the overall research study.

7.2.iv Developing the Theories of the Inquiry

In the section on developing the Theories of the Inquiry (3.3.v), I discussed how I looked for advice in the selection of the theories and used Pawson's guidance that the researcher should select those theories that she thinks vital to the effectiveness of the programme. I followed this advice conscientiously and selected Theories of

the Inquiry which, in my judgement, reflected the main structures of the First Schools Project and then set out to collect data that would support, modify or invalidate the theories. However, following the detail of the process carefully masked its implications. It was not until I constructed Table 4.7 to summarise the results of the schools questionnaire (and by then the research process was well advanced), that I realised that the task of data collection for so many Theories of the Inquiry was impossible within the constraints of the time and resources of this study.

The problem here is not in the design of realistic research but in the interpretation of it. It would have been more practical to have selected about four to six theories. These would still need to include the theories which are important for the effectiveness of the programme but it might be possible to exclude some of the more obvious theories. For example, I included Theory of the Inquiry 4 (see Table 3.4), which was about schools making time for the teachers to talk to the SLT, because there was evidence that in some schools this was not happening. However, it may be that time is an obvious Context for the effective operation of the First Schools Project. There is extensive evidence from the literature review (see section 2.4.iv.c) on the importance of time in collaborative projects. Moreover, in a recent study by Paradice, Bailey-Wood, Davies and Solomon (2007), time is taken to be a necessity for the effectiveness of collaborative working and protected time for teachers to talk to SLTs was a pre-requisite if schools wished to participate in the collaborative project that they describe. If 'time' was an evident Context then Theory of the Inquiry 4 was to be 'simply true' (Pawson, 2002a and discussed in section 6.3) and could have been excluded from the Inquiry. I should have been more liberal in my interpretation of which Theories of the Inquiry were 'simply true' (e.g. Theory of the Inquiry 8, facilitating the work of the SLT, could also be seen as self-evident) and not included them in the research study.

Realistic research is about exploring the layers of a social programme and the effect of emergence when elements in the social programme combine (discussed in section 3.2.iii). I think, therefore, that it is important to include more complex theories which can be discussed in detail with the stakeholders in a holistic way. (This is considered further below). Hence, I think it is appropriate to include

theories such as theory 5 (shared understanding), theory 10 (shared responsibility) and theory 12 (SLT training).

7.2.v Identifying regularities or establishing whether Contexts, Mechanisms and Outcomes are happening

Both Sayer (2000) and Pawson and Tilley (1997) discuss how the realistic researcher seeks to explain regularities between social phenomena and for this reason (and because this seemed to be the case in the examples quoted by Pawson and Tilley,1997) I designed the data collection so that the first part was about identifying regularities (see Chapter 4 which describes the schools questionnaire). However, I now feel that it is more helpful to re-construe the underlying principle from 'explaining regularities' to 'identifying facilitating and blocking Contexts' (and this terminology is also used by Pawson and Tilley, 1997). This construction focuses *all* of the data-gathering on Mechanisms, Outcomes *and Contexts* (Part 1 of this study focussed on identifying regularities and the data collection was on only Ms and Cs). An underpinning question for this research study would then have been: which Contexts facilitate and which hinder successful Outcomes for the First Schools Project?

There is still a need for the data collection for a realistic evaluation to be in two parts but the Part 1 should aim to establish whether the Contexts, as well as the Mechanisms and Outcomes of the Theories of the Inquiry are happening. By framing the inquiry in this way, the researchers can ensure that data is gathered on all aspects of the social programme. In order to achieve this, the first task for the researcher should be to analyse each theory and to identify sources of evidence for all aspects of it. This system should open to the researcher all the available data and would avoid one of the oversights of this research study when the information on children who did not attend clinic appointments (needed for Theory of the Inquiry 2, see Table 3.4) existed but was not collected. It should also highlight where further data was needed. Theory of the Inquiry 1 is shown below (see Table 7.1) as an example with possible sources of information shown in blue italics.

Table 7.1: Data collection Part 1. Theory of the Inquiry 1, as an example, with possible sources of information on whether Contexts, Mechanisms and Outcomes are happening

	Context		Mechanism		Outcome Pattern
Theory 1of the Inquiry 1 (General project)	The ideal context is a school where there is a positive attitude to meeting the needs of children with language difficulties (e.g. it is part of the whole school policy, *(information from the school senior management team, school development plan)* teachers and TAs have undertaken appropriate training *(school records of staff development)*, parents are made to feel welcome *(parents, school policy)*.	+	SLTs make regular visits to schools and share their expertise with school staff *(SLT's records of school visits)*	=	Children make progress in all aspects of language development *(SLT records, school records),* in literacy skills *(Early years foundation records, SATs results, school records)* , in social skills, and in behavioural skills *(class teachers)*

It may still be necessary to collect basic information on whether aspects of Contexts, Mechanisms and Outcomes are happening (as Part 1 of the data collection). It will be remembered that, in realistic research, when information is needed, the choice of the method of data collection is defined by the object of study (discussed in section 3.2.vi and this applies to both Part 1 and Part 2 of the data collection). The framework suggested by Pawson and Tilley (1997) helps to clarify the choice of method. They suggest three questions for the researcher. What do I need to know? Who can give me this information? And, how will I collect it? In the evaluation of the First Schools Project, the Pawson and Tilley framework was followed for the data collection in Parts 1 and 2 and successfully guided the researcher in the appropriate use of research methods.

7.2.vi Supporting or invalidating the Theories of the Inquiry and re-assessing the Theories of the Inquiry

The last two stages of this research study (described in section 3.3.iii), included Part 2 of the data collection (discussions with the stakeholders about the Theories of the Inquiry, described in Chapter 5) and a review of the Theories of the Inquiry (see Chapter 6). From these last stages there were two issues to consider: the expertise of the stakeholders and the method of analysis of the qualitative data and, because the method of data analysis cannot be separated from the way that the theories are re-assessed, these two stages are discussed together.

Previous to this discussion, changes to Part 2 of the data collection, following the remodelling of Part 1 (discussed in section, 7.2.v) are considered briefly. If Part 1 of the data gathering were organised as suggested in the previous section (7.2.v), then, when Part 1 was complete, the researcher would have information on whether the Contexts, as well as the Mechanisms and Outcomes were happening. This would lead to greater clarity in the purposes of the data gathering in Part 2 since the researcher could focus on holistic discussions of the Theories of the Inquiry with the stakeholders and not have also to collect information on whether contexts were happening (as was the case in the evaluation of the First Schools Project).

Pawson and Tilley discuss the kind of knowledge that different stakeholders might have about a social programme. For example, they suggest that participants might be sensitive to Mechanisms but have less knowledge about Contextual constraints and Outcome patterns. As discussed in Chapter 5 (see sections 5.2 and 5.5.ii-iv), this method of allocating expertise did not seem helpful since, for example, one group of participants (the parents) were able to talk about more than just the Mechanisms of the Project and could offer explanations for Outcomes. A more useful approach was what Pawson and Tilley (1997) term 'different but complementary world views'. All of the stakeholders, whether they were participants or practitioners or fulfilled both roles (as did the teachers and, to a lesser extent, the parents), were able to offer explanations for Outcome Patterns but from different knowledge bases and hence the the view point of each of the different groups of stakeholders was qualitatively different. The problem in the evaluation of the First Schools Project was that the selected stakeholders did not have knowledge on all aspects of the Theories of the Inquiry. (For example, no senior members of the school staff, who would be able to talk with authority about government initiatives, was included as an interviewee, see table 5.9 and section 6.2.vi.) In realistic research, it is important the researcher chooses sufficiently diverse groups, so that complementary knowledge on different aspects of all of the Theories of the Inquiry is ensured.

When planning the interviews, I interpreted the model of Theorising the Interview because I was anxious to allow the interviewees to be as open as possible in their

responses (and not to have ideas donated by me) and also not to intimidate the parents with research jargon (see section 5.5). The problem with this approach was that not all aspects of the theories were discussed (e.g. there was no discussion of government initiatives with the teacher/SLT pairs for Theory of the Inquiry 6, see Table 5.9). However, if the aim in Part 2 is to discuss the theories with the stakeholders, then the researcher needs to follow closely the model of 'Theorising the Interview' (Pawson, 1996 and discussed in section 5.4.iii) because this provides the means for such discussions. It should still be possible to present the teacher-learner phase of the interview in such a way that less confident or knowledgeable interviewees (e.g. parents) can understand the process. During the conceptual refinement phase, the topics for discussion may be less open (than they were for the First School Project interviews) but they would be focussed on the Theories of the Inquiry. Moreover, the interviewer should be able to ensure that interviewees are allowed to be open and honest in what they say.

In Chapters 5 and 6 I discussed the most appropriate methods for analysing the data from the discussion with the stakeholders and for reviewing the theories and it seems that the methods chosen could still be justified following the re-modelling of the data collection in both Parts 1 and 2 of the inquiry. In section 5.4.iii I considered how to analyse the data from the interviews with the stakeholders since Pawson and Tilley (1997) had not indicated whether researchers used only their insight to draw conclusions from such data or whether some systematic analysis of the data was used. I rejected the former since I was concerned that it would be difficult to justify the validity of the conclusions and, instead, I used the method of analysis suggested by Miles and Huberman (1994). Even though Part 2 of the data collection might be focussed on holistic discussions of the theories there would still need to be a method for aggregating the information from the different stakeholders. The Miles and Huberman model could be used and displays could summarise the data under each theory (see Tables 5.4-5.15 for the displays for the evaluation of the First Schools Project). However, when the researcher reviews all of the data from the research inquiry, the summaries can be used as guidance but the final conclusions will also be guided by insight and understanding. As discussed in section 6.1, in order to reach the final Theories of the Inquiry for the First Schools Project I used my judgement as a psychologist and a researcher.

7.3 Suggestions for future researchers

As this study has indicated, the Pawson and Tilley model of realistic evaluation can be adapted for use in educational research. Hence an important contribution of this research inquiry is guidance for future researchers on how the model can be used.

- Interrogate the literature for evidence of possible 'good explanations' (Pawson, 2004) for the Outcomes of the social programme you are studying. Try to identify, in previous research, Contexts that might facilitate or hinder successful Outcomes. Use the literature review to underpin the construction of the Theories of the Inquiry.
- The model of realistic evaluation (Pawson and Tilley, 1997) provides a sound structure for the evaluation of programmes in educational research, particularly when the researcher is also a practitioner. However, it is probably less confusing to use only the term 'theory' and to avoid the use of Hypothesis. For evidence-based policy, when researchers consider existing evidence, the theories-of-change model is more appropriate.
- Analysing the programme using a model of its progress (adapted from the theories-of-change model, see table 3.2) is helpful in fully understanding the programme. However, a detailed listing of Contexts, Mechanisms and Outcomes may not contribute to the advancement of the inquiry.
- Focus the area of study by limiting the number of Theories of the Inquiry that you select. Include theories which are vital to the functioning of the social programme but there is no need to investigate those that are 'simply true' (Pawson, 2002a).
- Consider the underlying purpose of the inquiry is to identify Contexts that facilitate or hinder successful Outcomes of the social programme.
- Data collection in Part 1 of the research study is about identifying which Contexts, Mechanisms and Theories are happening. Put the Theories of the Inquiry in a table and check that you have included a source for information from all aspects of the theories. Use existing data when possible.

- For determining methods of data collection, follow the advice of Pawson and Tilley (1997): first clarify the information that is needed and then ask 'who can give me this information?' Finally ask, 'how can I collect this information?'
- Ensure that the group of stakeholders is sufficiently diverse to have knowledge of all aspects of the Theories of the Inquiry. When discussing the theories with the stakeholders, do this in a holistic way following the principles of theorising the interview (Pawson, 1996). It may be necessary to analyse the data but the researcher needs to use their understanding and insight in order to make the final deductions.

7.4 Realistic Research and practice in education

This study suggests that realistic evaluation might be used in many areas of education research but, in order to focus the discussion at the end of this thesis, I am going to limit considerations to possible evaluations of practice in education. This is because the model is more suitable for assessing programmes rather than education policy. A further reason is that the Children Act (2004) has necessitated that educationalists evaluate their own practice and shape their service to deliver outcomes that matter to children. Baxter and Fredrickson (2005) discuss the need for EPs to evaluate their work in order to ensure that it is making a positive difference to children but their discussion can be applied more broadly to all professionals working with children. Matthews (2003) also considers the work of EPs and suggests using realist methods as a way of producing an evidence base for their practice but, again, this can be applied to all education professionals. He argues that realistic evaluation, which allows the practitioner to explore the complexity of social phenomena, is the most appropriate way to ensure that professional practice is of value to children.

Educationalists are often urged to use particular programmes in their practice (for example, a phonics approach to reading) but the studies supporting such programmes are often inconclusive since the research usually focuses on identifying Outcomes and ignores the effect of Context on those Outcomes. (This is discussed by Timmins and Miller, 2007.) This can be illustrated through some

recent work involving an applied behavioural analysis (ABA) programme which was used with pre school autistic children (Remington and Hastings, 2007, Research Autism Report, 2007). The authors noted that the outcomes from the programme included gains in intelligence, language and daily living skills. However, no account is taken of the Contexts in which the programme was delivered. The Contexts included the level of involvement of the parents, the number of hours of ABA that each child received (none had the full 40 hours that was recommended), the individual characteristics of the children, the number of tutors each child had (this ranged from 4 to 13) and the intentions of the tutors. Moreover, the programme itself varied since each programme was tailored to the needs of the individual children. With so much variation, it would seem difficult to say with certainty that the ABA programme resulted in the specified Outcomes. It would have been more useful for future practitioners, who intend to use the ABA programme, if the researchers had been able to specify what aspects of the programme worked in what circumstances.

Practitioners could also use realistic research to evaluate aspects of their everyday work. For example, an EP might want to examine how a cognitive behaviour therapy programme (Hawton, Salkovskis, Kirk and Clark, 1989) had worked with a child. He could identify Outcomes using rating scales completed by the child, her teacher and her parents. The EP could then explore with the stakeholders (the parents, the teachers and the child) which contexts (for example, the language and cognitive ability of the child, the nature of the identified problem, the relationship between the EP and the child) facilitated successful outcomes and which hindered the Mechanisms of the Programme. In this way, the EP could explain how different features of the cognitive behaviour intervention worked in certain Contexts. Further, realistic evaluation can be used to produce evidence on all aspects of professional practice and not just on the use of specific programmes. For example, realistic evaluation might be used to assess the efficiency of a multi-agency meeting, or the usefulness of a professional report. The principles of the evaluation would be the same: the professional would need to identify the Outcomes and then use the stakeholders to explain what worked and in what circumstances.

7.5 Some Final Words

Both the First Schools Project and this research study were begun before the Children Act (2004). However, the conclusions of the study have relevance to the Act and to the way that all professionals who work with children are developing their practice. It seems that, in the First Schools Project, the District SLTs have developed a successful model of collaborative working that can form a basis for integrated services and a team around the child. Moreover, it seems that realistic evaluation provides practitioners with an effective tool for evidence-based practice. Although this study is a modest beginning, it may be an indicator for development of educational research and practice.

References

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Barber, M., Farrell, P. and Parkinson, G. (2002) *Evaluation of the Speech and Language Projects Supported by the Standards Fund: A Report*. Nottingham: DfES Publications.

Baxter, J. and Frederickson, N. (2005) Every Child Matters: can educational psychologists contribute to radical reform? *Educational Psychology in Practice* 21(2) pp87-102.

Beitchman, J. H., Nair, R., Clegg, M., Patel, P.G., Furguson, B. and Pressman, E. (1986) Prevalence of speech and language disorders in 5-year-old kindergarten children in the Ottawa-Carleton region. *Journal of Speech and Hearing Disorders* 51(2) pp 98-110.

Bhaskar, R. (1986) *Scientific Realism and Human Emancipation*. London: Verso.

Bishop, D.V.M. (1994) Developmental disorders of speech and language. In: Rutter, M., Taylor, E. and Hersov, L. (Eds) *Child and Adolescent Psychiatry, Third Edition* Oxford: Blackwell Scientific.

Blaikie, N. (2000) *Designing Social Research: The Logic of Anticipation*. Cambridge: Polity Press.

Botting, N. and Conti-Ramsden (2000) Social and behavioural difficulties in children with language impairment. *Child Language and Teaching Therapy,* 16, pp107-120.

British Psychological Society (BPS) (2007) Ethical Principles for conducting Research with Human Participants. www.bps.org.uk

Burden, V., Stott, C. M., Forge, J. and Goodyer, I. (1996) The Cambridge language and speech project (CLASP): 1 detection of language difficulties at 36 to 39 months. *Developmental Medicine and Child Neurology,* 38, pp 613-631.

Burton, D. (2000a) Design issues in survey research. In: Burton, D. (ed) *Research Training for Social Scientists*. London: Sage.

Burton, D. (2000b) Data collection issues in survey research. In Burton, D. (ed) *Research Training for Social Scientists*. London: Sage.

Burton, D. (2000c) Questionnaire design. In Burton, D. (ed) *Research Training for Social Scientists*. London: Sage.

Catts, H. W. (1993) The relationship between speech-language impairments and reading disabilities. *Journal of Speech and Hearing Research,* 36, pp 948 – 958.

Clarke, D. D. (2004) “Structured judgements and methods” – the best of both worlds? In: Todd, Z., Nerlich, B., Mckeown, S. and Clarke, D. D. (eds) *Mixing Methods in Psychology.* Hove: Psychology Press.

Cohen, L., Manion, L. and Morrison (2000) *Research Methods in Education.* London: Routledge Falmer.

Cohen, N.J. (1996) Unsuspected language impairments in psychiatrically impaired children. In: Beitchman, J.H., Cohan, N.J., Konstantareas, M.M. and Tannock, R. (eds) *Language, Learning and Behaviour Disorders: Developmental, Biological and Clinical Perspectives,* Cambridge: Cambridge University Press.

Cohen, N.J., Barwick, M.A., Horodezky, N.B., Vallence, D.D. and In N. (1998) Language, achievement and cognitive processing in psychiatrically disturbed children with previously identified and unsuspected language impairments. *Journal of Child Psychology and Psychiatry* 39(6) pp 865-877.

Cross, M., Blake, P., Tunbridge, N. and Gill, T. (2001) Collaborative working to promote the communication skills of a 14-year-old student with emotional, behavioural and learning difficulties. *Child Language Teaching and Therapy* **17.**

Department for Education (DfE) (1993) *Education Act 1993* London: HMSO.

Department for Education and Employment (DfEE) (2000) in collaboration with the Department of Health. *Provision of Speech and Language Therapy Services to Children with Special Educational Needs (England): Report of the Working Group.* London:DfEE.

Department for Education and Employment (DfEE) (1997) *Excellence for all Children: Meeting Special Educational Needs.* London:H.M.S.O.

Department for Education and Employment (DfEE) (1997) *Meeting Special Educational Needs: a Programme of Action.* London: DfEE.

Department for Education and Skills (DfES) (2004) *The Children Act.* London: HMSO.

Department for Education and Skills (DfES) (2004) *Every Child Matters: Change for Children*. Nottingham: DfES Publications.

Department for Education and Skills (DfES) (2001) *Special Educational Needs Code of Practice.* London:DfES.

Department of Health (DoH) (2004) *The National Service Framework for Children and Young People*. London: HMSO.

Department of Health (1991) *The Children Act 1991: Guidance and Regulations – Volume 6: Children with Disabilities.* London: HMS

Dockrell, J. and Lindsay, G. (2001) Children with specific language difficulties - the teachers' perspective. *Oxford Review of Education* 27(3) pp 369 – 393.

Dockrell, J. and Lindsay, G. (2000) Meeting the needs of children with specific speech and language difficulties. *European Journal of Special Needs Education* 15(1) pp 24 – 41.

Dockrell, J. and Lindsay, G. (1998) The ways in which speech and language difficulties impact on children's access to the curriculum. *Child Teaching Language and Therapy* 14 pp117-133.

Dunsmuir, S., Clifford, V. and Took, S. (2006) Collaboration between educational psychologists and speech and language therapists: barriers and opportunities. *Educational Psychology in Practice* 22(2) pp 125-140.

Forbes, J. C. (2001) Teacher/therapist collaboration policy: an analysis. *Child Language Teaching and Therapy* 17 pp 195-205.

Frederickson, N (2002) Evidence-based practice in educational psychology. *Educational and Child Psychology* 19(3) pp 96-111

Gallagher, T.M. (1999) Interrelationships among children's language, behaviour and emotional problems. *Topics in Language Disorders* 19(2) pp 1-15.

Gallagher, T.M. (1996) Social-interactional approaches to child language intervention. In: Beitchman, J.H., Cohan, N.J., Konstantareas, M.M. and Tannock, R. (eds) *Language, Learning and Behaviour Disorders: Developmental, Biological and Clinical Perspectives,* pp 418-431. Cambridge: Cambridge University Press.

Gascoigne, M. (2006) *Supporting Children with Speech, Language and Communication Needs within Integrated Children's Services: RCSLT Position Paper*. London: RCSLT.

Gillham, B. (2000) *Developing a Questionnaire*. London: Continuum.

Gorard, R. (2001) *Quantitative Methods in Educational Research: The Role of Numbers Made Easy*. London: Continuum.

Gorad, S. (2001) *Quantitative Methods in Educational Research*. London: Continuum.

Greene, C., Lehn, B. and Goodyear, L. (2001) The merits of mixing methods in evaluation. *Evaluation* 7(1) pp 25-44.

Hammersley, M. (2000) The relevance of qualitative research. *Oxford Review of Education* 26(3&4) pp 393-405.

Hartas, D. (2004) Teacher and speech-language therapist: being equal and achieving a common goal. *Child Language Teaching and Therapy* 20(1) pp 33-54.

Hawton, K., Slakovskis, P.M., Kirk, J. and Clarke, D. M. (1989) *Cognitive Behaviour Therpay for Psychiatric Problems*. Oxford: University Press

Henwood, K (2004) Reinventing validity: reflections on principles and practices from beyond the quality-quantity divide. In: Todd, Z., Nerllich, B., McKeown, S. and Clarke, D. *Mixing Methods in Psychology*. Hove: Psychology Press

Hockey J (1994) Research methods – researching peers and familiar settings. *Research Papers in Education* 8(2) pp 199-225

Houston, S. (2001) Beyond social constructionism: critical realism and social work. *British Journal of Social Work* **31** p845-861.

I-can (2001) *Joint Professional Development Framework* London: I-can.

Kersner, M. and Wright, J. (1996) Collaboration between teachers and speech and language therapists working with children with severe learning difficulties: implications for professional development. *British Journal of Learning Disabilities* 24 pp33-37.

Law, J., Boyle, J., Harris, F., Harkness, A. and Nye, C. (2000) Prevalence and natural history of primary speech and language delay: findings from a systematic review of the literature. *International Journal of Language and Communication Disorders* 35(2) pp165-188.

Law. J, Lindsey, G., Pearcy, N., Gascoigne, M., Soloff, N., Radford, J. and Band, S. (2001) Facilitating communication between education and health services: the provision for children with speech and language needs. *British Journal of Special Education* 28(3) pp 133-137.

Law, J., Lindsay, G., Pearcey, N., Gascoigne, M., Soloff, N., Radford, J. and Band, S. (2000) *Provision for Children with Speech and Language Needs in England and Wales: Facilitating Communication between Education and Health Services.* Nottingham: DfEE publications.

Law, J., Luscombe, M. and Roux, J. (2002) Whose standards? Using the standards fund for children with speech and language needs – a survey of allocation of resources in England. *British Journal of Special Education* 29 (3) pp 136-140.

Law, J. and Tamhne, R. (2000) The size of the problem. In Law, L., Parkinson, A. and Tamhne, R. (eds) *Communication Difficulties in Childhood.* Radcliff Medical Press: Oxford.

Lennox, N. and Watkins, K. (1998) Teaching and learning together. *Royal College of Speech and Language Therapists Bulletin,* March.

Lickert, R. (1932) A technique for the measurement of attitudes. *Archives of Psychology* no 140

Lindsay, G. and Dockrell, J. (2002) Meeting the needs of children with speech, language and communication needs: a critical perspective on inclusion and collaboration. *Child Language Teaching and Therapy* 18(2) pp 91-101

Lindsay, G., Solloff, N., Law, J., Band, S., Pearcey, N., Gascoigne, M. and Radford, J. (2002) Speech and language therapy services to education in England and Wales. *International Journal of Language and Communicational Disorders* 37(3) p273-288

Matthews, J. (2003) A framework for the creation of practitioner-based evidence. *Educational and Child Psychology* 20(4) pp 60-67.

McCartney, E. (1999) Barriers to collaboration: an analysis of systematic barriers to collaboration between teachers and speech and language therapists. *International Journal of Language and Communicational Disorders* 34, 4 pp 431-440.

McCartney, E. and van der Gaag, A. (1996) How shall we be judged? Speech and language therapists in educational settings. *Child Language Teaching and Therapy* 12 pp 314-327.

McNiff, J., Lomax, P. and Whitehead, J. (1996) *You and Your Action Research Project.* London: Routledge.

Mertens, D.M. (1998) *Research Methods in Education and Psychology: Integrating Diversity with Quantitative and Qualitative Approaches.* California: Thousand Oaks

Miles, M. B. and Huberman, A. M. (1994) *Qualitative data analysis: an expanded source book.* London: Sage.

Miller, C. (2002) Learning from each other: practitioners in school-based support for children with language and communication needs. *Support for Learning* 17(4) pp 187-192l.

Nathan, L., Stackhouse, J., Goulandris, N and Snowling, M. (2004) Educational consequences of developmental speech disorder: Key stage 1 National Curriculum assessment results in English and mathematics. *British Journal of Educational Psychology* 74 pp 173-186.

Owen, R., Hayett, L. and Roulstone, S. (2004) Children's views of speech and language therapy in school: consulting children with communication difficulties. *Child Language Teaching and Therapy* 20(1) pp 55-73.

Paradice, R. (2001) Collaborative training for teachers and speech and language therapists: what are the implications for the educational psychologist? *Division of Educational and Child Psychology*: *Debate* 101 pp 6-8.

Paradice, R., Bailey-Wood, N., Davies K. and Solomon, M. (2007) Developing successful collaborative practices for children with speech and language difficulties: a pilot study. *Child Language Teaching and Therapy* 23(2) pp 223-236

Pawson, R. (2006) Seminar, Tavistock Institute, 27 June 2006, *Realistic Evaluation*

Pawson, R (2004) Assessing the quality of evidence in evidence-based policy: why, how and when? *ESRC Research Methods Programme Working Paper No 1*

Pawson, R. (2003) Nothing as practical as a good theory. *Evaluation* 9(4) pp 471-490.

Pawson, R. (2003a) Social care knowledge: seeing the wood for the trees. *ESRC UK Centre for Evidence-Based Policy and Practice: Working Paper 12.*

Pawson, R. (2002a) Evidence-based policy: In search of a method. *Evaluation* 8(2) pp 157-181.

Pawson, R. (2002b) Evidence-based policy: the promise of 'Realist Synthesis' *Evaluation* 8(3) pp 340-358.

Pawson, R. (2002c) Does Megan's Law work? A theory-driven systematic review. *ESRC UK Centre for Evidence Based Policy and Practice: Working Paper 8.* London: Queen Mary, University of London.

Pawson, R. (1996) Theorising the interview. British Journal of Sociology 47(2) pp 295-313.

Pawson, R. and Tilley, N. (1997) *Realistic Evaluation*. London: Sage.

Plain English Campaign (1995) *How to write reports in plain English.*

R *v* London Borough of Harrow *ex parte* M: 8 October 1996.

Reason, P. (1999) Integrating Action and Reflection through co-operative inquiry. *Management Learning* 30(2) P207-226

Reid, J. and Farmer, H. (2001*) How Good is our Collaboration? Working Practice Agreements between Schools and Speech and Language Therapists*. Fife: Fife Council.

Remington, R. and Hastings, R. (2007) Report on the SCAmP research. Research Seminar, London

Research Autism (2007) *Research Report: Outcome of Early Intervention for Autism.* www.researchautism.net

Robson C (2002) *Real World Research (Second Edition)*. Oxford: Blackwell

Royal College of Speech and Language Therapists (RCSLT) (1996) *Communicating Quality 2.* London: Royal college of speech and language therapists.

Sadler, J. (2005) Knowledge, attitudes and beliefs of mainstream teachers of children with a pre school diagnosis of speech/language impairment. *Child Language Teaching and Therapy* 21(2) pp 147-163.

Sayer, A. (2000) *Realism and Social Science* London: Sage.

Scott, D. (2000) *Realism and Educational Research: New perspectives and Possibilities.* London: Routlege.

Shaw, L., Luscombe, M. and Ostime, J. (1996) Collaborative working in the development of a school-based speech and language therapy service. In: *Proceedings of the Golden Jubilee Conference, York 1995*. London: The Royal College of Speech and Language Therapists pp 330-342.

Silverman, D. (1993*) Interpreting Qualitative Data*. London: Sage.

Solity J (2000) Early reading research: applying Psychology to the classroom. *Educational and Child Psychology* 17(2) p46-65

SPSS Statistical Package for the Social Scientist, Windows 11.5 version

Stevenson, J. (1996) Developmental changes in the mechanisms linking language disabilities and bahavior disorders. In: In: Beitchman, J.,H., Cohan, N., J., Konstantareas, M., M. and Tannock, R. (eds) *Language, learning and behaviour disorders: Developmental, biological and clinical perspectives,* Cambridge: Cambridge University Press.

Stringer, H. and Lozano, S. (2007) Under identification of speech and language impairment in children attending a special school for children with emotional and behavioural disorders. *Educational and Child Psychology,* 24 (4) pp 9-19

Tilley, N. (1993) *Understanding Car Parks, Crime and CCTV,* Crime Prevention Unit Paper 42, London: The Home Office.

Timmins, P. and Miller, C. (2007) Making evaluations realistic: the challenge of complexity. *Support for Learning*, 22 (1) pp 9-16

Tomblin, J. B., Records, N. L., Buckwalter, P., Zhang, X., Smith, E. and O'Brien, M. (1997) Prevalence of specific language impairment in kindergarten children. *Journal of Speech Language and Hearing Research,* 40, pp 1245 – 1260.

Topping, C. T., Gascoigne, M. T. and Cook, M. (1998) Excellence for all children: a redefinition of the role of the speech and language therapist. *International Journal of Language and Communicational Disorders* 33 supplement pp 608 – 613.

Vallence, D., Cummings, R. and Humphries, T. (1998) Indicators of risk for problem behaviour in children with language and learning disabilities. *Journal of Learning Disability* 31(2).

Vygotsky, L. S. (1962) *Thought and language*. M.I.T. Press: Cambridge.

Worcestershire Speech and Language Therapy Services – Wyre Forest (2002) *Speech and Language Therapy Service for School-age Children Attending Mainstream Schools in the Wyre Forest.*

Wright, J. A. (1995) Provision for children with communication difficulties. In: Lunt, I., Norwich, B. and Varma, V. (eds) *Psychology and Special Education for Special Needs.* Aldershot: Arena

Wright (1996) Teachers and therapists: the evolution of a partnership. . *Child Language Teaching and Therapy* 12 pp 3-16.

Wright, J. A. and Graham, J. (1997) Where and when do speech and language teachers work with therapists? *British Journal of Special Education*, 24:4 pp 171-174.

Wright ,J. A.and Kersner, M. (1998) *Supporting Children with Communication Problems: Sharing the Workload*. London: David Fulton.

Wright, J. and Kersner, M. (2004) Short-term projects: The standards fund and collaboration between speech and language therapists and teachers. *Support for Learning* 19(1) pp 19-23.

Realistic Evaluation

Pawson, R (2004) Assessing the quality of evidence in evidence-based policy: why, how and when? *ESRC Research Methods Programme Working Paper No 1*

Pawson, R. (2003) Nothing as practical as a good theory. *Evaluation* 9(4) pp 471-490.

Pawson, R. (2003a) Social care knowledge: seeing the wood for the trees. *ESRC UK Centre for Evidence-Based Policy and Practice: Working Paper 12.*

Pawson, R. (2002a) Evidence-based policy: In search of a method. *Evaluation* 8(2) pp 157-181.

Pawson, R. (2002b) Evidence-based policy: the promise of 'Realist Synthesis' *Evaluation* 8(3) pp 340-358.

Pawson, R. (2002c) Does Megan's Law work? A theory-driven systematic review. *ESRC UK Centre for Evidence Based Policy and Practice: Working Paper 8.* London: Queen Mary, University of London.

Pawson, R. (1996) Theorising the interview. British Journal of Sociology 47(2) pp 295-313.

Pawson, R. and Tilley, N. (1997) *Realistic Evaluation*. London: Sage.

Plain English Campaign (1995) *How to write reports in plain English.*

R *v* London Borough of Harrow *ex parte* M: 8 October 1996.

Reason, P. (1999) Integrating Action and Reflection through co-operative inquiry. *Management Learning* 30(2) P207-226

Reid, J. and Farmer, H. (2001*) How Good is our Collaboration? Working Practice Agreements between Schools and Speech and Language Therapists*. Fife: Fife Council.

Remington, R. and Hastings, R. (2007) Report on the SCAmP research. Research Seminar, London

Research Autism (2007) *Research Report: Outcome of Early Intervention for Autism.* www.researchautism.net

Robson C (2002) *Real World Research (Second Edition)*. Oxford: Blackwell

Royal College of Speech and Language Therapists (RCSLT) (1996) *Communicating Quality 2.* London: Royal college of speech and language therapists.

Sadler, J. (2005) Knowledge, attitudes and beliefs of mainstream teachers of children with a pre school diagnosis of speech/language impairment. *Child Language Teaching and Therapy* 21(2) pp 147-163.

Sayer, A. (2000) *Realism and Social Science* London: Sage.

Scott, D. (2000) *Realism and Educational Research: New perspectives and Possibilities.* London: Routlege.

Shaw, L., Luscombe, M. and Ostime, J. (1996) Collaborative working in the development of a school-based speech and language therapy service. In:

Proceedings of the Golden Jubilee Conference, York 1995. London: The Royal College of Speech and Language Therapists pp 330-342.

Silverman, D. (1993*) Interpreting Qualitative Data*. London: Sage.

Solity J (2000) Early reading research: applying Psychology to the classroom. *Educational and Child Psychology* 17(2) p46-65

SPSS Statistical Package for the Social Scientist, Windows 11.5 version

Stevenson, J. (1996) Developmental changes in the mechanisms linking language disabilities and bahavior disorders. In: In: Beitchman, J.,H., Cohan, N., J., Konstantareas, M., M. and Tannock, R. (eds) *Language, learning and behaviour disorders: Developmental, biological and clinical perspectives,* Cambridge: Cambridge University Press.

Stringer, H. and Lozano, S. (2007) Under identification of speech and language impairment in children attending a special school for children with emotional and behavioural disorders. *Educational and Child Psychology,* 24 (4) pp 9-19

Tilley, N. (1993) *Understanding Car Parks, Crime and CCTV,* Crime Prevention Unit Paper 42, London: The Home Office.

Timmins, P. and Miller, C. (2007) Making evaluations realistic: the challenge of complexity. *Support for Learning*, 22 (1) pp 9-16

Tomblin, J. B., Records, N. L., Buckwalter, P., Zhang, X., Smith, E. and O'Brien, M. (1997) Prevalence of specific language impairment in kindergarten children. *Journal of Speech Language and Hearing Research,* 40, pp 1245 – 1260.

Topping, C. T., Gascoigne, M. T. and Cook, M. (1998) Excellence for all children: a redefinition of the role of the speech and language therapist. *International Journal of Language and Communicational Disorders* 33 supplement pp 608 – 613.

Vallence, D., Cummings, R. and Humphries, T. (1998) Indicators of risk for problem behaviour in children with language and learning disabilities. *Journal of Learning Disability* 31(2).

Vygotsky, L. S. (1962) *Thought and language*. M.I.T. Press: Cambridge.

Worcestershire Speech and Language Therapy Services – Wyre Forest (2002) *Speech and Language Therapy Service for School-age Children Attending Mainstream Schools in the Wyre Forest.*

Wright, J. A. (1995) Provision for children with communication difficulties. In: Lunt, I., Norwich, B. and Varma, V. (eds) *Psychology and Special Education for Special Needs.* Aldershot: Arena

Wright (1996) Teachers and therapists: the evolution of a partnership. . *Child Language Teaching and Therapy* 12 pp 3-16.

Wright, J. A. and Graham, J. (1997) Where and when do speech and language teachers work with therapists? *British Journal of Special Education*, 24:4 pp 171-174.

Wright ,J. A.and Kersner, M. (1998) *Supporting Children with Communication Problems: Sharing the Workload*. London: David Fulton.

Wright, J. and Kersner, M. (2004) Short-term projects: The standards fund and collaboration between speech and language therapists and teachers. *Support for Learning* 19(1) pp 19-23.