An exploratory multiple case study investigating how the Routes for Learning assessment approach has been implemented by professionals working with children and young people with profound and multiple learning difficulties

Heidi McDermott
2014
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<th>Description</th>
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<tbody>
<tr>
<td>AA</td>
<td>Augmentative and Alternative Communication</td>
</tr>
<tr>
<td>ACCAC</td>
<td>The Qualifications, Curriculum and Assessment Authority for Wales</td>
</tr>
<tr>
<td>CCEA</td>
<td>Council for Curriculum Examinations and Assessment</td>
</tr>
<tr>
<td>CLDD</td>
<td>Complex Learning Difficulties and Disabilities</td>
</tr>
<tr>
<td>CPD</td>
<td>Continuous Professional Development</td>
</tr>
<tr>
<td>DCSF</td>
<td>Department for Children, Schools and Families</td>
</tr>
<tr>
<td>DFE</td>
<td>Department for Education</td>
</tr>
<tr>
<td>ECM</td>
<td>Every Child Matters</td>
</tr>
<tr>
<td>EMT</td>
<td>Electronic Music Technology</td>
</tr>
<tr>
<td>EP</td>
<td>Educational Psychologist</td>
</tr>
<tr>
<td>IQ</td>
<td>Intelligence Quotient</td>
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<tr>
<td>ITT</td>
<td>Initial Teacher Training</td>
</tr>
<tr>
<td>LA</td>
<td>Local Authority</td>
</tr>
<tr>
<td>NQT</td>
<td>Newly Qualified Teacher</td>
</tr>
<tr>
<td>PECS</td>
<td>Picture Exchange Communication System</td>
</tr>
<tr>
<td>PIVATS</td>
<td>Performance Indicators for Value Added Target Setting</td>
</tr>
<tr>
<td>PMLD</td>
<td>Profound and Multiple Learning Difficulties</td>
</tr>
<tr>
<td>QCA</td>
<td>Qualifications and Curriculum Authority</td>
</tr>
<tr>
<td>QCDA</td>
<td>The Quality and Curriculum Development Agency</td>
</tr>
<tr>
<td>RFL</td>
<td>Routes for Learning</td>
</tr>
<tr>
<td>RQ</td>
<td>Research Question</td>
</tr>
<tr>
<td>SCRUFFY</td>
<td>Student-led, Creative, Relevant, Unspecified, Fun For Youngsters</td>
</tr>
<tr>
<td>SEN</td>
<td>Special Educational Needs</td>
</tr>
<tr>
<td>SENCO</td>
<td>Special Educational Needs Co-ordinator</td>
</tr>
<tr>
<td>SLD</td>
<td>Severe Learning Difficulties</td>
</tr>
<tr>
<td>SSAT</td>
<td>Special Schools and Academies Trust</td>
</tr>
<tr>
<td>TDA</td>
<td>Training and Development Agency</td>
</tr>
<tr>
<td>WAG</td>
<td>Welsh Assembly Government</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organisation</td>
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Abstract

The University of Manchester: Doctorate in Educational and Child Psychology
Heidi McDermott
2014

An exploratory multiple case study investigating how the Routes for Learning assessment approach has been implemented by professionals working with children and young people with profound and multiple learning difficulties.

**Background**: The Routes for Learning (RfL) assessment is intended to enable accurate assessment of the cognitive and communication skills of pupils with profound and multiple learning difficulties (PMLD). A literature search revealed that there is little published research regarding the implementation or effectiveness of RfL. This study aimed to begin to address this lack of research by investigating some of the ways in which the RfL materials are used in practice, why they have been used in these ways and how this relates to the RfL guidance.

**Participants**: Two special school settings were identified while working for an Educational Psychology Service. For each setting a practitioner using RfL and a staff member with leadership responsibility for assessment/RfL was identified.

**Methods**: A multiple embedded case study was conducted in two special school settings in a North West local authority. A running record was kept of observations made of school staff using RfL in practice. Semi-structured interviews were conducted with practitioners using RfL and staff members with leadership responsibility for RfL. All interviewees also completed a background questionnaire to provide context for the research and to support data from interviews. Interviews were recorded and transcribed. An examination of the RfL materials and resources was undertaken.

**Analysis/ Findings**: All interview data were analysed using thematic analysis and the findings presented as thematic maps.

**Conclusion/ Implications**: This study found that RfL is being used in different ways in special schools and identified a number of issues which relate to its use and implementation.
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Acknowledgements

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I am also very grateful to my fellow trainee educational psychologists with whom I have been fortunate to train and who have now become friends as well as colleagues. They have been a caring, supportive group and a pleasure to work and learn alongside. Their collective sense of humour has been invaluable in keeping me going through the good and the more challenging times and I hope that the friendships we have forged will continue long into the future.

My thanks also go to the staff members of the two schools who participated in this study. Their work with this special group of young people is inspirational and their care, belief and enthusiasm were apparent throughout.

Finally I would like to thank Cathy Atkinson for reading all my drafts, for her constructive advice, for managing my moving deadlines and for her support with the thesis and beyond throughout my final year.
Chapter 1 – Introduction

1.1 Chapter Overview

This chapter first discusses the researcher’s involvement in the research area before giving an overview of the present study comprising a brief outline of each of the following four chapters.

1.2. Introduction to the researcher’s involvement in the research area

This research study was undertaken to meet the requirements of the University of Manchester Doctorate in Educational and Child Psychology.

The researcher worked with children as a primary class teacher and then as a specialist teacher for behaviour for a total of twenty years before embarking on the doctorate. Throughout this time the researcher has had few opportunities to spend time in special school provision despite having an interest in this field.

The researcher is trained to deliver a number of parenting programmes and has used a variety of interventions in work as a teacher and specialist teacher. This raised the researcher’s awareness of implementation issues and their potential influence on the effectiveness and success of interventions. This has been built upon throughout the Doctoral training and the work of Durlak and Dupre (2008) has been particularly influential in this area. As a trainee educational psychologist it is important to have an awareness of a range of interventions, practices and resources available to meet a range of purposes and to have a knowledge of the research on which they are based. This knowledge can be used to support and advise schools in order that they may best support pupils.

The area of assessment for pupils with severe or profound and multiple learning difficulties (PMLD) was initially raised as part of undertaking a systematic literature review in this area, specifically on the Routes for Learning (RfL) materials (WAG, 2006). RfL was of particular interest to the researcher because it uses a knowledge and understanding of the ways in which children and young people with PMLD learn and
develop rather than attempting to adapt and break down assessment systems designed for typically developing children.

The researcher discovered that since its introduction in 2006 there had been limited research with regard to RfL and that this was a potential area for more in depth study. The researcher was keen to investigate how RfL was being used to support the assessment of students with PMLD. The current research allowed the researcher to access special school provision, observe RfL in use and to talk with school staff about their experiences of using RfL in their work with children and young people with PMLD. The study has also enabled the researcher to focus on implementation issues and to link this with gaining a better understanding of RfL in practice. It is hoped that this study will provide a foundation for later research on evaluating the RfL materials and to support schools to access examples of good practice which can be applied to the use of RfL in their own setting.

1.3 Introduction to the present study

This study consists of four more chapters. A brief overview of the content of each chapter follows in the remainder of this section.

1.3.1 Chapter 2: Literature review

This chapter includes a detailed review and analysis of the literature relating the present study. It begins by exploring the definitions and the purposes of different kinds of assessment. PMLD is then defined followed by a critique of some of the assessments commonly used with this group of pupils. This is followed by an examination of the design and development of the RfL materials and a critique of the research directly linked to RfL. Next, there is an exploration of the literature with regard to the methodologies used by researchers investigating the implementation of programmes or interventions designed to be used with children and young people with PMLD, and an outline of how these influenced the design of the current study. Following this, issues with regard to the effective implementation of interventions and approaches in educational settings are examined. Finally, this chapter states the research questions for this study and how these are linked to the literature review and rationale in their formulation.
1.3.2 Chapter 3: Methodology

This chapter gives a rationale for the study before an examination of the research design and philosophical considerations. The design of the study is described and the case study protocol presented. The propositions for the study are identified alongside an explanation of how these were derived. The chapter then goes on to describe the procedures for sampling and participant recruitment, data gathering and data analysis methods. Finally, a critique of the method is given followed by a description of the ethical considerations.

1.3.3 Chapter 4: Findings

The documentary and observational data are presented first in this chapter to give the overall context for the findings of this research. The findings chapter therefore begins with an overview of the documentary analysis of the RfL materials. Following this are the narrative accounts written using data from the running records kept during observations of RfL in practice. Next the thematic analysis of the semi-structured interview data is given for each school in turn. Each thematic analysis is presented with a thematic map, followed by a breakdown of the basic themes which are supported by interviewee comments. Both cases are then examined using a cross case analysis which gives a number of synthesised organising themes. Finally, there is an examination of how the findings from each school relate to the propositions.

1.3.4 Chapter 5: Discussion

This chapter discusses the findings presented in Chapter Four in relation to the synthesised organising themes. These themes are explored in greater detail with links made to the literature. A critique of the study is given. Finally the implications of the research are discussed as well as considerations for future research.

1.4 Summary

This chapter has introduced the current study including giving a description of the researcher’s involvement in the research area and outlined each of the four chapters that follow. The next chapter comprises the literature review which gives an overview of the current literature available pertaining to this study.
Chapter 2 – Literature Review

2.1 Chapter Overview

This literature review is structured in several sections. First, definitions and purposes of assessment are discussed. Then, PMLD is defined before a critique is given of some of the most common assessment methods and tools used with this group of children and young people. The research base for and development of the RfL approach is outlined followed by a critique of the limited existing research on RfL in use. Next, studies relating to the methodologies used by researchers investigating the implementation of programmes or interventions with children and young people with PMLD are summarised and linked to the design of this research. Following this other sources which explore issues related to effective implementation of interventions and approaches in education are examined. Finally, the research questions are stated together with an explanation of the role of the literature review and rationale in their formulation, identification of the knowledge gap which this study intends to address.

2.2 Literature review strategy

A systematic literature review searching for ‘Routes for Learning’ using the ASSIA, ERIC, Education: A SAGE Full-Text Collection and the British Education Index databases gave no results. A further search with the search terms ‘assessment’ and ‘PMLD’ or ‘profound and multiple learning difficulties’ also yielded no results. However, a search for ‘PMLD’ or ‘profound and multiple learning difficulties’ returned 34 results with ERIC (See Section 2.6.2 and Appendix A). Additionally, a more general online search was conducted as well as a search of relevant grey literature including practice journals for example, SLD Experience and PMLD Link. Reference harvesting was also used as part of this process to identify further relevant literature.

2.3 Definitions and purposes of assessment

As the Routes for Learning resource is essentially an assessment tool this review first examines assessment to give an overview of issues associated with assessment and to
locate RfL within the broader assessment context. This section outlines different kinds, definitions and purposes of assessment.

Broadfoot (2007) gives a broad definition of assessment as the collection of evidence and its interpretation in relation to a standard. Drummond (1993) says that effective assessment in schools should be based on a thorough understanding of the purposes of teaching and the aspirations held for pupils, and that assessment can be used to support and extend children’s learning and to evaluate and enrich the curriculum offered as well as provision as a whole.

The report of the Task Group on Assessment and Testing (DES, 1988) gave four purposes of assessment: formative, to support and encourage learning; diagnostic, to identify students’ learning needs; summative to identify learning outcomes; and evaluative to assess the quality of provision in institutions and the system as a whole. Broadfoot (2007) offers a similar but more sociological view with four C’s or purposes of assessment: competence, for example certification of achievement; competition or selection, for example to select pupils for a particular group or set; content, or the evaluation of provision; and control, of both individual aspirations and systemic functioning (for example, institutional quality assurance and control through accountability for whole school results). The boundaries between some of the different purposes of assessment are not always clear cut and may overlap, however it is debatable whether a single assessment could or should meet all of these purposes (Broadfoot, 2007).

It is important to establish the purposes or goals of assessment, to ensure that the correct assessment is selected to serve the identified function and is therefore useful and relevant. The Welsh Assembly Government (2010), authors of the Routes for Learning assessment (WAG, 2006), focus on two main functions of assessment: summative assessment of learning, for example in end of Key Stage tests; and formative assessment for learning, for example to establish learning goals and monitor progress. These two kinds of assessment may serve a number of the purposes described above. Summative assessment could identify individual learning outcomes and could also be used to evaluate the quality of provision (DES, 1998). Summative assessment may also have the four C’s or purposes of competence, competition, content and control identified by
Broadfoot (2007). Formative assessment may also have a diagnostic element (DES, 1998) and may meet the purposes of content and control at an individual level (Broadfoot, 2007). Table 2.1, below, outlines some differences between formative and summative assessment.

**Table 2.1 A comparison of formative and summative assessment adapted from the Welsh Assembly Government (2010).**

<table>
<thead>
<tr>
<th><strong>Formative Assessment</strong></th>
<th><strong>Summative Assessment</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers focus on individual pupils' ongoing achievements.</td>
<td>Teachers use knowledge gained about pupils from a range of activities over time, to make and record their judgements on overall attainment at transition points, e.g. the end of a key stage.</td>
</tr>
<tr>
<td>A cycle of activity where evidence is gathered and is interpreted in terms of progress towards short-term goals and priorities for the individual pupil.</td>
<td>Information is interpreted in terms of achievement of certain skills, knowledge and understanding outlined in common criteria (e.g. P-levels, National Curriculum levels), enabling information to be compared.</td>
</tr>
<tr>
<td>Information is used to help pupils take the next steps in their learning.</td>
<td>Information may be used to report to pupils, parents/carers and to make decisions about future options. Information may be fed back into the pupil's learning but this is not usually immediate.</td>
</tr>
<tr>
<td>Assessment is usually via internal measures such as skills, knowledge, understanding identified in schemes of work and IEP targets and are used to evaluate the progress of individuals/success of strategies/interventions, etc.</td>
<td>Aggregated results may be used for evaluating the effectiveness of the school, local authority and for monitoring standards of achievement.</td>
</tr>
</tbody>
</table>
Garner, Forbes, Aspland and Datta (2012) discuss how schools are increasingly finding assessment practices challenging due to the tensions between assessment of learning and accountability, and assessment for learning, or pedagogy. The Welsh Assembly Government’s Curriculum For all Learners (WAG, 2010) advises that a Rfl completed ‘Routemap’ (Appendix B) can provide formative assessment as well as information for school review, times of transition and reports to parents. The Routemap can in itself provide a summary of each learner’s attainment, although practice has shown learners’ achievements may be spread across the entire map which might make it difficult to place them within a single band of achievement.

2.4 PMLD

The Routes for Learning assessment is primarily intended for use with children and young people with profound and multiple learning difficulties (PMLD) and therefore an understanding of the needs of this group is important for this study. This section first explains the (increasing) prevalence of PMLD in the UK prior to defining the broader term ‘Complex Learning Difficulties and Disabilities’ and the more specific ‘Profound and Multiple Learning Difficulties’. The development of children and young people with PMLD is then described followed by an examination of assessment practices for this group, in particular assessment for learning. Finally, this section considers the education provided for children and young people with PMLD and the supply of quality specialist teaching staff, offering a rationale for the development of specialised assessment materials for this group.

2.4.1 Prevalence of PMLD

Although there are no nationally agreed definitions of severe learning difficulties (SLD) or PMLD the number of children with PMLD reported by the UK Government increased by 29.7% between 2004 and 2009 and children with SLD and PMLD constituted approximately 0.5% of the school population in 2010 (DCSF, 2010). Despite these recent rises in the overall numbers of children with SLD and PMLD, the actual numbers in England remain relatively small. The latest estimates in 2012 (Complexneeds.org.uk, 2013) are of approximately 34,000 children with SLD and 12,000 children with PMLD.
This compares to a mainstream school population of around 8.2 million. Since there are no nationally established definitions of SLD or PMLD these figures are approximate but broadly correct. Hobbs (2009) reported that at the same time as the number of PMLD learners is increasing so is the complexity of their needs. This increasing and changing population can partly be explained due to medical advances which enable higher survival rates for children with difficulties arising from premature birth and more effective treatment for a range of medical conditions (Male & Rayner, 2009).

2.4.2 Definition of Complex Learning Difficulties and Disabilities

Carpenter, Cockbill, Egerton and English (2010) describe the ever-increasing complexity in the learning difficulties population and suggest that this has given rise to a new and overlapping category within special SEN terminology, that of Complex Learning Difficulties and Disabilities (CLDD), of which the PMLD population is one constituent group. Children with CLDD include those with co-existing conditions (e.g. autism and ADHD), or profound and multiple learning difficulties. They also include children with difficulties arising from premature birth who have survived infancy due to medical advances; those with disabilities arising from parental substance and alcohol abuse; and those with rare chromosomal disorders. Many may also be affected by compounding factors such as multisensory impairment or mental ill-health, or require invasive procedures, such as supported nutrition, assisted ventilation and rescue medication.

The Specialist Schools and Academies Trust (SSAT, 2013) was commissioned by the Department for Education (DfE) to develop a framework for teaching and learning practice to support the educators of children and young people with CLDD. The SSAT CLDD Research Project defined CLDD as follows:

Children and young people with Complex Learning Difficulties and Disabilities (CLDD) have conditions that co-exist. These conditions overlap and interlock creating a complex profile. The co-occurring and compounding nature of complex learning difficulties requires a personalised learning pathway that recognises children and young people’s unique and changing learning patterns. Children and young people with CLDD present with a range of issues and combination of layered needs – e.g. mental health, relationships, behavioural, physical, medical,
sensory, communication and cognitive. They need informed specific support and strategies which may include transdisciplinary input to engage effectively in the learning process and to participate actively in classroom activities and the wider community. Their attainments may be inconsistent, presenting an atypical or uneven profile. In the school setting, learners may be working at any educational level, including the National Curriculum and P scales. This definition could also be applicable to learners in Early Years and post-school settings.

(Bellamy et al., 2010) make a case for defining PMLD as a term and recognise that collective terms are open to subdivision as well as incorporation into a larger category of identity. Children and young people with PMLD are part of the larger CLDD population and definitions specific to PMLD are discussed within the following section.

2.4.3 Definitions of PMLD

There has been much debate around defining the term ‘profound and multiple learning difficulties’ (PMLD). This is due to a number of psychological, political and pragmatic reasons. The use of generic terms to assign a disabled identity to others has attracted criticism from social constructionists due to unequal power relations within health and social care systems (McClimens, 2005). Bellamy et al. (2010) distinguish between service planning and service delivery and explain that whilst service delivery is person centred and based on the individual’s strengths, abilities and aspirations, service planning necessitates agreed definitions, categorisation and the gathering of information on a larger scale to enable the overall provision of and access to appropriate services. The PMLD Network paper (2009) in response to the government strategy document Valuing People Now (Department of Health, 2009) supports this view making the point that there should be a considerably improved understanding of the numbers and needs of people with PMLD to ensure effective planning and monitoring of the support they receive. The British Institute of Learning Disabilities (Holland, 2011) in their factsheet on learning disabilities emphasise that people with the label of a learning disability can and should
also be described in many other ways and that the label describes only one aspect of a person but does not portray the whole person.

Another of the issues in the definition debate is the use of definitions of learning difficulties based on IQ (Intelligence Quotient) for example the World Health Organisation (WHO) (1980) defined pupils with PMLD as those with an IQ less than 20. Imray (2005) describes the limitations of this approach in terms of what IQ tests actually measure and whether these scores are useful for parents or practitioners and makes the point that using and applying such definitions may ‘pigeonhole’ and consequently limit the potential of a person with learning difficulties. In addition some clinical definitions can be viewed as a taking a deficit approach which focuses on what people with PMLD are not able to do and the areas in which they face most difficulty, rather than focusing on the person and their needs (Pawlin & Carnaby, 2009).

Imray (2005) takes a more developmental view and offers a ‘tentative definition’ for PMLD as someone whose intellectual development is below 18 months regardless of their actual age. He views this as being a more accessible and relevant explanation of PMLD for both practitioners and parents than IQ scores. He supplements this by adding a number of other characteristics including: that these children will be preverbal; have limited ways to communicate; be unable to imitate independently; be reliant on others to meet their basic care and safety needs; be unable to understand abstract concepts and have limited contingency awareness. Imray (2005) says that this should not be viewed as negative but rather he frames this definition as a way of understanding the difficulties learners with PMLD experience which enables the generation of positive solutions to meet their needs.

The Welsh Assembly Government (WAG) (2006) has given a broad definition of children with PMLD as the target group for the Routes for Learning assessment materials as learners with,

A profound cognitive impairment or learning difficulty leading to a significant delay in reaching developmental milestones. Such learners will be operating overall at a very early developmental level and will display at least one or more of the following:
• Significant motor impairments
• Significant sensory impairments
• Complex health care needs/dependence on technology.

WAG (2006, p.23)

Some definitions emphasise the intensity and complexity of need experienced by individuals with PMLD (Ware, 2004, Lacey and Ouvrey, 1998). Jones (2005) states that historical understandings of PMLD relate directly to the degree of this intensity and complexity of disabilities as well as the high levels of support needed for this group of learners. More recently there has been a paradigmatic shift away from stereotypical models or definitions to more collaborative, holistic and positive view of learners with PMLD which considers the abilities of these pupils as well as appreciating the extensive difficulties they experience. This represents a move away from a medical model to a more social model of disability which acknowledges individual strengths at the same time as the environmental barriers that can compound a disability (WHO, 2001).

Lacey and Ouvrey (1998) involved the views of parents, carers and staff in developing a definition of PMLD. Aird’s (2001) work attempted to move away from more stereotypical definitions and to develop definitions of PMLD which were more contextual to a particular school. The teachers of children and young people with PMLD (n=14) interviewed in Jones’ (2005) study were asked what, in their opinion, PMLD is. Their definitions made reference both to the complexity and the multiplicity of the learning disabilities experienced by these pupils and to how these learners may share some characteristics and yet also present as very individual and unique. This is a key challenge of arriving at a definition which encapsulates this group as a whole.

More recently Bellamy et al. (2010) conducted a literature review to provide definitions and meanings for PMLD then used focus groups and individual interviews with a range of professionals and family carers (N=23) to arrive at a definition of PMLD for use in the Joint Disability Service in Sheffield. They argue for a clear agreed definition in order to support planning and provision for the increasing PMLD population and point out that definitions are also important for diagnosis, eligibility for benefits and access to services. Bellamy et al. (2010) found that 60% of their participants preferred the definition by Samuel and
Pritchard (2001) which not only outlined the difficulties that children and adults with PMLD face but also described conditions which would be supportive to enable them to engage in their world and achieve their optimum potential. Many participants felt that whilst no single definition can fully articulate the complexities associated with PMLD that Samuel and Pritchard’s (2001) definition was preferred as a more balanced and positive classification. The definition agreed through further iterative development was that,

‘People with profound and multiple learning disability (PMLD):

- have extremely delayed intellectual and social functioning
- may have limited ability to engage verbally, but respond to cues within their environment (e.g. familiar voice, touch, gestures)
- often require those who are familiar with them to interpret their communication intent
- frequently have an associated medical condition which may include neurological problems, and physical or sensory impairments.

They have the chance to engage and to achieve their optimum potential in a highly structured environment with constant support and an individualized relationship with a carer.’


This definition will be used for the purposes of this research, as according to Bellamy et al. (2010) it may be more meaningful for both parents and practitioners, offers a clear way of understanding the difficulties learners with PMLD experience, is framed positively and gives consideration to development potential.

2.4.4 Development of children with PMLD

Children and young people with PMLD may learn and develop differently than typically developing students. Clearly they develop later and at a slower rate but there is evidence to suggest that their developmental pathways may differ in terms of the stages they go through and the order in which they go through them. The Quality and Curriculum Development Agency (QCDA, 2011) states that many pupils with learning difficulties develop uneven or ‘spiky’ profiles of development. They also draw attention to the fact that some pupils will retain an uneven profile since this may result from particular aspects
of their ability, aptitude or be related directly to their disability or condition. Bunning (2009) describes how there is greater congruence between achievements in different domains of development for typically developing infants than for children and adults with intellectual disabilities which can explain the ‘splinter skills’ in people with PMLD who may develop one skill in advance of others or find one area of development particularly difficult. The QDCA (2011) guidance clarifies and distinguishes between linear, hierarchical progress and lateral progress within or across a level where skills and understanding are generalised. This lateral progress may be more representative for children and young people with PMLD (Garner et al., 2012). Because children and young people with learning difficulties can develop in different ways to typically developing children there is a tension between the National Curriculum and the SLD curriculum as described by Ware (1994) who states that the National Curriculum emphasises,

What society is thought to need from the individual rather than what the individual needs to cope with society. This emphasis is a major source of conflict with good practice in SLD schools, where the needs of the individual are seen as paramount. It is important to realise that this is a problem for all special needs education and, indeed, all of education and is not just concerned with pupils with PMLD. (Ware, 1994).

This has implications for how to assess the progress of people with PMLD in the most effective, appropriate and useful ways.

2.4.5 Communication for and with children and young people with PMLD

Bunning (2009) describes communication as the conduit between the individual and the world, and its vital role in the development of identity, social engagement and relationships. Children and young people with PMLD function at the earliest stages of communication development. These pupils may express themselves through subtle behaviours for example eye gaze, body language, facial expression and vocalisation, which may be difficult to identify and interpret. In addition the variable behavioural states of this group with changing levels of alertness and activity also present a challenge. Therefore, the role of significant others is key to interpreting the communication behaviours of children and young people with PMLD through the use of knowledge and
experience of the person and their environment, although this is often not straightforward due to the idiosyncratic behaviours that these learners may display (Grove, Bunning, Porter and Olsson, 1999).

Augmentative and alternative communication (AAC) is a practice to support individuals with severe communication disorders. Harding, Lindsay, O’Brien, Dipper and Wright (2011) describe how children with PMLD can be provided with access to multi-modal forms of AAC support which may include training others to interpret non-verbal communication, using tactile supports, objects of reference (where an object is used to convey meaning for example a spoon for lunchtime) or switches for sounds or vocabulary. Using two case studies it was found that both children improved their communication skills following assessment and an intervention plan using specific tailored AAC supports. Harding et al. (2011) emphasised the importance of understanding each child’s cognition in relation to their receptive abilities and the use of a consistent, collaborative approach.

Bruce and Vargas (2007) in their study on intentional communication acts expressed by children with severe disabilities found that preferred or familiar activities and the proximity of a responsive adult resulted in a higher rate of intentional communication acts. Nind and Thomas (2005) make a case for the use of Intensive Interaction, a naturalistic approach designed to enhance the quality of teacher-learner interaction, drawing on observations of the process from caregiver-infant interaction. Intensive interaction aims to enable communication and sociable interactivity and usually occurs between a more skilled and an emergent communicator employing the responsive strategies normally used by most adults when interacting sociably with very young children (Hewett, Firth, Barber and Harrison, 2012). This sensitive responding approach supports reciprocal exchanges between teacher and student and scaffolds further communication development.

Accurate and meaningful assessment of communication for children and young people with PMLD needs to focus on the context and the role of communication partners as well as on the individual pupil. Bunning, Smith, Kennedy and Greenham (2013) conducted an observational study of individuals with severe to profound multiple intellectual disability
to examine the communication between these students and educational staff in a secondary special school setting. A coding framework was used to determine the nature of dyadic interactions and the relative contributions of student and teacher to the interaction. It was found that teachers took significantly more turns in the interactions with more initiations and follow up turns than students, who used more response turns than initiations. However, despite the apparent dominance of the teacher in the interactions observed the use of the coding framework enabled more detail about the communication interface and indicated a role of the teacher as offering students a scaffold to contribute to interactions using their available repertoires. Bunning et al. (2013) concluded that in order to understand the abilities and maximise the potential of this group of learners at the earliest stages of communication development, there must be consideration of the social interface with others.

Porter and Ouvrey (2001) highlighted the central roles of inference and intention in the communication process and how, with children and young people with PMLD, it is important to validate communication by asking a number of key questions to those who are most significant to the student. They use a case study example to illustrate how this validation approach can explore the range of perceptions of different individuals who know the person with PMLD, to question these perceptions and to present a view of individual strengths and scope for communication, supplemented by suggestions and evidence. Porter and Ouvrey (2001) identify a need to distinguish between what the individual with PMLD and their communication partners bring to the communication process so that the influence each has on the other can be examined. Checking out interpretations in this way allows the provision of opportunities for alternative responses, avoids limiting the communication process and facilitates the enabling influence of those who are most significant in the lives of children and young people with PMLD.

2.4.6 Assessment for children and young people with PMLD

Carnaby (2009) describes how a significant period of time is needed to undertake assessments with children and young people with PMLD and that this can be regarded as an intervention in itself. Carnaby (2009) advocates a ‘transdisciplinary’, more collaborative approach to (clinical) assessment, which places the individual and family at
the heart of the assessment process, service planning and delivery. This would mean that instead of team members each undertaking separate assessments that professionals and family conduct assessments together. The use of video recording is recommended by Carnaby (2009) to enable those supporting the child with PMLD to reflect on the assessment process, their assumptions and conclusions and their own approach to support.

In a study of teacher assessment of children with PMLD, McNicholas (2000) found that the frequency and depth of assessment varied between teachers and schools. More than half of participants felt that the needs of pupils with PMLD were not clearly identified and that assessment of cross-curricular skills was given less attention than core subjects. Much current assessment in schools for children with special educational needs is based on P scales (QCA 2009), which are designed to assess the progress of children who are working at below Level 1 of the National Curriculum. Donnelly (2005) describes how this practice has developed despite the fact that P scales were not designed to support short-term judgements on individual targets or pieces of work. Ndaji and Tymms (2009) contend that the use of P scales may mean that more attention is given to teaching those areas which are assessed at the expense of other more relevant areas. Donnelly (2005) expressed concerns that this approach may mean that highly significant learning including contingency awareness or improvement of sensory function is lower in the hierarchy than attempting to measure ‘experiences’ linked to subjects unlikely to move learners on. Martin (2006), deputy head teacher of a special school for children with severe and profound learning difficulties, outlined the difficulties of assessing students with PMLD using the P scales, arguing that they are not fine-grained enough to measure progress over a year and are more suitable to show progress over longer periods like a key stage.

Various published assessments and computer packages break down the P scales into smaller steps, for example PIVATS 4 (Lancashire County Council, 2012) and B-Squared (2012). Martin (2006) described a danger of this approach in terms of the potential for the ‘blurring’ of assessment and curriculum where assessments are broken down into small steps where the items on a checklist describe how a pupil progresses on to the next level and therefore may define curriculum content. Martin (2006) designed a computer package, based on the P scales performance descriptions, to enable more detailed
assessment, to describe the irregular assessment profiles of pupils with complex educational needs over shorter periods and to allow consistent recording of data for reporting purposes. Whilst this avoided breaking down the P levels into smaller steps and offered a more standardised approach making it easier to compare data between schools this assessment still reflected target setting within the context of the National Curriculum.

All of the assessment tools just described are linear or hierarchical and make the assumption that all children with SEN progress in the same way as typically developing children. They do not measure the very subtle changes demonstrated by learners with PMLD (WAG, 2006) or lateral progress, for example shown through increased awareness and a greater range of responses leading to a higher level of engagement and participation, which is an equally valid measure of improvement. The QCDA (2011) materials do encourage those making assessments to consider if a pupil is responding with less support or prompting, using skills more confidently or independently or in new contexts or settings or with different people. However, P-levels are not fine-grained enough to give this information and yet special schools in England have to report assessment data in the form of P levels in English, Maths and Science at the end of Key Stages One, Two and Three to the Standards and Testing Agency. Ware and Donnelly (2004) make the point that heavy reliance on developmental checklists can be a straitjacket rather than an aid as they do not account for the interaction between the sensory impairments, motor disabilities and medical problems that many children and young people with PMLD experience. There also needs to be an understanding that a pupil may reach a plateau in their learning or lose skills as a result of a deteriorating medical condition and under these circumstances QCDA (2011) recommends that it may be more appropriate to recognise and report on the consolidation or maintenance of skills.

Wolf-Schein (1998) described the importance of developing and using tools for those working with children with severe disabilities.

What is most important is to address an individual’s needs, not to try to compare them to someone else’s standard and decide that they are less able. In fact,
looked at from a different perspective, children can be shown to have their own unique abilities and patterns of growth. Wolf-Schein, (1998, p. 52).

2.4.7 Assessment for learning for children and young people with PMLD

Assessment for learning involves questioning, providing feedback to learners and self and peer assessment (WAG, 2010). Lacey (2010) explains that these principles of assessment for learning are transferable and can inform work on target setting for children and young people with PMLD. This means putting the child at the centre of the process, rather than the curriculum, and that the targets come from earlier learning so that pupils can build on their existing skills and understanding. Pupil involvement for children with PMLD is likely to be through teacher interpretation as a result of observation over time. Lacey (2010) suggests the use of SCRUFFY rather than SMART targets with SCRUFFY being an acronym for Student-led, Creative, Relevant, Unspecified, Fun For Youngsters. This approach is similar to that described by the UK Government’s recommendations in the online training materials for teachers of learners with severe, profound and complex learning difficulties (DFE, 2013a) which advocate process-based as well as skills-based learning. The reasoning behind this is that by focusing on specific targets progress in other areas may not be recorded.

Ware and Donnelly (2004) state that the RfL materials aim to move away from a checklist approach as this may distract from the key focus on individual priorities and could result in the teaching of a restrictive, narrow curriculum. Instead process-based teaching, for example through Intensive Interaction (Imray, Navarro and Bond, 2010), gives the opportunity for varied and disparate learning to take place. Hewett (2006) comments that at this early cognitive developmental level learning does not happen by laying one skill upon another but comes rather from all experiences, very like the holistic manner of neuro-typical children learning through play. The implication of this for assessment is that progression may also be recognised in retrospect at the end of a session, week, half-term, term and/or year (Imray et al., 2010).
2.4.8 Education for children and young people with PMLD

Male and Rayner (2007) in their survey of all SLD schools in England demonstrated an increasing proportion of children and young people with PMLD in special schools. More than half of their special school head teacher respondents said that up to a quarter of their school population experienced PMLD and just over a third of head teachers reported that the proportion of students with PMLD was between a quarter and a half of the school’s total population. This was a significant increase in comparison with Male’s (1996) previous study.

Male and Rayner (2007) outline how the number of children with Statements of SEN in mainstream schools increased dramatically during the 1980s and 1990s in response to more inclusive policies and approaches, whilst correspondingly the number of special schools fell. It was stated by the government in 2004 in the document Removing Barriers to Achievement (DfES, 2004) there was an expectation that the special school population would continue to decrease over time, however as shown by the House of Commons Education and Skills Committee Report (2006) that the proportions of pupils in special schools has plateaued.

Less than five percent of pupils in the UK with statements of SEN or at School Action Plus have PMLD and the majority of these are educated within special schools rather than in mainstream provision (DFE, 2013b). This can be within mixed-ability or more specialist classes. Jones (2005) describes the changing educational context for children and young people with PMLD over the last two decades from being placed in ‘special care departments’ within special schools with little contact with the rest of the school to the current widespread integration into mixed-ability classes. The Ofsted (2006) report on inclusion report examines the factors that promote good outcomes across a range of different provision for pupils with learning difficulties and disabilities. The report found that although there were fewer pupils with PMLD placed in mainstream schools than special schools, that those placed in well-run and resourced mainstream schools with access to specialist resources and teaching were able to make outstanding progress.
2.4.9 Curriculum for children and young people with PMLD

Donnelly (2005) stated that the National Curriculum provides varied and interesting contexts but that to enable learners with PMLD to progress, relevant work must be planned at appropriate developmental levels with a focus on the learning process. Lacey (2011) discussed the latest developments in curriculum design for pupils with PMLD following on from the relaxation in the prescriptions of the National Curriculum. QCA guidelines (2009) showed that teachers were able to develop the most suitable curriculum for these pupils. As a result various sets of materials have been developed by schools which are available online for purchase from schools according to Lacey (2011). This has meant a move in curriculum design for pupils with PMLD towards a more developmental perspective with a drive for early thinking, communication, self-help skills, social interaction and mobility but also incorporating interesting contexts influenced by relevant school subjects.

2.4.10 The supply of quality teaching staff for pupils with PMLD

Ensuring that there is an adequate supply of teachers for children and young people with PMLD is vital to ensure that schools can meet their statutory requirements and meet the needs of these learners. During the reconfiguring of Initial Teacher Training (ITT) in 1989 specialist training routes for special educational needs were removed, as part of the inclusion agenda and the resulting expectation that all teachers could and should be expected to teach learners with SEN. In 1986 more than 200 new teachers from 11 four year, full-time Bachelor of Education (B.Ed) courses qualified to teach pupils with SLD but by 1994 only 15 teachers were gaining a specialist qualification (DCSF, 2010). This has left a gap in the specialist work force.

The Salt Review (DCSF, 2010) drew on evidence including visits to schools, interviews with school leaders, teachers and support staff interviews with national representative bodies, a focus group of special schools and a review of the existing relevant UK and international evidence base. This independent review found that teacher supply for pupils with SLD and PMLD is an issue for a range of reasons including: the increasingly complex needs of this group; the high vacancy rates for special school teachers (double that of all schools); that following (ITT) many newly qualified teachers (NQTs) felt inexperienced or ill-
prepared to teach learners with PMLD; and that headteachers, teachers and academics in this field are disproportionately older than in the mainstream, with the risk of losing a great deal of experience and expertise within a relatively short timescale. The review’s recommendations were to develop a six month additional ITT specialist option, enable easier access to special school placements for teacher trainees, to commission new self-study training modules on SLD and PMLD and to collect data on specialist teacher supply and demand to manage supply effectively in the future.

The new Training Materials for Teachers of Learners with Severe, Profound and Complex Learning Difficulties (SLD/PMLD/CLDD), published online by the Department for Education (DfE, 2013a), were commissioned by the Training and Development Agency for Schools (TDA) in response to the Salt Review (2010). The materials go some way to meeting the Salt Review (2010) recommendations and are intended to allow educators access to a high quality CPD resource to support teachers to meet the pedagogical challenges of meeting a new generation of children and young people with complex learning difficulties and disabilities. The training materials cover a range of issues and include reference to and recommendation of the Routes for Learning (WAG, 2006) assessment materials.

2.5 Routes for Learning

This section describes the Routes for Learning assessment materials, their theoretical basis and their development. The limited research base specifically for RfL is presented concluding with that closest to the present study.

2.5.1 The Routes for Learning materials

Routes for Learning (WAG, 2006) is a pack of informational and assessment materials produced in Wales by a working group of teachers supported by researchers. The resource was originally aimed primarily at inexperienced teachers who require guidance on the teaching and assessment of pupils with PMLD. The underlying idea was that children with PMLD may follow differing developmental pathways to those of typically developing children, something that many other assessment instruments do not make allowances for. The materials were not intended to be a checklist or to be used to design
a curriculum and were designed to support consideration of both lateral and hierarchical progress. They can support consolidation of existing skills as well as track and limit regression.

The materials focus on the early communication, social interaction and cognitive skills that are crucial for all future learning, leading from ‘notices stimuli’ to ‘contingency awareness’, ‘object permanence’, ‘early problem solving’, ‘expresses preference for items not present via symbolic means’ and ‘initiates actions to achieve desired result’. RfL is designed to be used with all age ranges up to 19 years old. Donnelly (2005) describes how the materials emphasise the need for close relationships and argues that communication should be assessed taking into account the role of the communication partner. There is a clear focus on the learner and their abilities and also an understanding of the impact of the learning environment on the learner.

The RfL materials focus on the early communication and cognitive skills which are priorities for learners with complex needs as they are the basis of subsequent learning and improved quality of life. The assessment gives a ‘Routemap’ with seven main milestones of development through which all learners pass if they progress as well as 36 others which learners may achieve. The Routemap promotes close observation of sensory function, preferred learning channels and means of processing information. The approach accepts that learners may not pass through the stages in a particular order and that they may demonstrate learning in a more advanced area whilst omitting some earlier phases. RfL shows a range of learning pathways to accommodate the complex needs of learners with PMLD. This means that assessment can be more accurate and consistent and give a fuller picture of the learner and their learning process.

The pack contains an assessment booklet; a guidance booklet which provides an overview of the main theories and background information underpinning effective teaching and assessment; a DVD of videoclips taken in classrooms that demonstrate a range of early communication; and a CD with text files of all the printed documents and the Routemap.

The Routemap (WAG, 2006) (Appendix B) shows a range of learning pathways leading to key milestones in communication and early cognitive development (shown in orange). These are seen as crucial to future development and are the major junctions that are
significant in all routes. The left-hand side of the Routemap focuses on communication skills and the right-hand side on early cognitive development. There is no hierarchical or predetermined order to achieve the Routemap steps and pupils may follow a range of pathways. Donnelly (2005) stated that the intention was to highlight the importance of lateral as well as hierarchical progress to ensure that staff members do not miss significant abilities or barriers to learning. The Routemap is not intended as a curriculum for pupils with PMLD, however it does allow the recording of significant developments and suggests possible next steps. For each numbered step on the Routemap, the assessment booklet provides suggestions for assessment activities to try, things to look for in terms of changes in behaviour and teaching strategies that may help to move a pupil on to achieve a further numbered step (Appendix B).

The Routemap is not a checklist. For each of the milestones, there are clear criteria for objectively determining whether a pupil has achieved it. To give one example in more depth, the 23rd milestone on the Routemap is ‘Contingency responding’. This means that the learner realises that performing a particular action causes an effect, but has not yet made a 1:1 association (for example one press of a switch gives one response – contingency awareness, the 24th milestone). As an assessment activity for this milestone the RfL assessment booklet (WAG, 2006) suggests the use of an action that the learner can do for example pressing a switch or kicking, to use a reward and observe the rate of response. The observer should look for the learner making something happen independently, for if the rate of response increases when it has an effect (for example, kicking increases when it causes a mobile to move). If the learner deliberately does the action once only to get the desired effect and then does the action again then they may be achieving contingency awareness.

**2.5.2 Development of Routes for Learning**

Ware and Donnelly (2004) undertook the original research on assessment for learning for pupils with PMLD as part of the ACCAC (The Qualifications, Curriculum and Assessment Authority for Wales) Insight Project which was the basis for the design of the RfL materials. One of the reasons behind the project was to provide appropriate guidance for inexperienced teachers as the number of staff trained and experienced in working with
children and young people with PMLD has been diminishing. Whilst the materials are aimed primarily at this group of teachers, they also provide ideas for more experienced teachers to incorporate into their work. Donnelly (2005) also said that the materials could be used by teachers, support staff, senior managers, LA advisors and colleges and could be used co-operatively by these professionals with the input of specialist services including visual and hearing impairment services, speech therapists as well as with parents. The aim was to design a ‘roadmap’ of possible routes that a student might take to get to the next stage of development, as well as to suggest ways to assess the student’s current level of functioning and how to support them to move between stages. (Appendix B: Route map).

The RfL materials (Ware & Donnelly, 2004) were trialled by 15 schools throughout Wales from May 2004 to January 2005. Donnelly (2005) describes the positive response from school staff who felt that the materials were more relevant and appropriate for pupils with PMLD than other materials available. The project helped teachers and parents to see a child’s abilities and progress as part of a ‘big picture’ and also supported knowledge and understanding of where focus might be needed on developing more accuracy, refinement and generalisation (Donnelly, 2005). The trials highlighted gaps in the early development of learners and gave a more detailed picture of how pupils could perform certain behaviours at particular times, in particular settings and with particular staff. Feedback from school staff indicated that the materials also enabled recognition of inconsistencies between staff judgements (Ware & Donnelly, 2004).

The RfL assessment approach (Welsh Assessment Government, 2006) is based on neuro-scientific work into typical and atypical development (Donnelly, 2005). The aim of these materials is to more accurately assess and meet the needs of those children and young people at the earliest stages of learning and to enable school staff to plan and measure more effectively curriculum progression. Ware and Donnelly (2004) describe how RfL is based on a number of key principles which are as follows. They should: promote equity, involve and empower all stakeholders, be founded in research, consider environmental impact, have regard for relationships, provide a picture of the whole learner and the learning process, emphasise essential skills as a foundation for later learning, support accurate judgements and promote consistency and support staff to find evidence of
understanding and development to enable the best possible progress. The materials
define that, “Our learners are entitled to access a curriculum and assessment framework
which is fit for purpose and meets their specific needs - there is little benefit (...) if they
are included in structures that fail to do this” (WAG, 2006, p. 46).

The UK Government online training materials for teachers of learners with severe,
profound and complex learning difficulties (DFE, 2013) state that there is increasing
interest in adapting the RfL pathways to demonstrate progress by converting milestones
into numerical data, for example by Barnes (2010) and Hogg (2012). This is possible
despite the fact that the milestones achieved may be scattered. Because each of the 43
RfL milestones could be divided into three possible levels of achievement: occasionally,
frequently or consistently, there are a potential 129 indicators of progress covering
communication and cognition for recording and reporting purposes.

The Routes for Learning (WAG, 2006) materials are in use in special schools in Wales. In
Northern Ireland the Council for Curriculum Examinations and Assessment (CCEA) gained
copyright and permission to adapt the materials for their context and published their own
Quest for Learning materials (CCEA, 2007). The Quest for Learning materials have since
been further developed and updated (CCEA, 2011) and Quest Online (CEA, 2012)
recording software designed which is accessible only to teachers and schools in Northern
Ireland. According to Garner et al. (2012) Scottish schools also made a unanimous choice
to adopt the materials and although lobbying from schools to the British Government to
take on RfL across England was unsuccessful the materials are also in use in special
schools in England.

2.5.3 Theoretical underpinnings of Routes for Learning

In RfL there is an emphasis on the relationships between the learner and supporting
adults and the role that adults can play in scaffolding learning within the zone of proximal
development (Vygotsky, 1978), which is the difference between what a child can achieve
independently and what he or she can achieve with adult support in the form of prompts
or cues and support or scaffolding. The learner’s current performance with this support
can give an indication as to where future teaching priorities should lie. Vygotsky stressed
that the interaction between learner and adult was key in leading to cognitive change.
The theoretical roots of dynamic assessment lie within Vygotsky’s socio-cultural theory of child development (Vygotsky, 1986) in which cognitive skills are culturally mediated through the interactions between the child and an adult. In dynamic assessment, as in RfL, the goal of assessment is to understand from how a child learns to improve their performance during given cognitive tasks where the assessor and child interact, that is within the zone of proximal development (Deutsch and Reynolds, 2000).

Process-based assessment looks at the relationship between the learner and their environment. Figure 2 below, illustrates the interrelated factors to be analysed in effective process-based assessment (Norwich, 1990) and which influenced RfL.

**Figure 2.1: Process Based Assessment (Norwich, 1990)**

According to The RfL Additional Guidance Booklet (WAG, 2006) children and young people with PMLD, at the earliest stages of development, are likely to move through basic learning processes as follows – habituation, early associative learning, operant conditioning learning processes. Habituation is when a learner fails to give a response to a
regularly presented stimulus because they have grown accustomed to it. Evidence of learning is given if a small change in the stimulus triggers the response. Early associative learning is when pupils show anticipation of an event when a consistent cue is given prior to that it. An example of this might be where a learner hears the dinner tables being set out and smacks his or her lips, anticipating lunch. Finally, operant conditioning is when the consequences of an action increase or decrease the chance that it will be repeated as the learner makes the connection between the stimulus and the response. For example, if a toy makes a sound when pushed this may increase or decrease the probability that the learner will push the toy again. The RfL Additional Guidance Booklet (WAG, 2006) describes how careful observation of learners will enable teachers to collect evidence regarding learners’ level of awareness of events in their environment. This in turn will allow increase teachers’ knowledge and understanding regarding a learner’s memory, sensory stimuli preferences, ability to link cues and events, to anticipate and predict and to influence events in the immediate environment.

The following hierarchy of skill development was described by Haring, Liberty and White (1981). Acquisition: where learners learn correct new responses through demonstration, modelling or physical prompting with an emphasis on developing accuracy. Fluency: where learners through repeatedly doing reach a level of mastery combining speed and accuracy. Maintenance: where learners consolidate and maintain a high level of competency and fluency by over learning through repetition and familiarity and can remember how to do the task after a break. Generalisation: where learners develop and achieve mastery in different contexts or settings, with different stimuli or with different supporting adults. Application or adaptation: where learners recognise similarities and differences between aspects of new situations and select appropriate responses, adapting skills and understanding to new problem solving situations. The RfL Additional Guidance Booklet (WAG, 2006) apply this hierarchy to the RfL assessment materials to show how skills can be developed and consolidated across different contexts and how careful planning is needed to enable learners with PMLD to move through this series of stages with each novel skill.
### 2.5.4 Routes for Learning research

Pollitt and Grant (2008) described the development of a school’s PMLD strategy aimed at raising the quality of educational experience of these students. They used the RfL materials to support identification of Key Stage Three and Four student development and provide suitable learning activities. The key questions raised by Pollitt and Grant (2008) were how to: engage the students in purposeful learning interaction; identify the precise development for each child; deliver relevant and purposeful learning experiences; assess progress and ensure quality continuous professional development (CPD) to support this process. The RfL materials were used to support identification of student development and provide suitable learning activities. Figure 2.2 below illustrates the planning process used.

**Figure 2.2:** Planning for meaningful progress using Routes for Learning (Pollitt and Grant, 2008)

Pollitt and Grant (2008) found that the RfL materials enabled identification of the precise stage of development for each pupil, offered appropriate and purposeful learning experiences to be delivered from the baseline and the assessment of progress to enable identification of next learning steps. They found RfL to be appropriate for those students with PMLD who were at the early stages of early thinking and communication but raised
the concern of how they could meet the needs of children who have just begun to communicate and demonstrate early thinking but remain complex.

This issue was partly addressed by Ware (2011) who reported on research on the development of communication skills for both typically developing children and those with SLD or PMLD. The aim was to offer a progression from RfL to support teachers of children with SLD and bridge the gap to the Welsh Skills Framework for Learners from 3-19 (WAG, 2008). The Skills framework has four sections: Thinking, Communication, Number and ICT. Ware (2011) designed assessment grids to provide a framework for assessing progress from the ‘top’ of RfL into the first cell of the Skills Framework for developing communication, which have been informally trialled by special schools in Wales.

Van Walwyck (2011) investigated the measurement of progress in children with PMLD in the school where she worked as a speech and language therapist. Van Walwyck (2011) identified success criteria for a system to measure the progress of children with PMLD (Table 2.2, below), compared the informal systems in place with the ‘ideal’ criteria identified and found that while some areas were met by the school’s existing system there were also unmet criteria. The RfL materials were then piloted to establish if these met the criteria and would be an improvement.

Table 2.2: Criteria to be met by a successful system of measuring progress of children with PMLD (Van Walwyck, 2011)

| Based on an understanding of typical human development (to provide a framework for description) |
| Accommodates alternative and diverse paths of development |
| Able to detect subtle changes in skills |
| Able to detect regression as well as progression |
| Applies a broad definition of progress including the lateral development of skills |
| Provides information for adjusting educational programmes so they facilitate further learning. |
| Provides information which can be used to evaluate teaching and school effectiveness |
| Provides a framework which can be used consistently across changes in staff, class or placement |
| Incorporates practical system of record-keeping which includes some detailed information |
RfL route-maps were completed for two children with PMLD, using information from observations, direct work and liaison with the class teacher. Van Walwyck (2011) found the RfL materials to have advantages including that: the milestones identified seemed appropriate for the identified pupils; the materials promote detailed observation of pupils; they offer a shared framework to unite professionals from different backgrounds; the structure of RfL aids in giving a shared frame of reference over time for successive professionals and the detailed guidance is supportive of staff inexperienced in working with children with PMLD. However, Van Walwyck (2011) found that RfL overlooked assessment of physical, visual and tactile skills. A further disadvantage was that the materials didn’t allow the recording of enough detail of the specific stimuli responded to, their category, the kind of responses seen, the setting and staff involved to give sufficient information to future staff. Van Walwyck (2011) concluded that the RfL approach met the majority of the identified criteria except that a more thorough record keeping system needed to be developed and that there was a need for information which could be used for summative assessment, for the evaluation of teaching and school effectiveness. Both of these issues are frequent subjects for discussion on the SLD Forum (DFE, 2012b) with practitioners asking questions of the online community and contributing ideas and resources which have included examples of record keeping.

Van Walwyck (2011) made the assumption that one assessment approach can meet all of the identified requirements; however there may be a tension between some of the criteria and the RfL approach. RfL is intended to be a formative assessment and as such may not provide data on teacher or school effectiveness. The uneven learning profile of many children and young people with PMLD means that use of student progress may not give an accurate reflection of the skills and abilities of school staff and alternative measures may be more appropriate to meet these needs. Further limitations of Van Walwyck’s (2011) study include that the RfL materials were investigated through a pilot in one school with only two students. The research involved interviewing staff members about the pre-existing assessment arrangements in the school but did not elicit their views about the RfL approach. The RfL materials were new to the setting, and therefore weren’t embedded in the school so information could not be gathered on how the materials were used or adapted over time. Other than looking at the possibility of
designing more detailed recording systems the research did not examine implementation issues.

Through membership of the SLD Forum (DFE, 2012b) the researcher recently became aware of upcoming research and discussed this with P. Lacey (personal communication 19 February 2014) who is planning to carry out research regarding RfL with some similarities to the present study. An initial request for schools to complete an online survey was published on the SLD Forum (DFE, 2012b) on 17th February 2014. Lacey plans to investigate which schools are using RfL or Quest for Learning, which staff members are involved and how the materials are being used. The research will involve a number of case studies (dependent on funding) and will include examination of planning and recording paperwork and the use of semi-structured interviews with staff (as in this study) including staff members with data responsibility and also interviews with parents. The research will also use the Engagement Scale designed by Carpenter (2010b) to support gathering additional information regarding pupils. It is hoped that the research may be supported by a bid to the Nuffield Foundation and t) to support observaent Scale designed by Carpenter nd will how they are using the materials. The aim is to share informahe aim is to share information about good practice across schools.

2.6 Implementation

This section focuses on current definitions of implementation, the role of implementation science in the evaluation of programmes and interventions and the issues regarding the study of implementation. Following this is an examination of the literature on the implementation of interventions with children and young people with PMLD.

2.6.1 Definitions of implementation

Lendrum and Humphrey (2012) define implementation as the process by which an intervention is put into practice. Kelly (2012) states that implementation science can provide frameworks for the preparation, execution, evaluation and sustainability of interventions in schools, organisations and communities, and makes the point that evidence based practice now has two elements – the particular programme and equally, how it is implemented in the field.
Durlak and Dupre (2008) argue that assessment of implementation is crucial in programme evaluation. Eight different aspects to implementation are described: fidelity, dosage, quality, participant responsiveness, programme differentiation, monitoring of control or comparison conditions, programme reach and adaptation. Additionally, implementation is affected by a range of factors at different ecological levels including community level factors, provider characteristics and innovation characteristics.

Lendrum and Humphrey (2012) review key issues in the study of implementation including the development, knowledge and understanding about the process of implementation including the balance between programme fidelity and adaptation and barriers and facilitators to implementation. They go on to argue for further research particularly focusing on implementation in school settings and put forward the view that communication between programme developers and teachers is crucial for supporting the most effective interventions that optimise implementation and maximise the achievement of outcomes.

Kelly and Perkins (2012) discuss the additional difficulties of measuring effectiveness of interventions in real world contexts as opposed to scientifically controlled trials. Blase, Van Dyke, Fixsen and Wallace Bailey (2012) describe how knowledge of what works is only useful if the ‘what’ or the intervention is assessed as well as the ‘how’ to implement, improve, sustain and scale-up the intervention in ‘very messy real-world settings’. They describe how it is important in operationalizing interventions to be explicit about which are the core intervention components as the more these are clearly identified the more likely the programme is to be implemented successfully. In addition Blase et al. (2012) explain the importance of the advice and support of a qualified ‘purveyor’ whose role it is to support effective implementation and fidelity. They outline several stages of implementation which comprise exploration, adoption, installation, initial implementation and full implementation. Figure 2 below, shows the implementation drivers which ensure that the skills, policies and procedures are developed at different levels to support successful implementation in three domains: competency, organisational and leadership.
Blase et al., (2012) state that the educational psychologist has an important role in bringing evidence based practices and programmes into everyday use in classrooms, schools and communities and could be valuable members of implementation teams and therefore promote and support the uptake, success and sustainability of evidence based interventions.

2.6.2 Implementation of interventions with children and young people with PMLD

A systematic literature search on the implementation of assessment approaches with children with PMLD yielded no results. (See Table 2.3 below for the search terms and databases used). However several articles were found which explored the efficacy or implementation of other strategies or programmes with children, young people and adults with PMLD, with the only search term being ‘PMLD’. The majority of these studies have tended to use a case study methodology. Most of these studies analyse data using either a Thematic Analysis (Braun & Clarke, 2006) or Grounded Theory approach (Strauss & Corbin, 1998).
Ayer (1998) investigated the use of multi-sensory rooms for children with profound and multiple learning difficulties with a small convenience sample. Ayer (1998) used detailed questionnaires completed by staff using multi-sensory rooms as part of single case studies to explore the variety of ways the multi-sensory rooms were used in the settings studied. An unstructured questionnaire schedule was used as an interview guide and a semi-structured questionnaire was developed and piloted. Porter and Ouvry (2001) used a case study approach to explore the issues in interpreting the communication of people with PMLD through working together with family members and significant others to share information and build up an accurate profile of how and what an individual communicates.

Firth, Elford, Leeming and Crabbe (2008) investigated the use of Intensive Interaction, an approach to teaching the pre-speech fundamentals of communication, with adults with PMLD in a social care setting. The focus was on the issues for staff when adopting Intensive Interaction after a period of training and support. They trained 29 staff in Intensive Interaction. Pre and post interviews and contemporaneous researcher field notes were analysed using Grounded Theory methodology. They highlighted the practical and philosophical issues regarding the adoption of the approach and brought to light the issues seen as significant by care staff in influencing the introduction and use of Intensive Interaction. The research was intended to inform the planning of future work and improve the likelihood of successful future implementation initiatives.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Terms</th>
<th>Boolean Operators</th>
<th>Databases</th>
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<tbody>
<tr>
<td>Assessment with PMLD</td>
<td>Assessment PMLD</td>
<td>AND, OR</td>
<td>ASSIA</td>
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<td></td>
<td>PMLD</td>
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<td></td>
<td>Profound and multiple learning</td>
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<td>Education: A SAGE Full-Text Collection</td>
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<td>difficulties Evaluation</td>
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<td>British Education Index</td>
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<td>PMLD</td>
<td>PMLD</td>
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<td>difficulties</td>
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Table 2.3: Search terms and databases
Magee and Burland (2008) conducted an exploratory study of the use of electronic music technologies (EMT) in clinical musical therapy with students with PMLD, and collected data from semi-structured interviews with music therapists. Their aim was to explore current practice successfully incorporating EMT in order to develop guidelines to improve practice and to identify when the use of EMTs would be most appropriate. Each therapist discussed their work with the researcher about up to three clients, with video extracts from clinical sessions, during two interviews. Magee and Burland (2008) used open coding procedures from Grounded Theory to analyse their data and undertook a process of member checking through the second interviews and a focus group. The current research will use semi-structured interviews with different staff working in or in support of special schools, and is less exploratory as there are existing guidelines for the use of RfL.

Harding et al. (2011) researched the process of implementing augmentative and alternative communication support for people with profound and multiple learning disabilities. They carried out two case studies of individual children using pre and post assessment information, discussions with teachers, learning support assistants and parents, a preverbal communication schedule, pragmatic profile checklist and observational data. They examined the process involved in deciding which approach would suit each child and the reasons for this and reflected on the necessary stages of implementing the intervention.

2.7 Summary of literature review

This literature review has explored definitions of assessment (Broadfoot, 2007; DES, 1988; Drummond, 1993) and the term profound and multiple learning difficulties (Bellamy et al. 2010; Imray, 2005; Samuel & Pritchard, 2001; WAG, 2006). It has discussed the different developmental pathways of children and young people with PMLD (Garner et al., 2012; QCDA, 2011; Ware, 1994) and the issues involved in assessment for this group (Hewett, 2006; Lacey, 2010; Martin, 2006; McNicholas, 2000; Ndaji & Tymms, 2009; WAG, 2006; Ware & Donnelly, 2004; Wolf-Schein, 1998). There are an increasing number of children and young people with PMLD in the education system and fewer teachers experienced with working with this group, therefore a number of assessments have been developed.
including PIVATS (Lancashire County Council, 2004), B-Squared (2012) and the Routes for Learning (WAG, 2006). The development of the RfL assessment materials (WAG, 2006; Ware & Donnelly, 2004) has been examined as well as the currently small research base for its use (Pollitt & Grant, 2008; Van Walwyck, 2011; Ware, 2011). In addition the review has also focused on implementation issues (Blase et al. 2012; Durlak & Dupre, 2008; Kelly, 2012; Kelly & Perkins, 2012; Lendrum & Humphrey, 2012). A systematic literature review yielded no results regarding assessments for students with PMLD, therefore research into the implementation of specific interventions with children and young people with PMLD has been described (Ayer, 1998; Firth et al., 2008; Harding et al., 2011; Magee & Burland, 2008; Porter & Ouvry, 2001).

2.8 Aims of the research

This research aims to add to the small literature base for RfL by building on Van Walwyck’s (2011) work to investigate the ways that the RfL materials are currently being used in practice in a number of settings, how this relates to the RfL guidance and why the materials have been used in these particular ways. This research also aims to extend the literature base by considering implementation issues.

2.9 Research questions

The first and second RQs investigate how and why any adaptations have been made to the RfL approach in each case and the third and fourth RQs examine implementation issues.

RQ1: How has the Routes for Learning approach been used by professionals to support the learning and assessment needs of children and young people with PMLD?

RQ2: Why has the Routes for Learning approach been used in these particular ways?

RQ3: What are the facilitators to implementing the Routes for Learning approach?

RQ4: What are the barriers to implementing the Routes for Learning approach?
2.10 Expected contribution to knowledge and impact

The role of the educational psychologist includes being able to advise schools using a knowledge and awareness of research evidence regarding the effectiveness of interventions (Frederickson, 2002). In addition, the role can also comprise support around successful implementation at individual, group and organisational levels. This literature review investigates what evidence is available on the use and effectiveness of the Routes for Learning materials. There is little research which explores how the Routes for Learning approach has been used in practice since its publication or regarding the facilitators and barriers to its implementation by different professionals working with children or young people with PMLD. This knowledge would be of benefit to EPs and other professionals working within or in support of specialist provision with this group of students.
Chapter 3 - Methodology

3.1 Chapter Overview

This chapter first describes the rationale for the study. The research questions and aims are stated prior to an examination of the research design and philosophical considerations. The design of the study is then explained and the case study protocol presented which includes the propositions identified for this research and an explanation of how these were derived from the researcher’s experience, contacts made in the field and the literature. The next sections describe sampling and participant recruitment, data gathering and analysis methods. Finally a critique of the method is given before a description of the ethical considerations.

3.2 Rationale

Children and young people with PMLD learn and develop differently than typically developing students, often having spiky development profiles (QCDA, 2011) and as described in Sections 2.4.2 and 2.4.4. This has implications for identifying the most appropriate ways to assess the progress made by members of this group. The number of children and young people with PMLD is increasing whilst the number of teachers with specialist training to work with this group is in decline. Since the launch of the Rfl assessment approach (WAG, 2006), for use with children and young people with PMLD, there has been little published research regarding its implementation or effectiveness. This research aimed to add to the small literature base for Rfl by building on Van Walwyck’s (2011) work to investigate the ways that the Rfl materials are currently being used in practice in two special school settings, how this relates to the Rfl guidance and why the materials have been used in these particular ways. This research also aimed to consider implementation issues. In the next section, links between this study and Van Walwyck’s (2011) research are detailed and the research gap is clarified. Aims of the research and the research questions will then be outlined.
3.2.1 The research gap

This research intends to address the gap identified from a systematic review of the literature on the implementation or effectiveness of RfL and to begin to build on Van Walwyck’s (2011) work to investigate the ways in which the RfL materials are currently being used in practice in more settings. In Van Walwyck’s (2011) study RfL was new to the setting and was trialled with two pupils. Staff members were interviewed about pre-existing assessment arrangements within the school and this was not followed up after trials with RfL. Van Walwyck (2011) identified some benefits and disadvantages of using RfL to support, mapped against ‘ideal criteria’ for assessments to support children and young people with PMLD (See Section 2.5.4 for Routes for Learning research). Analysis within the current study extended Van Walwyck’s (2011) work by examining issues related to the implementation of RfL in terms of barriers and facilitators but also made reference to aspects of implementation at different ecological levels (Durlak & Dupre, 2008) and the stages of implementation (Blase et al., 2012).

RfL was significantly more embedded within the settings in the current study. Because the research context was different, this study does not set out to replicate or partially replicate Van Walwyck’s (2011) research, but rather to develop and extend its findings. Rather than trialling the materials, here the use of semi-structured interviewing allowed school staff familiar with the materials to reflect on the use of RfL within the school context.

As most EPs within the researcher’s LA are linked to at least one special school and are increasingly involved in casework with children or young people with PMLD, EPs would benefit from this research. RfL assessments could potentially inform EP assessment and the design of focused and appropriate interventions with children and young people with PMLD. LA EPs and other professionals informed by this and other research could deliver training and offer advice and support regarding the potential uses and implementation issues of RfL to school staff working with children and young people with PMLD.
The aims of this research were as follows:

- To contribute to knowledge of how RfL can be used in practice.
- To identify the facilitators and barriers to using RfL.
- To contribute to theory by gaining further understanding of the assessment needs of children and young people with PMLD.

3.2.2 Research questions

The research questions were as follows:

**RQ1:** How has the Routes for Learning approach been used by professionals to support the learning and assessment needs of children and young people with PMLD?

**RQ2:** Why has the Routes for Learning approach been used in these particular ways?

**RQ3:** What are the facilitators to implementing the Routes for Learning approach?

**RQ4:** What are the barriers to implementing the Routes for Learning approach?
3.2.3 Data gathering methods

Table 3.1 below outlines the data gathering methods utilised in this study and how these link to the research questions.

**Table 3.1 Data gathering methods**

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Data Gathering Methods</th>
</tr>
</thead>
</table>
| RQ1: How has the Routes for Learning approach been used by professionals to support the learning and assessment needs of children and young people with PMLD? | • Semi-structured interviews with management staff, classroom practitioner and external agency staff (where involved)  
• Examination of the RfL materials and resources  
• Direct observations. |
| RQ2: Why has the Routes for Learning approach been used in these particular ways?   | • Semi-structured interviews with management staff, classroom practitioner and external agency staff (where involved)  
• Examination of the RfL materials and resources |
| RQ3: What are the facilitators to implementing the Routes for Learning approach?   | • Semi-structured interviews with management staff, classroom practitioner and external agency staff (where involved)  
• Direct observations. |
| RQ4: What are the barriers to implementing the Routes for Learning approach?       | • Semi-structured interviews with management staff, classroom practitioner and external agency staff (where involved)  
• Direct observations. |

3.3 Research design and philosophical considerations

**3.3.1 Epistemology**

Epistemology or the researcher’s understanding of the nature of knowledge shapes the methodological process and data analysis.

This research takes a critical realist rather than a social constructionist position. Easton (2010) describes the difference between critical realism and social constructionism as being that critical realists accept, and social constructionists reject, the possibility of knowing reality. Social constructionists concentrate on uncovering the constructions that social actors make. Houston (2001) describes the epistemological (relating to knowledge) and ontological (relating to existence) assumptions of the social constructionist position.
These are: the idea that the social world is socially constructed through interaction and language; that our understanding of the world is contingent on the context and finally that all knowledge world is relativist and subjective.

Critical realists believe that there is an independent reality that can be studied by science. However there is also recognition that all observation is fallible and has error and that all theory is revisable. In other words, the critical realist is critical of the ability to know reality with certainty. Because all measurement is fallible this means that it is important to employ multiple measures and observations and triangulation across these sources to obtain as accurate a picture as possible of what is happening in reality. Trochim and Donnelly (2008) explain critical realism by stating ‘There is an external reality independent of a person’s thinking (realism) but we can never know that reality with perfect accuracy (critical).’ Somekh and Lewin (2012) describe critical realism as an alternative to positivism (where the goal is generalizable laws), interpretivism (where the goal is to appreciate the lived experience of social actors) and postmodernism (where knowledge is socially constructed). Somekh and Lewin (2012) put forward that critical realism aims to cultivate deeper levels of explanation and offer a formula for ‘a logic of enquiry’ - that mechanism and context together equal outcomes.

Easton (2010) argues that critical realism is especially appropriate for case study research as it justifies in depth research which aims to understand why things are as they are. The current research uses the case study method to investigate how RfL is being used; the reasons why it is being used in these ways; and examines implementation issues to further inform the understandings gained. This study assumes that a good reflection of the reality of how RfL is being used can be discovered through the gathering of a range of data and the subsequent analysis of that data. The epistemological position of this research is therefore critical realism.

### 3.3.2 Ontology

Somekh and Lewin (2012) describe how a researcher’s approach to data collection, recording and analysis is dependent on the methodological framework for the research. This is shaped by the researcher’s understanding of epistemology or ‘the nature of knowledge’ and ontology or ‘being in the world’. Somekh and Lewin (2012) describe
critical realism as having a multi-layered and stratified ontology, where knowledge of the world can be viewed as having three overlapping domains: the empirical (where events can be observed directly or indirectly); the actual (where aspects of reality occur but may not be experienced); and the real (the deep structures that generate phenomena).

These understandings influence how observations and interviews are conducted as well as the analytic strategies used. The methodological processes used in this study and the use of deductive rather than inductive analytic approaches demonstrate the ways in which the researcher’s critical realist epistemological and ontological position has shaped the research. Easton (2010) describes how critical realism assumes that whilst there is a reality independent of observers this reality is socially constructed to some extent. The nature of the current research is that some empirical aspects of what is happening linked to the use of RfL can be directly observed, for example through the interactions between staff and pupils during observations and the recording systems in use. Even these however will be interpreted from the researcher’s subjective position and for this reason, alternative viewpoints on the data will be sought, for example through member checking (see Section 3.9.7 on reliability and validity for further details). Other aspects which are observed indirectly or those not experienced as well as the deeper underlying structures may be elicited through the semi-structured interview process to some extent. The use of different data gathering methods allows the most accurate picture of the reality of the use of RfL within the time and other constraints of this research.

### 3.3.3 Axiology

Axiology refers to the values and beliefs that are held by the researcher and which also influence the ways in which research is carried out (Cohen, Manion & Morrison, 2011). Somekh and Lewin (2012) discuss how axiology or values underpin human judgements and activities and that it is important for researchers to work with a methodology and methods that are appropriate to the area of enquiry and their own way of seeing the world.

This research concerns one of the most vulnerable groups of children and young people in society, those with PMLD. Because of the inherent difficulties with communication and cognition that the majority of these pupils experience they need support to express their
needs and to have a voice. Experience in the EP role has increased the researcher’s understanding of the needs of this group of children and young people and influenced this view. The values behind the RfL assessment materials reflect this and aim to enable these children and young people and the adults who work with them to demonstrate progress and plan strategies and next steps for learning. As such the researcher believes it is important to examine how these materials work in practice and for this knowledge to be shared amongst professionals and others as a way to advocate for the needs of these children and young people and the use of RfL as one of the ways in which these needs can be met.

Like all children and young people it is now acknowledged socially through legislation that people with PMLD have a right to education and to learn and to have their needs understood. It is accepted that they can contribute to society and have the same rights as those advocated in the Every Child Matters (ECM) agenda (DfES, 2004a) and in the United Nations Convention on the Rights of the Child (UNICEF, 1989).

These values and beliefs have influenced all aspects of how the research has been constructed and conducted, the ways that schools and individual professionals have been approached and how the justification for carrying out this research has been explained to others both verbally - in telephone calls and during introductions and interviews, as well as in writing, including in the information sheet (Appendix D) and emails. Because of the approach of the researcher, school staff members are aware of the value the researcher places on: the education of children and young people with PMLD; the challenges and rewards of working with this group; and investigating appropriate and relevant assessment approaches. During the semi-structured interviews the researcher held a conscious awareness of these values and beliefs whilst at the same time making efforts to demonstrate a level of impartiality. The aim was to elicit responses which were as full and honest as possible to accurately represent the views, thoughts, values and practices of participants. Whilst the researcher’s beliefs and values had an influence on the collection and interpretation of the data, triangulation of data from multiple sources, member checking, a reflexive approach and the use of supervision were all employed to enhance reliability and validity.
3.4 Case study methodology

Easton (2010) defines case study research as a method which involves investigating one or a small number of social entities or situations using multiple data sources and developing a holistic description through an iterative research process. Cohen et al. (2011) say that case studies enable the reader to have a greater understanding of ideas by giving examples of real people in real situations. Yin (2014) states that the case study method can embrace different epistemological orientations; however he gives most examples oriented to a realist perspective, which presumes that there is a single reality which is independent of the observer, as opposed to a relativist approach which acknowledges that there are multiple realities and multiple meanings with findings influenced by the observer. The strength of case study research is its ability to observe effects within real, unique and dynamic contexts. Case studies involve in-depth inquiry, studying conditions over time and include data about the contextual conditions surrounding the case. This leads to the generation of a large quantity of variables of interest in any given case study and consequently a potentially large amount of data; therefore it is important to carefully define the boundaries of a case.

Yin (2014) states that the case study research method is most appropriate when the researcher is asking a how or why research question; when control of behavioural events is not required; and when there is a focus on contemporary events. The current research used Yin’s (2014) case study design to investigate how RfL is being used in two settings, why it is being used in these ways and the barriers and facilitators to its use.

3.5 Design of the study

3.5.1 Case study design and protocol

This research is an exploratory case study and has a multiple embedded case study design (Yin 2014). According to Yin (2014) the use of a case study protocol is essential to conduct a multiple case study. The protocol contains the instruments (in this case the semi-structured interviews, observations and background questionnaires) as well as the procedures, rules and routines to be followed during their use. This keeps the researcher focused on the topic of the case study, to stay within the boundaries of the case, and ensures that potential difficulties are identified. The protocol increases the reliability of
the case study research and guides the researcher through the collection of data for each case. Yin (2014) recommends that a protocol should have four parts: an overview of the case study; data collection procedures; data collection questions and a guide for the case study report.

See Table 3.2 below for a detailed breakdown of the case study protocol used in the current research.

Table 3.2: The case study protocol

<table>
<thead>
<tr>
<th>Section of the protocol</th>
<th>Stage of the case study research</th>
<th>Rationale/Activity</th>
</tr>
</thead>
</table>
| Overview                | Multiple case study overview     | • Children and young people with PMLD have very specific learning and assessment needs.  
• Many existing assessment materials do not take into account the uneven development patterns of children and young people with PMLD.  
• Most other assessment materials for children and young people with PMLD are based on the National Curriculum.  
• The RfL materials were introduced in 2006 to meet the assessment needs of children with PMLD and the adults who work with them.  
• There is little current research on how the RfL materials are being used in practice.  
• The current study researches how RfL is used in special schools, why it is being used in these ways and the barriers and facilitators associated with its implementation. |
| Design                  | A multiple embedded explanatory case study design.  
• Two cases, each a special school using RfL with children and young people with PMLD.  
• One case involved a large secondary special school, where a practitioner and manager were interviewed and an observation of RfL undertaken.  
• A second case involved a small 2-19 special school where a practitioner and manager were interviewed and an observation of RfL undertaken.  
• Units of analysis were practitioner views of the use and relevance of RfL, manager views of the use and relevance of RfL, observation of RfL in practice and documents and resources relating to RfL in practice. |
| Case study procedure     | A detailed operational risk assessment was completed which can be found in Appendix E. |
| Case selection           | Convenience sampling was used to select provision and participants |
Criteria for participating schools were: 1) that they were special schools offering specialist provision for pupils with PMLD; 2) currently using the RfL assessment materials.

Criteria for participating managers were: 1) that they had knowledge of the RfL materials; 2) had management responsibility for their use within the school.

Criteria for participating practitioners were: 1) that they had knowledge of the RfL materials; 2) were using them within their normal practice.

### Data collection procedures

<table>
<thead>
<tr>
<th>Data collection procedures</th>
<th>Data gathering</th>
<th>Phases</th>
<th>Data gathering methods</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Phase 1</td>
<td>Familiarisation with RfL materials</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phase 2</td>
<td>Observation of RfL in use in practice</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phase 3</td>
<td>Semi-structured interview with practitioner</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phase 4</td>
<td>Semi-structured interview with manager</td>
</tr>
</tbody>
</table>

### Data collection questions

<table>
<thead>
<tr>
<th>Data collection questions</th>
<th>Data analysis</th>
<th>Phases</th>
<th>Source of data</th>
<th>Data analysis method</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Phase 1</td>
<td>RfL materials</td>
<td>Document analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phase 2</td>
<td>Running record of events</td>
<td>Narrative account</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phase 3</td>
<td>Interview transcript</td>
<td>Thematic analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phase 4</td>
<td>Interview transcript</td>
<td>Thematic analysis</td>
</tr>
</tbody>
</table>

### Guide for case study report

<table>
<thead>
<tr>
<th>Reporting</th>
<th>Source of data</th>
<th>Data analysis method</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Case study findings will be reported to all participants and EPs and other relevant professionals within the local authority.</td>
<td></td>
</tr>
</tbody>
</table>

### Timeline

See Appendix F for the timeline and time budget for this research.

### 3.5.1.1 Theoretical propositions

The researcher identified a number of propositions as outlined below. These propositions informed the research questions and data gathering methods for this study including the questions and probes for the semi-structured interview. Some of these propositions were generated in response to initial contacts made with the first potential participant school, others with a teacher completing research on recording and reporting RfL data for different stakeholders (R. Hogg, personal communication, October 12, 2012) and others from the outcomes of Van Walwyck’s (2011) research study. The generation of each of the four proposition areas is now described.
Proposition area 1: Schools may adapt the materials to meet the needs of their setting

R. Hogg (personal communication, October 12, 2012) is a teacher in a school for children with PMLD and is conducting research regarding the design of ways to record progress data from RfL assessments in a quantitative as opposed to a qualitative way. This, alongside Van Walwyck’s (2011) research, suggests that there is a need to generate quantitative information for accountability measures, and led to the propositions regarding the probability that schools might adapt or supplement their recording of progress to use for teacher and whole school evaluation purposes as well as for formative assessment (see proposition areas 1 and 2 in Table 3.3 below).

Proposition area 2: Schools may supplement the materials to meet recording and reporting needs

Van Walwyck (2011) found that RfL did not cover assessments for physical, visual and tactile skills, and so this informed the propositions regarding the likelihood that schools would use RfL as one of a number of assessments when working with children with PMLD. In addition Van Walwyck (2011) concludes that it is necessary to develop a more detailed record keeping system for use with RfL and this resulted in the propositions relating to the likelihood of schools designing different ways to record and report the assessment information gained from RfL (see proposition area 2). Discussion with a special school SENCO as a potential research participant revealed that a range of assessments were in place, that recording systems had been designed to track pupil progress in RfL but that different assessments were used to report progress to the local authority and on a national level.

Proposition area 3: Schools may use the materials selectively in response to perceived need

Discussion with the SENCO of the potential participating special school demonstrated that a school’s knowledge and understanding of individual pupils influenced their identification of the children for whom the RfL assessment would be most appropriate.
Proposition area 4: That differing levels of staff experience and expertise will influence how RfL is used

The propositions regarding the potential use of RfL with other assessments (see proposition area 2) were informed by an awareness of the range of assessments (for example B-Squared (2012), PIVATS 4, 2012) that have been used with children and young people with PMLD identified through the literature search and from EP practice, and this in turn influenced the proposition that different schools would be using RfL in different ways depending on a number of factors. These factors included training and experience, contextual or whole school issues as well as the nature and needs of their individual students.

The propositions are that data collected would be influenced by the following factors summarised in Table 3.3 below. As can be seen from Table 3.3 there is overlap between the propositions and which research questions they address. For ease of reference the research questions are restated here:

**RQ1**: How has the Routes for Learning approach been used by professionals to support the learning and assessment needs of children and young people with PMLD?

**RQ2**: Why has the Routes for Learning approach been used in these particular ways?

**RQ3**: What are the facilitators to implementing the Routes for Learning approach?

**RQ4**: What are the barriers to implementing the Routes for Learning approach?
Table 3.3 Propositions

<table>
<thead>
<tr>
<th>Proposition area</th>
<th>Detailed propositions</th>
<th>Related Research Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Schools may adapt the materials to meet the needs of their setting</strong></td>
<td>• The RfL materials are being used in a variety of ways.</td>
<td>RQ1 RQ2</td>
</tr>
</tbody>
</table>
| **Schools may supplement the materials to meet recording and reporting needs**   | • Participants may use other published ‘quantitative’ assessments to supplement RfL.  
• Participants may have developed other systems to supplement RfL.  
• Participants will have designed different recording systems.  
• Participants will have designed ways of reporting on RfL assessments to parents and other stakeholders.  
• Participants will have had to work out how to ‘fit’ RfL with the drive to provide data to the LA and on a national level.  
• Participants may adapt the RfL to be more quantitative for reporting and school improvement purposes. | RQ1 RQ2 RQ3 RQ4             |
| **Schools may use the materials selectively in response to perceived need**      | • Participants may use RfL with particular children in preference to other assessments.                                                                                                                                     | RQ1 RQ2 RQ3                 |
| **That differing levels of staff experience and expertise will influence how RfL is used** | • Participants will have had differing access to training or resources.  
• Participants will have differing levels of experience in working with children with PMLD.  
• Participants will have different levels of experience in using RfL.                                                                                           | RQ3 RQ4                     |
3.5.1.2 Exploratory case studies

Yin (2014) identifies four motives for using case study research in psychology: description, explanation, exploration and evaluation. Yin (2014) describes a descriptive case study as one whose purpose is to describe a phenomenon in its real world context, an exploratory case study as one whose purpose is to identify research questions for subsequent study and an explanatory case study as one which explains how or why some condition came to be. Evaluation case studies are those which seek to evaluate a practice or intervention. These different purposes for case studies are not mutually exclusive and may overlap (Yin, 2012).

Yin (2012) states that the goal of an exploratory case study can be to discover theory by directly observing a social phenomenon in its natural context. The research may identify further research questions for future study as in an exploratory study but may also generate theory. Yin (2012) describes how in exploratory case studies, unlike in explanatory case studies, fieldwork and data collection are undertaken before the definition of study questions or specific methodological procedures. Yin (2014) states that propositions are not necessary in exploratory case study research, however in this case the current exploratory case study research has built on previous exploratory case study research (Van Walwyck, 2011). Therefore, sufficient information has been drawn from earlier research to lead to the development of potential theories and so consequently it has been possible for the researcher to define research questions and tentative propositions regarding potential outcomes prior to data collection.

3.5.1.3 Multiple case study design

Yin (2014) explains that the advantage of using a multiple case design is that the evidence is deemed more convincing than a single case design, that the analytic benefits from having two or more cases may be substantial and that research is therefore considered to be more robust. An embedded as opposed to a holistic design involves units of analysis at more than one level where subunits are examined within each case. Table 3.4 below shows a summary of the multiple case study procedure adapted from Yin (2014).
Table 3.4: Multiple-case study procedure (from Yin, 2014)

<table>
<thead>
<tr>
<th>Define and design</th>
<th>Prepare, collect and analyse</th>
<th>Analyse and conclude</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop theory</td>
<td>Select cases</td>
<td>Conduct first case study</td>
</tr>
<tr>
<td></td>
<td>Design data collection protocol</td>
<td>Conduct second case study</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Write individual case report</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Yin (2014) describes multiple case studies as having a replication logic similar to that used in multiple experiments and that these replications can either be literal and predict similar results or theoretical where contrasting results are predicted for particular reasons. Within the current multiple embedded case study data were gathered to generate findings that in principle were likely to be similar. However the differing nature of the particular school settings, their organisation of teaching and learning, the training, experience and practice of professionals and the strengths and needs of individual students would lead to some variations as predicted within the propositions outlined earlier. Therefore the cases within this research generally reflect a literal logic but also move toward a theoretical replication logic, strengthening the findings compared to a single case study.

3.5.1.4 Units of analysis

The current study used a multiple embedded case study design as shown in Table 3.5, below. The four units of analysis (UoA) in each case were identified as: practitioner views of the use and relevance of RfL; manager views of the use and relevance of RfL; RfL in practice; and RfL documentation.
Table 3.5: Multiple embedded case studies with Units of Analysis (UoA).

<table>
<thead>
<tr>
<th>Case/s – Use of RFL in special school A/B</th>
<th>Sources of data</th>
<th>Data to be collected</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UoA 1</strong>: Practitioner views of the use and relevance of RfL</td>
<td>Practitioner interview</td>
<td>Interview scripts</td>
</tr>
<tr>
<td><strong>UoA 2</strong>: Manager views of the use and relevance of RfL</td>
<td>Manager interview</td>
<td>Interview scripts</td>
</tr>
<tr>
<td><strong>UoA 3</strong>: RfL in practice</td>
<td>Classroom observation Interviews</td>
<td>Observation notes</td>
</tr>
<tr>
<td><strong>UoA 4</strong>: RfL documentation</td>
<td>RfL Assessment materials RfL Additional Guidance RfL Routemap</td>
<td>Key aspects identified using McCulloch (2011) framework</td>
</tr>
</tbody>
</table>

3.5.1.5 Triangulation

A number of different sources of data were collected and analysed in order to develop what Yin (2014) calls converging lines of enquiry. This triangulation of data strengthens case study findings or conclusions because they are based on a number of different sources of converging information, where the multiple sources of evidence give multiple measures of the same phenomenon (see Section 3.9.7).

3.6 Sampling and participant recruitment

3.6.1 Overview

Participants were recruited through convenience sampling via contacts and recommendations made during the TEP’s placement within the LA. Initial discussions with school staff enabled the remaining participants to be recruited via snowball sampling where recommendations/contacts were provided by the original identified schools. Participants comprised staff members from special schools. The same data gathering tools were used in the two settings and the aim was to gain similar information but also to investigate contrasting elements of provision and how this might have influenced
assessment practice. All interviews were conducted on school or other work premises and it was planned to follow guidance for lone working if necessary and appropriate. A summary of school and participants who took part in the research can be found in Table 3.6 below.

Table 3.6 School and participant information

<table>
<thead>
<tr>
<th>School</th>
<th>Number of pupils</th>
<th>Age range of pupils</th>
<th>Needs of pupils</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>School A</td>
<td>133</td>
<td>11-19</td>
<td>SLD, MLD, PMLD, ASD, physical and medical needs.</td>
<td>• Class teacher with responsibility for RfL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Teaching assistant</td>
</tr>
<tr>
<td>School B</td>
<td>67</td>
<td>2-19</td>
<td>SLD, PMLD, ASD, Complex learning difficulties</td>
<td>• Deputy head teacher</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Teacher</td>
</tr>
</tbody>
</table>

3.6.2 Recruitment of provision

In 2013, within the LA where the research took place, 199 children and young people within the special school population had statements of SEN for PMLD. Twenty one pupils with PMLD were being educated within mainstream primary schools and none in mainstream secondary schools (DFE, 2013b). As the vast majority of children and young people with PMLD are educated within special school provision the researcher made the decision to focus the study on the use of RfL within specialist settings.

Initially the researcher emailed EP colleagues within the local EPS team to ask if they had knowledge of special schools which were currently using the RfL assessment materials. It was likely that this information would be available to the EPs as a result of conducting regular planning meetings with school SENCOs and supporting them with aspects of SEN provision mapping.

Inclusion criteria for settings to be involved with the research were: that the setting should be a special school with pupils with PMLD; that the RfL materials were used within the setting; and that RfL was embedded within the setting. RfL was considered to be embedded in the school if some school practitioners had been using the materials with pupils with PMLD for a period of at least two years.
Initially a primary special school (School X) was identified, on the recommendation of a colleague as a potential participating setting, and discussed the research with the SENCO who was also the deputy head teacher. However, due to staff absences it was subsequently not possible to carry out the research within School X at that time. Fortuitously, the SENCO from School X had knowledge of other schools using the RfL materials within the local authority and was able to provide a number of other potential contacts for the research study.

Two schools which contrasted in various ways (see Tables 3.6 and 3.7) were selected for the researcher to approach. The researcher made contact with the head teacher of the first school by telephone to explain the purpose of the research and what being a participating setting would entail. Once the head teacher expressed an initial interest this was followed up with an email with an attached participant information sheet and consent forms for relevant staff. The head teacher and staff members were then given a period of two weeks to consider and respond to the email before the researcher made follow up contact. The same procedure and time scale was followed for the second special school.

3.6.3. School information

The two schools identified for the study were twenty five miles apart and located within different parts of the local authority in which the researcher works as a TEP. Both of these schools had more pupils with PMLD than other special schools in the region. The first case study involved the use of RfL within a relatively large special school for children aged 11-19. The second case study was carried out within a smaller special school for children aged 2-19. Details regarding the school contexts for each case are in Table 3.7 below and further contextual information was gathered throughout the research process.
Table 3.7 Contextual information for each school taking part in the study

<table>
<thead>
<tr>
<th>Setting</th>
<th>School A</th>
<th>School B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population description</td>
<td>Students with SLD, MLD, PMLD and ASD, many with additional physical or medical needs.</td>
<td>Students with SLD and PMLD.</td>
</tr>
<tr>
<td>Number of pupils</td>
<td>133</td>
<td>67</td>
</tr>
<tr>
<td>Age range of pupils</td>
<td>11-19</td>
<td>2-19</td>
</tr>
<tr>
<td>Additional information</td>
<td>The school is co-located with a mainstream secondary school.</td>
<td>The school has Communication and Interaction Specialist status.</td>
</tr>
<tr>
<td>Approach to using RfL</td>
<td>RfL used by teaching assistants on a day to day basis within class and as part of withdrawal sessions.</td>
<td>RfL used by a specialist teacher in withdrawal sessions, and continued in class with other teaching staff.</td>
</tr>
</tbody>
</table>

3.6.3.1 School A

School A had 133 students on roll, 41 of whom were in the post 16 provision. The school had pupils with SLD, MLD, PMLD and ASD, many of whom had additional physical or medical needs. There are almost equal numbers of girls and boys in the school and most students are of White British heritage. Almost half of the pupils were eligible for the Pupil Premium\(^1\) which is significantly above the national average. This funding is given to schools to support children and young people who are eligible for free school meals and for those who are looked-after or in care. This school moved to a new building in 2009 and is now co-located with a mainstream secondary school on a purpose built campus.

The school received an overall ‘good’ rating with an ‘outstanding’ rating for the behaviour and safety of pupils, when inspected by Ofsted in February 2013 (Ofsted, 2013). The Ofsted report noted that signing, pictures, symbols and technology were used to enable pupils to make themselves understood and that students’ communication skills develop exceptionally well. School A has achieved Healthy School status, the Leading Parent Partnership Award and Investors in People.

The school’s speech and language therapist played an important role in the school in terms of using RfL to make assessments, in modelling assessments as part of training and

\(^1\) Pupil Premium is additional funding given to publicly funded schools in England to raise the attainment of disadvantaged pupils and close the gap between them and their peers.
offering ongoing support to staff members in the use of RfL. At the time the research was conducted PMLD students taught in mixed ability classes with each class having a class teacher and a teaching assistant working in partnership to use RfL assessment activities with identified pupils.

3.6.3.2 School B

School B had 67 pupils on roll, six of whom were in the post 16 provision. The school took pupils from the ages of 2 to 19 and catered mainly for students with SLD and PMLD. The school also had a number of pupils with ASD and a small but increasing population of pupils with very complex learning difficulties and disabilities. Around a third of the pupils are known to be eligible for the Pupil Premium, which is relatively high. There were slightly more boys than girls and the great majority of pupils came from White British backgrounds.

The school was rated as being of an overall ‘good’ standard by Ofsted (Ofsted, 2012) following an inspection in November 2012. The Ofsted report noted that the specialism in communication and language is a real strength of the work of the school in terms of the quality of adult training, the progress pupils make in learning to communicate and how this allows them to participate. School B had held Communication and Interaction Specialist status for six years, and was therefore able to provide specific support to pupils to develop functional communication and independence as well having a role in offering advice and support to other schools regarding communication and language development.

In School B the Speech and Language Therapist did not have a role in assessing the communication of pupils with PMLD. At the time the research was conducted pupils with PMLD were in mixed ability classes and regularly taken out of class individually and in small groups to complete assessment activities with Teacher B, who specialised in the use of RfL. These assessment sessions were also used to model and share the use of the RfL materials with class based members of staff, who used these activities with the same children and young people within class.
3.6.4 Recruitment of participants

The researcher liaised with the Head Teacher of each school to identify the participating manager and practitioner to take part in the semi-structured interviews. Initial contact was made by telephone with follow up emails attaching the information sheet and consent form (Appendices D and G). The proposed participants were a manager and practitioner experienced in the use of RfL with pupils with PMLD. The researcher contacted potential participants by telephone after they had been identified by the head teacher of each school. In line with the purpose of the study and the research questions inclusion criteria for participants were that the identified manager had management responsibility for the implementation of RfL within the school and the practitioner needed to be actively involved in using RfL in practice to enable an observation of RfL in use. Both the practitioner and manager needed to have a knowledge and understanding of RfL and an awareness of the barriers and facilitators related to its implementation.

It was necessary for each participant to give informed consent before the research could commence (See Ethics Section, 3.10.2), and as part of this process there was also the opportunity to request additional information via telephone or email. When participants had been identified, the researcher then emailed them the participant information sheet and consent forms (Appendices D and G) and allowed them two weeks to respond before following up with telephone contact for confirmation. After completion of the consent forms, mutually convenient times for conducting the observations and semi-structured interviews were negotiated by email with the researcher offering several time slots.

A summary of the participants from both schools can be found below in Table 3.8, followed by a more detailed description.
Table 3.8: Summary of participants

<table>
<thead>
<tr>
<th>School</th>
<th>Manager</th>
<th>Practitioner</th>
</tr>
</thead>
<tbody>
<tr>
<td>School A</td>
<td>• Class teacher</td>
<td>• Teaching assistant</td>
</tr>
<tr>
<td></td>
<td>• Lead for RfL</td>
<td>• Classroom based</td>
</tr>
<tr>
<td></td>
<td>• Co-ordinator for sensory integration</td>
<td>• On the job training in RfL</td>
</tr>
<tr>
<td></td>
<td>• Brief training in sensory integration</td>
<td>• 2 years’ experience with RfL</td>
</tr>
<tr>
<td>School B</td>
<td>• Deputy Head Teacher</td>
<td>• Teacher</td>
</tr>
<tr>
<td></td>
<td>• Responsibility for RfL and assessment</td>
<td>• Not classroom based</td>
</tr>
<tr>
<td></td>
<td>• Formal training in Quest for Learning</td>
<td>• Formal training in RfL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Model and train school staff</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 8 years’ experience with RfL</td>
</tr>
</tbody>
</table>

3.6.4.1.1 School A manager information

The manager in School A was a class teacher who had management responsibility for sensory integration and was a Lead for RfL within the school. The Deputy Head Teacher was also a Lead for RfL. She taught a mixed ability Year 7 and 8 class which included several students with PMLD. She had taught in special education for seven years and for four years within School A. She had experience of working with children with PMLD throughout this time although more in the last four years. She had been using the RfL materials for two years. Manager A had received no direct training for RfL but had received one full day of sensory integration training which she felt was had strong links with RfL.

3.6.4.1.2 School A practitioner information

Practitioner A was a Level 2 Teaching Assistant who had worked within special education for a period of eight years all of which were at School A. Practitioner A had experience of working with children and young people with PMLD for the previous six years. She had used Routes for Learning since the preceding academic year and had also worked alongside other members of staff using RfL. Practitioner A had not received formal training related to RfL however had worked alongside the Speech and Language Therapist
for the school to undertake assessments and had used the assessment booklet from the RfL materials.

### 3.6.4.1.3 School A speech and language therapist (SALT) information

The speech and language therapist had worked in special education for four and a half years and then for a day and a half a week at Special School A for three and a half years. She had experience throughout her role of working with children and young people with PMLD. The SALT had worked with the RfL assessment materials for over two years and although she had received no formal training in RfL she had initial and ongoing support from a senior colleague who had been trained in RfL. The SALT was interviewed to contribute to contextual information regarding School A.

### 3.6.4.2.1 School B manager information

Manager B was the deputy head teacher of School B. She was new in post in September 2013. She had worked in special education for twenty five years and had experience of working with children and young people for the majority of this time. Manager B had previously used Quest for Learning (CCEA, 2007) which is based upon and very similar to the RfL materials. She had received training on Quest for Learning as part of a consortium of Local Authorities during her previous job at another school. This training was delivered by trainers from Northern Ireland where Quest for Learning originated.

### 3.6.4.2.2 School B practitioner information

Practitioner B was a teacher at School B. She had worked in special education for thirty years all of which were at School B. She had experience of working with children with PMLD throughout most of her teaching career. She had been using RfL for seven years and received training when RfL was first published from Ware (2006), one of the key authors of the RfL materials. At the time of the research Practitioner B did not have a class responsibility. Her role was to carry out RfL assessments with children and young people with PMLD individually and in small groups outside of the classroom, and train other staff in RfL through modelling and offering advice.
3.7 Data gathering methods

3.7.1 Overview

Different sources of data were gathered with the aim of developing converging levels of enquiry in a process of triangulation and corroboration (Yin, 2009). Each of the data gathering methods is examined individually within this section beginning with observation, followed by background questionnaires, semi structured interviews and examination of the RfL materials. This follows the sequence of data gathering which took place during the process of this research, first with School A and then with School B. Table 3.9 below shows the data gathering and analysis methods to be used for each RQ.

Table 3.9: Data gathering and analysis methods.

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Data Gathering</th>
<th>Data Analysis</th>
</tr>
</thead>
</table>
| RQ 1

How is RfL used in this setting? | Semi-structured interviews with management staff, classroom practitioner and external agency staff (where involved)
Examination of the RfL materials and resources
Direct observations. | Thematic analysis
Document analysis
Narrative account |
| RQ 2

What is the rationale for RfL being used in this way? | Semi-structured interviews with management staff, classroom practitioner and external agency staff (where involved)
Examination of the RfL materials and resources | Thematic analysis
Document analysis |
| RQ 3

What are the facilitators to implementation of RfL? | Semi-structured interviews with management staff, classroom practitioner and external agency staff (where involved)
Direct observations. | Thematic analysis
Narrative account |
| RQ 4

What are the barriers to implementation of RfL? | Semi-structured interviews with management staff, classroom practitioner and external agency staff (where involved)
Direct observations. | Thematic analysis
Narrative account |
3.7.2 Semi-structured interview

Both semi-structured interviews and focus groups were considered as potential useful data gathering methods either of which would have produced data relevant to answering the research questions and testing out the propositions. These two methods are defined briefly below, to allow the reader to understand the rationale for the selection of semi-structured interviews in this study.

Cohen et al. (2011) define an interview as a planned, question-based conversation with a specific purpose. They describe a continuum of interviewing from closed or multiple choice questions yielding quantitative data to more open ended questions generating word-based qualitative data. Semi-structured interviews are towards the latter end of this continuum and follow an interview guide approach (Cohen et al., 2011) where an outline of topics and issues to be covered are specified in outline form in advance. Robson (2002) defines a semi-structured interview as having predetermined questions, the order and wording of which can be modified based on the interviewer’s perception of what is most appropriate. Focus groups are a form of group interview which relies on the interaction between group members where the data emerges from group discussion of a topic given by the researcher (Cohen et al., 2011). The use of focus groups with groups of staff from different schools was considered for this research and it is possible that different insights might have emerged from the use of a focus group, where individuals are able to co-construct their responses. However it was felt that for logistical reasons the constraints around ensuring that all participants could be available at the same time and place was prohibitive and the researcher wished to gain individual perceptions and responses to the research questions for analysis and to be able to explore similarities and differences between the settings. Semi-structured interviews were therefore selected as a flexible data collection tool which gives rich data and allows great depth of analysis (Cohen et al., 2011).

Data were gathered from semi-structured interviews with school staff (management and classroom practitioners) and other professionals working with pupils for whom RfL has been used. The semi-structured interview design including questions, probes and prompts to be used in the research was developed from the literature review and
designed to address the research questions. It was additionally informed by discussions with the SENCO in School X.

It was planned to adapt the semi-structured interview if required, in response to the quantity, quality and type of data gained and also in response to feedback given by the participants. However this did not prove necessary. The semi-structured interview schedule is in Appendix H. Semi-structured interviews were recorded using a digital voice recorder and then transferred to a secure data stick for transcription. The researcher fully transcribed the semi-structured interviews as a way of becoming immersed in and familiar with the data prior to analysis.

In this study it was felt that full transcription was most appropriate to gain the most information from the richness of the data; however non-verbal information was not recorded in this case. The purposes of the study and key interview questions were stated to participants before the interviews. This was to try to ensure that participants felt that the researcher was seeking information and their views on how RfL was being used in that particular context at that time rather than any idealised version of events. Confidentiality of their responses was reassured to further support the gathering of as accurate data as possible.

3.7.3 Observation

The use of observational evidence is intended to provide additional information about the topic being studied. Direct observations were conducted to provide additional context for the research and to inform the semi-structured interviews. As in this case observational data are usually collected using all of the researcher’s senses, taking field notes and creating a narrative. In this case, a running record was kept during observations to record events in time sequence, to make notes about the environment and to record the researcher’s thoughts and ideas throughout. An example of the observation notes made in this study can be found in Appendix I. These observations enabled the researcher to see RfL being used in practice, to give additional contextual information, to contribute to building rapport with the school practitioner, to highlight some of the facilitators and barriers of implementing RfL and to inform the semi-structured interviews which followed. It is important that field notes and impressions are
written down or otherwise recorded as soon as possible, either during or after the observation to ensure that the maximum quantity and quality of data are retained, and so narrative accounts of each observation for this study were written on the day the observations took place.

3.7.4 Examination of RfL materials

There was also an examination of the RfL materials and resources. This involved an initial reading through of each of the booklets, the blank and example route-maps and watching the RfL DVD. The materials were then read again and the researcher made notes relating to each section of the documents and in response to a number of areas outlined in the analysis (Section 3.8.6). This examination of the materials informed the description of the RfL materials given in the Literature Review in Chapter Two of this thesis in line with guidance suggested by McCulloch (2011).

3.7.5 Background questionnaire

All participants completed the background information questionnaire (Appendix J) in the presence of the researcher, immediately prior to taking part in the semi-structured interview. The questionnaire gathered information on participants’ length of time working in special education and at that particular school, their experience with children and young people with PMLD and of using RfL. This enabled more rapport building between researcher and participant, could be referred back to during the semi-structured interviews and gave further additional contextual information, used in Table 4.3 in Chapter Four, to show how data from each case was applied to each of the original propositions. Data from the background information questionnaires also contributed to the participant information section earlier in this chapter (Table 3.6).

The background questionnaires were short and not time consuming to design or complete as they were intended to gain participant information. The questions on the questionnaire were mainly closed, with the exception of the final question regarding the training received by participants with regard to RfL. As the researcher was present during completion of the questionnaires it was felt that respondents tended to give more supplementary information verbally than if they had completed the questions in isolation.
3.8 Data analysis methods

3.8.1 Overview

This section first explains the general analytic strategies for this study then presents an overview of the data analysis methods in the same order as above.

For the data analysis methods there is first a description of the construction of the narrative account drawn from observation data. Next there is an explanation of the thematic analysis of the semi-structured interview data. This is followed by an explanation of the process of cross-case analysis. Finally there is a description of the document analysis of the RfL materials.

3.8.2 General analytic strategies

Yin (2014) identifies four general analytic strategies. These comprise: relying on theoretical propositions; working data from the ground up; and developing a case description. The current study used theoretical propositions and research questions to structure the research process; however in terms of analysing semi-structured interview data an inductive or ground up process was used in order to lead further into the data and potentially to yield additional information and interpretations.

Yin (2014) describes a number of analytic techniques including the use of a pattern matching logic, which involves the comparison of the pattern gained from the findings of the case study with those predicted prior to data collection. In the current research as outlined above in the general analytic strategy the case study propositions were compared with the data generated from the different sources. Cross-case synthesis is used in the analysis of multiple case studies as in the present study. (See section 3.8.5).

3.8.3 Narrative account from observation and background questionnaire data

Observations were used to inform the interviews and to contribute to a narrative text constructed from field notes and a running record (Appendix I). The narrative accounts described contextual information for each setting and case within the multiple case study. Cohen et al. (2011) describe a narrative account as able to capture a chronology of events and can convey information in an accessible way which brings it to life, enabling
researchers and readers to understand the experiences of participants and cultures. Cohen et al. describe how a selective focus is needed as a narrative account cannot record all events. A narrative can include key events, themes, behaviours, actions, decisions, people, meaningful events to participants, places and experiences. The researcher can analyse and interpret the text, and check hypotheses generated against other data sources. Different interpretations of the text should be considered and those selected should be the most consistent with the text. The narrative accounts generated from the observations in this research, can be found in Sections 4.2.2 and 4.2.3.

3.8.4 Thematic analysis of semi-structured interview data

Both thematic analysis and content analysis approaches were considered for analysis of semi-structured interview data. According to Hsieh and Shannon (2005) content analysis adheres to a naturalistic paradigm and is intended to interpret meaning from the content of text data. Thematic analysis aims to provide in-depth rich information which the researcher felt would enable deeper analysis of the data than content analysis, which would give broader but less depth of analysis. Thematic analysis was therefore selected as the way to analyse the semi-structured interview data from this study. More in depth analysis was important in the context of this research because a goal of this exploratory case study was to discover theory by gathering information on the implementation of RfL within the natural school context.

For this study data from semi-structured interviews were fully transcribed. Transcriptions were analysed using thematic analysis (Braun and Clarke, 2006) to identify, analyse and report patterns within the data regarding how RfL was being used in each setting, as well as the facilitators and barriers (implementation) of the RfL assessment materials as experienced by the school managers and practitioners. Thematic analysis contained the stages as shown in Figure 3.1 below.
The first stage of the semi-structured interview data analysis was the transcription of the data (See Appendix K). Initial codes were identified throughout the data set as shown in the section of an annotated transcript in Appendix K. These codes were collected into basic themes (Appendix L) which were then reviewed and refined to develop organised themes (Appendix M). Finally the themes and sub-themes were presented in diagrams with relevant extracts (Chapter 4) and used to relate back to the propositions and the research questions.

Member checking was used to ensure that themes identified as part of the thematic analysis process were an accurate reflection of the data gathered from the semi-structured interviews. This involved sending thematic maps by email to the participants involved for any feedback.

3.8.5 Cross-case analysis

In order to apply replication logic a cross-case analysis was undertaken (Appendix N). Yin (2014) describes how a cross-case analysis can be used in the analysis of multiple cases. The technique treats each case as an individual case study and then aggregates findings across the individual studies. Word tables can be used to display and analyse sets of features from the data to investigate similarities between the two cases and to make generalisations. In this case word tables were constructed according to a number of uniform categories related to the research questions and propositions. These tables can

<table>
<thead>
<tr>
<th>Phase</th>
<th>Description of the process</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Familiarizing yourself with your data:</td>
<td>Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas.</td>
</tr>
<tr>
<td>2. Generating initial codes:</td>
<td>Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.</td>
</tr>
<tr>
<td>3. Searching for themes:</td>
<td>Collating codes into potential themes, gathering all data relevant to each potential theme.</td>
</tr>
<tr>
<td>4. Reviewing themes:</td>
<td>Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic ‘map’ of the analysis.</td>
</tr>
<tr>
<td>5. Defining and naming themes:</td>
<td>Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.</td>
</tr>
<tr>
<td>6. Producing the report:</td>
<td>The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.</td>
</tr>
</tbody>
</table>
be seen in Sections 4.5 and 4.6. This process enabled the researcher to make comparisons between the cases to examine whether the cases replicated or contrasted with each other. Yin (2014) points out that the use of word tables to examine cross-case patterns relies strongly on ‘argumentative interpretation’ and therefore the researcher must develop and justify robust, plausible and rational arguments which are supported by the data.

### 3.8.6 Document analysis of RfL materials

McCulloch (2011) describes a document as a record of an event or process, which can be produced by individual or a group. The RfL materials (WAG, 2006) are a primary source document produced by the Welsh Assembly Government as a resource for special school staff and other professionals to support the assessment of the communication and cognitive progress of children and young people with PMLD. Yin (2014) emphasises that documents can play an important role in case study research to augment and corroborate evidence from other sources.

McCulloch (2011) gives a number of factors that should be examined in documentary analysis the first of which is examining the document’s reliability in terms of the source. The meaning of the document should be studied in context to gain an understanding of the information being conveyed, underlying values of and assumptions of the authors and arguments put forward. The researcher should consider the authors of the document, the intended audience and the outcomes of the document in terms of its influence.

Yin (2014) outlines the strengths of documentary evidence as being: stable, because they can be accessed and viewed as often as necessary; unobtrusive, as documentation is not created as a result of the case study; specific and broad. Weaknesses can include retrievability, selectivity, access and reporting bias.

In this study the researcher analysed the RfL materials in response to a number of questions related to: purpose, structure and general approach; political position; historical information; explicit and implicit underlying theories and assumptions; examples used and guidance given; views or understandings about education, teaching,
teachers and learning; and views or facts on the nature of children and young people with PMLD. This document analysis can be found in Section 4.2.1.

3.9 Critique of methodology

3.9.1 Overview

This section gives a critique of selected elements of the methodology and is broken down into a number of subsections including the case study methodology, the sampling strategies used, semi-structured interview and observation. Next the use of thematic analysis is examined. Finally the reliability and validity of the study are considered.

3.9.2 Case study methodology

Somekh and Lewin (2012) purport that the main strength of a case study is that it can use multiple methods and data sources to explore an activity to achieve a ‘thick description’ to present the phenomenon from the participants’ perspective. Advantages of using a case study design include that this can contribute to knowledge of individual, group, organisational, social, political and related phenomena and allow the researcher to preserve the holistic and meaningful features of real life events (Yin, 2009).

One criticism of case studies has been regarding the perceived lack of scientific generalisability (Somekh & Lewin, 2012), however Yin (2009) says that case studies are generalisable to theoretical propositions and that their goal is to expand and generalise theories or analytic generalisation. In terms of generalisability, Somekh and Lewin (2012) say that there is an argument that good case studies could be said to have ‘naturalistic generalisation’, which means that the reader recognises their own experience in the case and generalises this to their own situation.

Case studies can be time consuming as they can generate large quantities of data so therefore it is important to tightly define the case in order to collect the appropriate kind and quantity of data in response to the research questions and to meet time constraints.

The current case study was defined in order to generate manageable levels of data and therefore other potential data sources were not gathered for example copies of school
policies or RfL recording systems. However, a sufficient range of data was gathered to gain a good range of evidence in response to the research questions.

3.9.3 Sampling

The use of convenience and snowball sampling as a participant recruitment method may have had an influence on the results obtained in that schools may have existing relationships with each other and therefore have similar ways of working including similar ways of using and adapting the RfL assessment approach. This might then give similar results which could be due to generic issues around the use and implementation of RfL or some similarities between schools. However, using a more random sampling method would possibly also display similar results given the geographical and time constraints of the current research. That is why the researcher tried to recruit schools catering for different age ranges or target populations to ensure as much breadth as possible in terms of gaining a range of information on the uses and implementation of RfL.

3.9.4 Semi-structured interviews

Strengths of the semi-structured interview or interview guide approach identified by Cohen et al. (2011) are that the outline increases the comprehensiveness of the data and supports a relatively systematic and consistent way to collect data from each participant. Interviews can elicit responses about complex and deep issues. The interviewer can anticipate and close gaps in the data throughout the interview process and the interviews themselves can be reasonably conversational and situational. The interviewer needs to be reflexive and responsive in order to tailor questions to the position and comments of the interviewee (Banister, Burman, Parker, Taylor & Tindall, 1999). Further advantages of using interviews are that they can be targeted specifically on the case study topics and can give explanations as well as personal views (Yin, 2014).

Limitations of interviews are that they are time consuming to conduct, transcribe and analyse, that they may be subject to interviewer bias, that they can be inconvenient or fatiguing for respondents and can be more difficult to anonymise (Cohen et al., 2011). Other disadvantages identified by Yin (2014) include that there can be a response bias and that interviewees may say what they think interviewer wants to hear. Transcription of recorded interviews inevitably loses some data from the original as it is difficult to
record non-verbal as well as verbal information; however the researcher fully transcribing the interviews allowed immersion in the data to get the fullest picture possible.

In this study although the semi-structured interview schedule could be altered in response to each interview this was not necessary as the quantity and quality of data gained was high. Interviewees’ responses to the overall research questions used in the interviews did indicate an overlap between the areas being discussed. This did not affect the quality of the information given, rather it enabled the researcher to tailor the interview for each participant, to maximise opportunities for full and comprehensive responses and to use the prompts and probes to gain as much information as possible.

Somekh and Lewin (2012) raise the issue that reliance on interview data alone could result in an ‘overly empiricist analysis’ where the focus is only on the participants’ current perceptions. In the current research this was addressed by examining relevant literature and other sources of data to also explore participants’ memories and reasoning about how they came to be using the RfL materials in the current way.

3.9.5 Observation

As Yin (2009) outlines, observation is an invaluable aid for understanding the intervention or approach and any potential problems. The reliability of observational evidence could be increased by having more than one observer; however this was not possible in the current study due to not having access to other researchers to support this. Advantages of direct observation evidence according to Yin (2014) are that it covers actions in real time and that it can cover the case’s context. A disadvantage of this approach is that the observation is to some extent the subjective view of the researcher and this must be made explicit within the presentation of the narrative. Further disadvantages identified by Yin (2014) are that observations can be time consuming, that observers need to be selective in order to be able to record what is observed and that participants may behave differently than usual because of the presence of an observer.

In this study the observations were short and therefore not time consuming, so the data collected were limited. The running record used was effective in capturing times, the main events during the observation and notes about the context and the researcher’s thoughts and ideas, however it was not possible to record the finer details in terms of the
actions and responses of all of the young people and staff members in the classroom situation. The researcher was aware that the presence of an observer can influence the ways that those being observed behave. The data gathered however did meet the purpose of the observations in that it gave additional contextual information, an insight into how RfL was used in practice and informed the semi-structured interviews. It also helped to develop more rapport with the participants prior to the interviews.

A strength of employing an observation in addition to other data gathering methods is the ability of this method to highlight any practices which support the other data as well as those which may differ from the policies or participants’ descriptions (Somekh & Lewin, 2012). In the current research the use of observations informed a contextual narrative account. The interviews also helped to interpret the observations, enabling a fuller and more comprehensive understanding of the data.

3.9.6 Thematic analysis

Cohen et al. (2011) describe the tension in the analysis of interview data as between maintaining sense of the whole interview and breaking down or fragmenting the data. Thematic analysis is an approach which notes and gives equal weight to patterns and themes rather than recording the frequency of which ideas of themes occur. Thematic analysis according to Braun and Clarke (2006) is a flexible approach which can provide a complex, rich and detailed account, summarise the features of a large amount of data, highlight similarities and differences from a data set and can give new or unexpected insights. Thematic analysis is a recursive not a linear process and is lengthy and time consuming. Member checking with participants can be used to ensure that the identified themes are appropriate and that they represent the semi-structured interviews as experienced by the interviewees.

In this study using thematic analysis was very time consuming; however the process gave a depth of information linked to the interview data and to the research questions and many of the propositions that would not have been possible using a content analysis approach.
3.9.7 Unforeseen difficulties

An unanticipated ‘real world issue’ (Robson, 2002) which arose during the sampling phase was that the first school approached was unable to continue with the research due to staffing issues despite being initially keen to participate. This meant that for this school most of the expertise in RfL was located with one member of staff.

3.9.8 Reliability and validity

Yin (2014) outlines the criteria for judging the quality of research designs and those are summarised in Table 3.10 below with the relevant case study elements which support construct validity, internal validity, external validity and reliability.

Table 3.10: Criteria for judging the quality of research designs (adapted from Yin, 2014)

<table>
<thead>
<tr>
<th>Tests</th>
<th>Case study elements</th>
<th>Phase of research</th>
</tr>
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</table>
| Construct validity | • Use multiple sources of evidence  
|                  | • Establish chain of evidence  
|                  | • Have key informants review the case study report                                 | Data collection            |
| Internal validity   | • Do pattern matching  
|                    | • Do explanation building  
|                    | • Address rival explanations  
|                    | • Use logic models                                                           | Data analysis              |
| External validity    | • Use replication logic                                                        | Research design            |
| Reliability       | • Use case study protocol  
|                  | • Develop case study database                                                  | Data collection            |

To support internal validity member checking was used to give respondents the opportunity to correct factual errors, add further information and to check the appropriateness of the analysis (Cohen et al., 2011). Triangulation was achieved through utilising and integrating analysis of the data gathered from different professionals in different settings. The overall analytic strategy used was relying on theoretical propositions (Yin, 2009) given in Section 3.5 above. The data were collected at organisational and individual levels. The data were compared to predicted explanations through pattern matching where the propositions were explored and considered to build a pattern. This pattern matching contributed to the explanation building process (Yin, 2009).
3.10 Ethical considerations

The research was undertaken in accordance with ethical guidelines from the British Psychological Society’s Code of Ethics (2006) and the Health and Care Professionals Council’s (HCPC) Standards of Proficiency (2012) as outlined below.

The researcher also completed and submitted the School of Education documents for ethical approval before commencing the research. Ethical consent was gained on May 8th 2013 (Appendix O). Each of the following areas was considered during the planning, carrying out and analysis of the research.

3.10.2 Informed consent

Verbal explanations, consent form and information sheet (Appendices G and D) were supplied to all participants in order to give them the opportunity to understand the purposes and processes of the research. Participants were given a period of two weeks to consider whether they wished to take part, after which point they read and signed the consent form (Appendix G). Although the researcher approached head teachers first and therefore participants may have felt some pressure to take part, it was made clear that they had a right to participate or not according to their individual wishes. Time was provided by head teachers for the managers and participants to take part in the research semi-structured interviews and observations within the normal school day. Participants were made aware that all data gathered would be anonymous and only used for the purpose described in the information sheet. Member checking was used to check with the participants that themes identified during analysis were accurate.

3.10.2 Protection of participants

The researcher was aware that some topics discussed during the semi-structured interviews may be sensitive, perhaps where a child had regressed for example due to having a degenerative condition. Although these potential topic areas are those which would be discussed amongst school staff during their normal work, the researcher gave their details as a point of contact. Interviewees were aware that they had the opportunity to stop the interview at any point and to seek appropriate support. If an interviewee had become upset in the session they would have been able to discuss this
with the researcher or be supported to seek a colleague to talk about the issues. The researcher would also offer a debrief regarding any upsetting issues at a later time if appropriate. The researcher’s university supervisor enabled confidential discussion and agreement of ways to address any issues of this sort where necessary.

3.10.3 Right to withdraw

All participants were made aware of their right to withdraw from the research process at any time both verbally and within the information sheet and consent form (Appendices D and G). If participants had decided to withdraw their data would have been taken out of the study.

3.10.4 Confidentiality

The researcher anonymised the local authority, schools, staff and all participant data gained through research diary notes and audio transcripts to ensure confidentiality. Recorded interviews were saved on an encrypted memory stick and deleted on completion of a full transcript. Any direct quotes used were anonymised. All electronically stored data were anonymised and contact details were locked in a secure filing cabinet. All data were stored securely and retained only as long as necessary for a period of five years after thesis submission, in line with university regulations. Analysis of the data took place at the researcher’s home in private and was conducted by the researcher. The researcher’s university supervisor had access to the data generated for monitoring purposes.

3.10.5 Debriefing

Participants will have the opportunity for debriefing at the end of the research process in writing or in person to share the main outcomes of the research.

3.10.6 Access to research findings

The results of the research will be made available to research participants as a written summary on request and also participants, including the SALT from School A, will have the opportunity to have feedback from the researcher in person. This would enable them to ask any questions which can be answered with appropriate regard for anonymity and
confidentiality. Throughout the research process participants were able to contact the researcher via email to ask questions or raise issues.

3.11 Summary of methodology

This chapter has given a detailed overview of the methodology used within this study. First the rationale for this study is described which is to investigate the use of RfL with children and young people with PMLD and to add to the small literature base by building on the research previously carried out by Van Walwyck (2011). This is of particular relevance currently as there has been little research regarding RfL since its introduction in 2006, and the number of pupils with PMLD is increasing whilst the number of teachers with specialist training to work with this group is in decline.

The methodology chapter has described the research design for this study and case study methodology. Sampling and participant recruitment information has also been provided. Following this each data gathering and analysis method has been described in detail. Finally a critique of the methodology has been provided and ethical considerations given.

Chapter Four will address the findings of this study including from documentary analysis of the RfL materials, narrative accounts from observational data and thematic analysis of semi-structured interview data. This will be followed by cross case analysis and an examination of how the findings linked to the propositions for each school.
Chapter 4 - Findings

4.1 Chapter Overview

This chapter begins with an overview of the documentary analysis of the RfL materials. This is followed by narrative accounts which describe the context of each particular special school. These narrative accounts in the form of contextual summaries are constructed from data drawn from running records logged during observations (Appendix I) of RfL in practice. The documentary analysis followed by the narrative accounts provides the context for this research by exploring the RfL materials and each case study school.

Next is the analysis of the semi-structured interview data for School A followed by School B. The thematic analysis findings from practitioner and manager semi-structured interviews for each case are outlined and presented as thematic maps, with a breakdown of the basic themes which are illustrated by relevant supporting interviewee comments. Both cases are examined using a cross case analysis which leads to a number of overall synthesised organising themes. Finally there is an examination of how the findings from each school are related to the original propositions.

The research questions for this study were as follows:

RQ1: How has the Routes for Learning approach been used by professionals to support the learning and assessment needs of children and young people with PMLD?

RQ2: Why has the Routes for Learning approach been used in these particular ways?

RQ3: What are the facilitators to implementing the Routes for Learning approach?

RQ4: What are the barriers to implementing the Routes for Learning
4.2 Contextual analysis

4.2.1 Documentary analysis

The RfL materials were examined using documentary analysis by answering a range of questions in line with the factors suggested by McCulloch (2011). This documentary analysis was undertaken in support of Research Questions One and Two (see above, Section 4.1) as this links to the intended use and rationale of the use of the RfL materials and can be used as a basis for comparison with how the materials are utilised in practice. As described in the previous Chapter, Section 3.8.4, McCulloch (2011) gives a number of factors that should be examined in documentary analysis the first of which is examining the document’s reliability in terms of the source. The source in this case can be seen as reliable in that it was produced by the Welsh Assembly Government (2006) and is therefore the primary source for the RfL assessment materials. According to McCulloch (2011) the meaning of the document should be studied in context to gain an understanding of the information being conveyed, the underlying values of and assumptions of the authors and arguments put forward. For the purposes of this study the researcher considered a number of questions in relation to the RfL materials including the purpose, structure and general approach; political position; historical information; explicit and implicit underlying theories and assumptions; examples used and guidance given; views or understandings about education, teaching, teachers and learning; and views or facts on the nature of children and young people with PMLD. Details of the documentary analysis of the RfL materials are outlined in Table 4.1 below.
Table 4.1 Documentary analysis of the RfL materials based on the McCulloch (2011) framework

<table>
<thead>
<tr>
<th>Question</th>
<th>Analysis</th>
</tr>
</thead>
</table>
| What is the stated purpose of the materials? | • To develop further guidance on the teaching and assessment of learners with more complex needs  
• To consider the complex needs of pupils with PMLD.  
• To give an assessment able to detect subtle changes in behaviour shown by learners with PMLD |
| Who is the intended audience for the materials? | • Designed for use by teachers, support staff, school managers, LEA advisory staff and trainers in Initial Education and Training institutions.  
• Aimed primarily at inexperienced teachers who have not had specialist training  
• Also for more experienced ideas to incorporate into their work  
• Materials designed for learners with PMLD  
• Materials designed for learners of all ages with PMLD across the curriculum |
| How are the materials structured? | • Guidance booklet giving an introduction and rationale, background theories an ideas, and guidance regarding the communication process, assessment for learning and record keeping  
• Assessment booklet with extracts from the Route Planner, assessment activities to try, things to look for and teaching activities to move a pupil to a numbered step  
• A ‘Routemap’ poster shows a range of learning pathways  
• Example of completed planner  
• Blank planner  
• DVD examples using the assessment |
| What is the general approach? | • Focus on early communication and cognitive skills  
• Flexible to the needs of individual learners and how they learn |
| What is the political position? | • To support inclusion of pupils with PMLD |
| What are underlying principles? | (Education Act, 1996, Special Educational Needs and Disability Act, 2001)  
- Support the revised National Curriculum and Foundation Stage  
- Takes a holistic view of learners and focus on how they learn  
- Providing equal opportunities by meeting individual needs  
- The focus is on the learner’s abilities  
- The assessment is process-based  
- Learners, families and professionals all play an active part in the process  
- A high regard for relationships, interactive approaches and a responsive learning environment  
- The purpose of assessment is to enable a learner to make best possible progress  
- Draws on many sources of information and is founded in research on the developmental process in learners with and without disabilities  
- The assessment should:  
  - Empower staff and parents  
  - Lead to accurate judgements and promote consistency  
  - Support teachers and others to seek evidence and focus on future learning priorities  
  - Provide a whole picture of the learner and the learning process |
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<td>What historical information is provided?</td>
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- Government policies (as above)  
- Approaches to teaching  
- Underlying theories as below and how they have influenced the teaching of learners with PMLD  
- Curriculum design pre and during the National and Curriculum and the Wales Curriculum 2000. |
| What are the explicit underlying theories and assumptions? |  
- Learning for pupils with PMLD is not hierarchical  
- Assessment for learning  
- Dynamic assessment and the zone of proximal development  
- Some behaviourist influences  
- Interactive approaches  
- Staff need training |
1. **Learners will pass through key milestones although the routes will vary**
2. **A focus on learning processes –** habituation, early associative learning, operant conditioning
3. **Hierarchy of skill development –** acquisition, fluency, maintenance, generalisation and application or adaptation (Haring, Liberty and White, 1981)
4. **A number of key principles are given for effective learning**
5. **Maslow’s hierarchy of needs (1970)**

**Are there any implicit underlying theories and assumptions?**

1. **Values and principles are made very explicit**
2. **Issues regarding reporting to Ofsted, nationally and so on are not clearly addressed**

**What kinds of examples are used?**

1. **Examples are given of planner extracts for pupils working at earlier and later stages, with examples of what to look for in assessment and teaching strategies**

**What sort of guidance is given?**

1. **Guidance is structured and explicit with examples as above**
2. **To share materials and expertise as a training tool**
3. **To use the materials as a baseline assessment and a tool to track progress**
4. **Explore how to use for summative assessment (not numerically)**
5. **Theoretical background is given**
6. **Underlying principles are stated**

**What views of education, teachers, families, teaching and learning are put forward?**

1. **Different stakeholders should be working together**
2. **The family know more about their child than can be assessed just at school**
3. **There are less teachers now with specific qualifications for teaching pupil with PMLD**

**What views are given regarding the nature of children and young people with PMLD?**

1. **These pupils show learning through very subtle changes**
2. **There is a very complex interaction between sensory impairments, motor disabilities and medical problems.**
3. **Learners having a profound cognitive impairment or learning difficulty leads to**
a significant delay in reaching developmental milestones

- These learners operate overall at a very early developmental level
- Learners will have one or more of significant motor or sensory impairments and/or complex healthcare needs
- Learners will have a statement of SEN
- Learners will be working on the behaviours on the for most or all of their school life
- They will need extra support in school for example specialist staffing and substantial support, adapted curriculum, mobility aids, therapy programmes, frequent assistance and medical support

4.2.2 Narrative account for Case Study A

This narrative account was constructed after the observation conducted in School A. A running record was kept during the observation with events and descriptions as well as researcher thoughts and comments. Please see Appendix I for a sample of this running record. In School A the researcher observed the students in the whole class context through the registration period and into a lesson and then observed an RfL assessment being undertaken by the teaching assistant (Practitioner A) with one female Year Eight student.

There was an interactive whiteboard on one side of the classroom, a table and chairs for some children and a higher table for students who used wheelchairs or standing frames. There was also a soft area in the room with a hoist. Objects of reference, used as a communication aid to represent different activities were arranged on a board and table. IEP targets were displayed on the students’ tables and showed whether they were working on RfL, P levels or National Curriculum. There were also individual pupil profiles stored in files for each student which described in slightly more detail information regarding each student’s learning needs; attainment; language, communication and interaction; behaviours and triggers; de-escalation; mobility; dining arrangements and care plan.
There were eight students present in the class in Years Seven and Eight. Two other students were not present. There were four teaching assistants and the teacher present. At the start of the lesson all of the children were seated in a semi-circle either in chairs or wheelchairs. The register was taken by displaying each pupil’s photograph on the interactive whiteboard and the children responded with differing levels of support by saying hello, signing, using PECS symbols (a Picture Exchange Communication System) or pressing the button on a Big Mack, an electronic communication aid which can be programmed to play different recorded messages, which said ‘good morning’.

There was a broad ability range between the students within the class. The adults were also managing the complex medical needs of some students including the use of specialist equipment including hoists, standing frames and tube feeding.

After registration the children went to complete individual or small group tasks with support for example, one student was doing a fine motor skills threading activity, another completing a colour pattern sequence with bricks. One student with PMLD was engaging in turn taking with an adult to bang a tambourine and another was working with another adult on a cause and effect activity to press a button to activate a musical toy. One of these students was seated in a wheelchair and another was in a standing frame with a tray. One student received gentle hand stroking from an adult. He initially found it hard to tolerate this touch but then calmed and held the adult’s hand. Each student had a box containing their own work or activities.

Throughout the session staff members used a lot of conversation and descriptive commenting about children’s actions and responses during activities. Pupils with PMLD received a lot of individual attention from adults and although they had key workers seemed to respond to different members of staff. The adults all had a calm, quiet, gentle and caring manner. Staff members gave lots of eye contact and held their faces close to the students to communicate. The adults seemed attuned and responsive to the pupils, used simple vocal descriptive commentary and gave the pupils a long time to respond during interactions.

The student observed during the one to one RfL assessment session was a girl in Year Eight. She had access to a large catalogue because she liked to flip all of the pages as a
calming activity. She was ambulatory however for her safety staff sometimes used a waist strap with her and occasionally a wheelchair to transfer her to and from the school transport. During the observation she was seated at a table with a semi-circular cut out to support her to keep still and attend to the tasks.

The pupil records for RfL had colour coded categories for each route which included red to show a step had been encountered, yellow to show gaining skills and understanding and green to represent a skill had been mastered. There was also a small space to record observations or comments.

The individual observation of the pupil described above took place in the classroom when the other pupils were taking part in a lesson elsewhere. The practitioner discussed this choice of setting with the researcher and said that although the sensory room had been considered she decided that being seated in the classroom would allow the pupil to sit still and focus more on the activities. The session was intended to assess several routes including whether the student was showing behaviour which could be interpreted as rejection to a stimulus, whether she communicated ‘more’ and whether she looked between two objects and showed an awareness of where they were.

Firstly, Practitioner A sprayed some water from a bottle onto the pupil’s hand who pulled back in her seat. A fine mist was then sprayed into the air and the pupil flinched a little. The pupil then held the spray bottle and tried to put it into her mouth.

The pupil was then presented with a silver space blanket and the spray bottle together. She took the blanket and crinkled it enthusiastically for a few seconds before putting it down and turning around towards the tray of equipment. The pupil then took some bells from Practitioner A and engaged with them by shaking them and then mouthing them. Practitioner A said ‘Do you like them bells?’ and then ‘Out of your mouth’ as she pulled the bells away. Practitioner A then took the bells and shook them before giving them back to the pupil who also shook them. Practitioner A praised her by saying ‘Good girl’ and said ‘Shake it, shaky, shaky’ whilst the pupil shook the bells.

Each of the activities lasted between one and three minutes. The pupil was presented with other items in pairs including a light globe, a tambourine and some music. When
presented with the items the pupil tended to select one and engage with it for a short time and then try to mouth it. As one item was removed she would then select a different one. When the objects or stimuli were removed the pupil tended to withdraw and suck her thumb and didn’t seem to seek interaction, but responded immediately when an object was returned.

Later on in the session the pupil became more engaged and vocalised more. When Practitioner A played a familiar piece of music the pupil made some jerky movements with her upper body and arms and she put her hands on the Practitioner’s hands. When the music stopped the pupil vocalised a little and the Practitioner said ‘Stopped’ and paused then asked ‘Do you want some more?’ She repeated this activity several more times with the pupil vocalising each time.

The pupil responded to a game of peekaboo where Practitioner A hid her own face with her hands and the pupil startled a little when the practitioner said ‘Boo’. When the practitioner hid again the pupil vocalised and put her fingers in her mouth. The next time Practitioner A hid the pupil pulled her hands away from her face and made a high pitched vocalisation. The practitioner said ‘Are you speaking to me?’ and the pupil then gave a lower pitched vocalisation. This was followed by the pupil being presented with the space blanket again and she appeared to take turns scrunching this with the practitioner.

The whole one to one session lasted approximately twenty five minutes. Practitioner A gave some commentary throughout saying things like “Do you want some more?” and “Do you like that?” The Practitioner had lots of close face to face and eye contact with the student during the assessment session.

4.2.3 Narrative account for Case Study B

This narrative account was constructed after the observation conducted in School B. A running record was kept during the observation with events and descriptions as well as researcher thoughts and comments. Please see Appendix I for a sample of this running record. In School B the researcher observed three students who were withdrawn from their class during RfL assessment work being supported by Practitioner B and two other
staff members from the pupils’ classroom. The students were all from one mixed ability class. There were two female and one male student. All three students used wheelchairs.

The room was smaller than a classroom and contained a cupboard and shelves storing equipment, a table, an interactive whiteboard and a television. The RfL targets for each child were displayed on the inside of the door. The children’s recording grids were stored in a file and also copies were on display boards outside of their classroom.

All three students were working on the same route, step twenty one, which was ‘reaction on a reactive environment’, where staff members were looking for the learner making attempts to create an action or effect for example, by placing the learner on an interesting reactive surface and noting the response. The equipment available in this session included a silver space blanket, a board with different textures and a soft ball which made ringing and other sounds. The researcher made the decision to focus mainly on Practitioner B during this observation due to the inherent difficulties of observing more than one staff pupil pairing at the same time, but was also able to make some less detailed notes regarding the activities of the other adults and students in the room.

Practitioner B engaged with one female pupil using intensive interaction techniques to respond to the sounds the pupil was making through imitation and then allowing time for the pupil to respond in turn. The texture board was then presented to the pupil and Practitioner B praised her when she touched the board and used a sing song voice to say ‘(Name) do it again’. The pupil responded again and the practitioner said ‘Good girl, good touch’. Practitioner B was following the guidance for this route which advises the use of physical or verbal prompts to initiate exploration, to reduce the frequency of the prompts and draw the learner’s attention to the effects created. The practitioner then moved on to presenting the student with the sound ball saying ‘(Name) touch’. After the pupil touched the ball Practitioner B praised the pupil and then waited for the pupil to vocalise, to give her the opportunity to request for the activity to be repeated. Towards the end of the session Practitioner B tickled the pupil who laughed and then showed anticipation of more as the practitioner said ‘I’m coming again, are you ready?’

Practitioner B came across as lively, enthusiastic and playful and the pupil she was focusing on responded well to her approach. The practitioner held her face close to the
student’s face and made eye contact, smiled and laughed with the pupil. She used a lot of repetition with the activities and employed long pauses and waited for the pupil to respond.

One of the other staff members was interacting with the other female student presenting her with the space blanket. When the student did not respond she covered her with the blanket and the student made a sound but stayed under the blanket. The staff member then wrapped the student’s hands in the blanket and then the pupil lifted her hands up and scrunched it. The male student vocalised and smiled when the staff member working with him placed her face close to his and made eye contact. He also paid attention to the other student scrunching up the space blanket by turning to look at her. The students had been using the same equipment in their classroom prior to this small group session and one of the staff members commented that they were not engaging in the same way. This could potentially have been due to a number of reasons including the change of environment, tiredness or that they had simply had enough of doing those particular activities.

Practitioner B appeared much more confident than the other staff members, louder, more enthusiastic and more uninhibited in her responses to the pupils. She was more socially, verbally and non-verbally, interactive. The other staff members appeared to be more reliant on the equipment and resources to engage with the students. They used less vocal and non-verbal interaction and seemed less responsive and attuned to the pupils than Practitioner B. This could have been due to some degree by the fact that they were being observed and potentially felt self-conscious ‘publicly’ practising a relatively new set of skills, or that they had not yet fully developed the specialist knowledge and expertise required to work confidently with this group of students.

4.2.4 Comparison of the observations from School A and School B

The staff in both schools used similar techniques and equipment to work on the RfL assessments with the children and young people with PMLD and had designed similar recording mechanisms. The students in both schools at the times of the observations were placed in mixed ability classes, although this was likely to change the following term in School B.
Practitioner B in School B had more experience and expertise and specialist training in working with students with PMLD and the RfL materials than the staff in School A. However the skills necessary for working with this group of students were more evident in other staff working in School A than those in School B, probably because they had used these skills on a daily basis for longer than School B classroom staff. School B staff had only taught pupils with PMLD in mixed classes for a term. School A staff had possibly had more opportunities to be supported and supervised using the materials by the class teacher and teaching assistant (Manager A and Practitioner A) in the classroom situation than the staff in School B who were developing these skills in a withdrawal situation.

In School A the assessment session was undertaken on a one to one basis in a quiet room whereas in School B there were a number of children and adults working on assessment activities at the same time. In both schools there were opportunities for children to work using the RfL materials in both group and individual situations.

There was an apparent difference in character or style in the way staff members interacted with pupils with PMLD in the two different schools with School A staff members coming across as quiet, gentle and responsive and Practitioner B in School B being louder, playful and enthusiastic. Both the observed staff members in School A and Practitioner B in School B presented as being attuned to the needs of the pupils they were working with. Other staff members observed in School B came across as somewhat less verbally and non-verbally interactive in their work with this group of pupils.

### 4.3 Semi-structured interview data - findings for Case Study A

#### 4.3.1 Overview

In this section the thematic analysis for Case A or School A is given. First an overall thematic map is provided. As will be seen from this map, although the data was analysed inductively because the questions in the semi-structured interviews were linked to the research questions, the organising themes therefore fitted into the four research questions. Each organising theme is illustrated by a diagram showing the constituent basic themes. Each basic theme is then described with the use of supporting illustrative quotations taken from the semi-structured interview data.
4.3.2 Thematic analysis

The transcriptions from the semi-structured interviews with Practitioner A and Manager A were analysed together using primarily inductive thematic analysis. As the interview questions were formulated using the research questions and propositions deductive thematic analysis was also used. The data were analysed using the process outlined by Braun and Clarke (2006) as described in Chapter Three. The following diagram, Figure 4.1, shows the final thematic map constructed after analysis of the semi-structured interviews undertaken in School A. Where basic themes link to each other or to more than one organising theme this is shown with a blue arrow. The thematic analysis process produced four organising themes and thirteen basic themes. Each of these themes is discussed separately with the inclusion of illustrative quotations where appropriate.
Figure 4.1: Thematic map for School A
A description is given for how each organising theme links to the relevant research question and diagrams show the linking basic themes. Each basic theme is outlined with accompanying examples of interviewee comments.

### 4.3.2.1 Research Question One

How is Routes for Learning used in this setting?

The organising theme relevant to research Question One is ‘RfL in practice’ shown with the six basic contributing themes in Figure 4.2 below.

**Figure 4.2: The organisational theme RfL in Practice and linked basic themes**

#### 4.3.2.1.1 Basic theme: Descriptions of RfL

The interviews featured a range of descriptions of RfL in terms of the kinds of activities that are involved, the nature of the group of pupils for whom RfL is intended to support and links to other strategies already employed in the school. Both interviewees talked about how RfL is appropriate for specific pupils, for children with lower ability or PMLD. Practitioner A commented “It’s more for the lower end of the spectrum, the lower end of
the children use it.” Practitioner A emphasised that RfL assesses sensory work already being done with students.

Manager A made reference to how RfL works alongside the Intensive Interaction approach used in School A. Manager A stated “It’s used through what you’ve seen with Pupil A where you do a one to one session with a child and go and do some intensive work with them and Intensive Interaction alongside and assess the Routes for Learning.”

4.3.2.1.2 Basic theme: Links with other assessments

This theme brings together a range of comments which made comparisons between the different assessments that are used with children and young people at School including RfL. With School A it was noted that B-Squared (2012), PIVATS (Lancashire County Council, 2012) and National Curriculum P Levels (1998) were used alongside RfL. In relation to how these assessments were combined to provide an assessment framework, Manager A commented:

Yeah and PIVATS of course yeah… Yeah they feed into those as well. And we’ve just started up B-Squared now which is another assessment tool. Erm and another one which I’m developing at the minute […] They’re a company that have developed […] some assessment wheels… It does link into the Routes for Learning but it’s not specific.

This suggests that complementing RfL materials with these other assessment materials may be advantageous. Manager A also indicated the possible pros and cons of the different assessments when used in tandem with RfL.

I’ve not settled down with the B-Squared yet. I need to have a mess with that myself cos that’s apparently is good as well cos they’ve really broken down targets as well, which fit nicer than the er, the PIVATS ones can be a bit broad, whereas B-Squared have broken them down even more so.

Finally, Practitioner A noted that the way in which levels were defined varied between the types of assessment schedules, remarking that “If you’re at PIVAT levels one to four you’re
usually at the Routes for Learning level, and then four to eight and then it’s National Curriculum.”

In general the comments suggest that despite the differences in the assessments and the way in which outcomes are defined, practitioners in School A are able to combine elements of other programmes with RfL in order to create assessment frameworks which are bespoke and tailored to the needs of the children and young people.

### 4.3.2.1.3 Basic theme: Targets and progression

Both Practitioner A and Manager A gave information about targets set for pupils’ learning and discussed factors relating to progress including links between targets and how further targets were set. Manager A talked about how targets for learning originated with statement targets and about the links between the primary feeder schools and her setting on the transition to secondary school provision. This was particularly relevant for these staff members as the class they were based in was made up of a mixture of children in Years Seven and Eight and so a proportion of these students had recently transferred to the school from primary school. Manager A commented:

> Well they all link. We start from the statement first of all and the targets come from there and then we work on the statement targets. They’re our main focus cos they’re set at the beginning and they come with targets from the primary school. So we kind of try and merge it together so we’ve got review, statement targets which then feed into the review targets and from there we then do the IEP targets and then the Routes for Learning feed into that. So they all cascade into one if you know what I mean.

Practitioner A also discussed how targets for pupils’ learning were carried on from primary to secondary school provision but also included some information on how these targets were adapted to show progress over time.

> IEP targets like I said are set from like the old school and we get them fetched up to us and we look through them and pick out different targets and then we look at improving them targets, so if they’ve mastered it as such then we move, pick another target maybe a similar target but moving up a level with it.
These comments indicate a shared view between the manager and practitioner in terms of how learning targets are decided upon. In addition there is a clear indication that there is good communication between the primary and secondary special school provision and that this leads to continuity for target setting and assessment information over the transition period.

4.3.2.1.4 Basic theme: Recording

At School A recording assessment information for RfL was carried out in a variety of ways including verbally, photographically and using dedicated recording sheets. Practitioner A talked about the use of RfL recording sheets with a colour coding system to show what pupils can do and are working on. Practitioner A described how RfL records that came with the children from the previous year were used and remarked:

*I have got Routes for Learning targets from last year that they’ve done, they’ve filled in with red, green and blue. They’ve filled in some of them and I can work off them and obviously throughout the year you can sort of see whether they can or can’t do what they’re asking.*

She went on to describe how information regarding the RfL assessment work she undertook with pupils was communicated to the class teacher verbally and commented:

*When I’ve done some of the Routes for Learning with a child I will then go and feedback to Manager A straight afterwards, er, and explain what I’ve done, how I’ve done it, what may need assessing, what we’re working towards and things like that and Manager A will take on board that. And use for her records to like record the scores for them.*

Manager A described the value of using photographic evidence to demonstrate progress and how records were shared with different staff members, professionals and parents. She commented:

*We present a slide show which I’m sure Practitioner A spoke to you about the reviews... they come up and they show the target that the child’s been working on and the photo... then they’re there for everybody, for outside agencies who want*
to see how they’re doing, or Ofsted inspectors, and we’ve got evidence that they are doing something. Trust me, this is what we’ve been doing. Look at all this work. They can’t write anything down and they can’t produce anything so that’s what we do really. A lot of photos all the time.

It is clear that there is a pressure to provide evidence of progress for a variety of stakeholders and that School A was able to present this in a number of different ways.

4.3.2.1.5 Basic theme: Leadership

Both staff members at School A put forward the view that the role of leadership at different levels was important in terms of implementing RfL, and linked to this was the need for the promotion of RfL through having a champion. Training and team working with school staff and the speech therapist were further factors linked to the leadership of RfL within the setting. Manager A made a number of comments with regard to her own leadership role in disseminating information about RfL and to raise its profile within the school and commented “So it’s just trying to pass it on all the time and just filter it down throughout the school the best I can really.”

The support of the school leadership team was important in terms of the allocation of time and resources for Manager A to offer training to other school staff and remarked “The head and the deputy are both keen on it so they help me to, give me the opportunity to train staff and get them sorted on it.” She described training she had delivered and said “I’ve run sensory integration training for the whole staff ... every teacher went on it and then probably about eighty percent of the TA’s... The head tried to get as many as they could, for me.”

Manager A had leadership responsibility for RfL in the school alongside the deputy head teacher and felt that it was part of her role to keep staff training up to date in this area. She said “Yeah about the training... I mean I’ve done a bit but it was a while ago so they probably all need redoing in it. It’s keeping it fresh in their minds all the time.”

Manager A talked about the important role played by the school’s speech and language therapist in the on-going training of Practitioner A and also as a source of support in conducting assessments and she remarked “Practitioner A’s been alongside the speech
therapist and getting her support that way, so it is a team effort really.” This idea of a team approach indicates that leadership of RfL is distributed between a number of different professionals from within and outside of the school.

4.3.2.1.6 Basic theme: Roles in implementation

There were a number of different roles identified by interviewees in School A that were important in relation to the implementation of RfL. These included the teacher and teaching assistant roles, who worked as a pair in each class. Practitioner A commented:

*I might take the class teacher out and just say this is what I’ve done. That’s what happened, how they responded or didn’t respond or things like that so she does have a, quite a bit of impact on it really.*

The level of parental involvement and parental understandings of RfL were also discussed. Practitioner A talked about how parents were involved through annual reviews and how assessment information was shared. She remarked:

*So then erm parents’ll look at what we’re doing in the reviews. They have an annual review erm and where they come in I’ve done some PowerPoints for our children and given like parents a booklet. I’ve printed off a PowerPoint and it shows what they’re working on throughout the year, what they’ve done so far, pictures of them working. Because obviously some of the children can’t speak and can’t go home and tell them what they’ve been doing during the day.*

Manager A also discussed the annual reviews but expressed an opinion that parents’ biggest priority was about ensuring their children were happy at school rather than being concerned about the details of assessments.

*They can do and they’re in the files when they come to parents’ evening. They’re accessible for everybody. I haven’t had any parents ask me what they’re about….Most parents here, all they want, they want their children to be happy and safe, and that’s all they want really. So the colours and the assessments are not that important to them.*
Manager A was not able to talk about how parents might support the RfL assessments with their children at home and said “Erm, I’m not sure about home. I’m not really sure about what things they do with her at home.” It could be inferred from these comments that whilst parents were informed about the progress their child had made using the annual reviews that they were not fully involved in the assessment process or RfL specifically.

The speech and language therapist’s input in School A was highly valued by school staff members and had a very strong influence on the ongoing training and successful implementation of RfL within School A. Practitioner A described the support that she received from the speech and language therapist:

> If I’m not a hundred percent certain I will ask the speech therapist if I am struggling with it and again if I do struggle with it and I do find that I don’t know if like with Pupil A, I don’t know if she can do it, I would ask the speech therapist to maybe come and assess it with me.... So I have found it a lot like better working with the speech therapist alongside it rather than just trying to find it on my own.

4.3.2.2 Research Question Two

What is the rationale for Routes for Learning being used in this way?

The organising theme which relates to Research Question Two is ‘Rationale’ illustrated with the five contributing basic themes below in Figure 4.3. It should be noted that three of these basic themes overlap with those used in response to Research Question One, which is because interviewees offered examples of RfL in practice to support their rationale for its use and vice versa.
4.3.2.2.1 Basic theme: Benefits of RfL

Both Practitioner A and Manager A were clear about a range of benefits of using RfL particularly in terms of how it met the complex assessment needs of children and young people with PMLD. Manager A also noted that there were also benefits for staff members working with this group of pupils as it enabled them to see pupil progression more effectively and to experience a sense of achievement about this. Manager A commented:

*I like Routes for Learning because it does, I think it is the best tool for your PMLDs ... I always refer to Pupil A, cos she just doesn’t fit. She’s so complex and there are so many things going on... She’s just one of those that doesn’t fit into everything whereas the Routes for Learning’s just got a target that she can achieve something on all of them...It gives the staff a sense of yeah we are getting somewhere with this. She’s done this and she couldn’t do that, and there isn’t any other ones that do that really.*
Practitioner A discussed the impact of RfL on how pupils with PMLD are viewed, understood and supported by staff members within the school and how her understanding of the abilities of this group of students had changed as a result of using RfL. She remarked:

\[
\text{It give me an insight into the children that I didn’t know and that I thought actually can’t do that, can’t do that and erm but when I sat with the speech therapist and did some work on a one to one with a child and the speech therapist and she explained it as we went along it was actually yes, she can do that or yeah you can do that or you know it give me a different outlook on... the lower end of the children, you know the more severe children.}
\]

**4.3.2.2.2 Basic theme: Descriptions of RfL**

Descriptions of RfL by the interviewees were associated with the appropriateness of RfL for assessing progress of the children and young people with PMLD and also showed how the RfL materials linked to existing elements of provision and brought them together. Manager A commented: “I think it’s just, it just fits the lower abilities a bit more, or if you’ve got one of those students who just doesn’t fit into the others. I just, yeah it is better, yeah.”

Manager A also described the sensory element of RfL and how this fitted with existing practices in the school. She remarked:

\[
\text{We’re doing a lot of the sensory side of it. You can then use the Routes for Learning cos a lot of that’s sensory with the stimuli and things like that so it does all work together in some sort of way.}
\]

**4.3.2.2.3 Basic theme: Links with other assessments**

Contributions by the interviewees showed how RfL linked with the use of other existing assessment tools used within School A to meet the specific needs of children and young people with PMLD. Manager A discussed the range of assessments used within the school and how these were adapted or used to complement each other to meet the needs of individual children and young people. She commented:
You have to break everything down cos every child in the school is so different, so like none of the, no assessment that we bring in is ever going to fit the needs of my class, cos it’s so vast, it’s like so we do a little bit of all of them at the moment.

Manager A made comparisons between RfL and other assessments to give a rationale for the use of RfL within School A, as the most appropriate assessment to meet the specific needs of learners with PMLD.

* B-Squared, well I don’t think so. Like I said I haven’t really got my head round B-Squared yet. I don’t think that’s going to do it. The PIVATS definitely don’t cos they don’t go low enough really than the B-Squared do. Erm and the Routes for Learning do, so yeah that’s what I like about it.

**4.3.2.2.4 Basic theme: Links within class**

Both Manager A and Practitioner A talked about how one to one assessment work using RfL linked with other classroom activities. This included linking to lessons across the curriculum. Practitioner A commented “And through lessons cos you can incorporate it into their IEPs or into a lesson erm that you’re doing. You know you could cross curriculum with it so it is used quite widely in the school really.” Practitioner A talked about how RfL targets were incorporated throughout different subjects or lessons throughout the normal school day and remarked:

*It’s also brought into their, their targets throughout the day so when they’re doing a maths based lesson and they’ve got to go away and do some work then you would be drawing on the Routes for Learning for your bit, your work that you’d be doing with that child.*

It was clear from interviewee comments that RfL was often used to conduct one to one assessments outside of the classroom situation, and that if this assessment raised questions about whether a pupil did have a particular communicative or cognitive skill or not then this could be investigated more in class. Practitioner A stated:
Practitioner A remarked on how RfL was relevant during other everyday school routines saying “And some fit into like your daily routines i.e. bathroom, feeding, you know, round school, the environment. That’s how some of the Routes for Learning do fit it. So you can use them throughout the day.”

These comments all indicated that RfL was embedded for much or all of the school day including the formal and informal curriculum for Practitioner A and Manager A with their particular class group.

4.3.2.2.5 Basic theme: Targets and progression

This basic theme links to the rationale for using RfL in the school as it demonstrates how RfL is suited to the recognition and recording of progression of learning for children and young people with PMLD and how it links to setting targets. Practitioner A described links between RfL targets and IEPs and remarked “We use it as a lot of the IEP time we do, we will feed in the Routes for Learning with it.” Another aspect in targets and progression linking to the rationale was the way that RfL supported the linking targets for learning at a range of different levels. Manager A reported:

So we kind of try and merge it together so we’ve got review, statement targets which then link into the review targets and from there we then do the IEP targets and then the Routes for Learning feed into that. So they should all cascade down into one if you know what I mean. They all feed into that overall statement target that parents have, that they want them to achieve.

4.3.2.3 Research Question Three

What are the facilitators to implementation of RfL?

The organising theme relating to Research Question Three is ‘Facilitators’ as illustrated with the related basic themes in Figure 4.4 below. As can be seen by the thematic map for School A (Figure 4.4) it was found that most of the basic themes for this organising
theme overlapped to some extent due to the absence of some facilitating factors leading to them becoming barriers and vice versa.

**Figure 4.4: The organisational theme ‘Facilitators’ and linked basic themes**

4.3.2.3.1 Basic theme: Organisation and systems

This basic theme showed how having whole school systems for RfL was supportive of its implementation. These systems included consistent recording, training and management systems.

Manager A commented regarding the consistency and ease of use of the recording system across the whole school:

*It’s what we all do here, yeah. And that’s something that’s across the school and er. It’s just an easy system to understand and anyone could pick that up and understand that the green obviously means that she’s doing something well and red means oh no this is not good.*
Manager A also discussed the value of the support from the management team in facilitating her own training role and therefore prioritising the use of RfL and remarked: “They help me to, give me opportunity to train staff and get them sorted on it.”

Manager A went on to talk about how the informal systems enabling training support from School A’s speech and language therapist facilitated the use of RfL at an ongoing practical level and stated “Practitioner A’s been alongside the speech therapist and getting her support that way.” This was also commented upon by Practitioner A who said: “We have, the speech therapist comes in weekly erm and she’ll visit different classes erm for different things really...We make a lot of appointments for her come and sit and do some work with me and a child.”

4.3.2.3.2 Basic theme: Leadership

The support of leadership was a facilitator identified by both interviewees. This was in addition to the setting up and ongoing support of systems as outlined in the previous basic theme ‘Organisation and systems’ as it involved more general leadership in terms of raising and maintaining the profile and status of RfL throughout the school. There were different levels of leadership in support of RfL including that of Practitioner A facilitating the use of RfL on the everyday practice level, Manager A leading both within her own classroom and having a wider role championing RfL throughout the school and the whole school leadership team who support RfL as part of the whole school development. The speech and language therapist also took a leadership role in facilitating the implementation of RfL.

Practitioner A talked about Manager A in terms of her role in being up to date on how RfL was used with students in her class and how this was recorded and said “She does have a, quite a bit of impact on it really.”

The whole school leadership team were supportive and this was demonstrated by the management responsibilities allocated to staff for RfL as well as the values and attitudes perceived by other staff with regard to their belief in RfL as an assessment tool. Manager A remarked “Erm management is obviously a big role and they’re very supportive of it. The head and the deputy are both keen on it.”
4.3.2.3.3 Basic theme: Recording

Having the same recording system across the school was a facilitator for implementation, enabling staff to easily record information regarding RfL which linked into other recording systems which could easily understood by other staff.

4.3.2.3.4 Basic theme: Training

Being able to access training for RfL was identified as a facilitator for implementation. Although neither of the interviewees had accessed formal training specifically for RfL they had other related training for example, Manager A had training in sensory integration and an awareness of Intensive Interaction techniques. The ability to be able to offer other school staff in service training was also a facilitator.

Practitioner A had ongoing ‘on the job’ training through support from the class teacher and the school’s speech and language therapist. Practitioner A found the training she had received from the speech and language therapist very valuable in facilitating her role in the implementation of RfL on a day to day basis, particularly in supporting when she encountered any problems of difficulties and remarked:

Yeah I do find it, I have found it really useful and I’m a lot more confident with it now. If I’m not a hundred percent certain I will ask the speech therapist if I am struggling with it and again if I do struggle with it and I do find that I don’t know if like with Pupil A, I don’t know if she can do it I would ask the speech therapist to maybe come and assess it with me.

4.3.2.3.5 Basic theme: Time

The availability of time for a number of purposes was an important facilitator for the implementation of RfL, as school staff members have a large number of different competing demands on their time. The majority of comments regarding this were made by the practitioner using RfL on a daily basis. Practitioner A talked about the need for time to make decisions about what to assess with a child and gave an example saying “I had time last night to sit down and look at different ones that I wanted to assess her on because I didn’t want to assess her on it all.”
Time was allocated by Manager A within the school day for Practitioner A to carry out the RfL assessments with children and young people. Time was also prioritised for Practitioner A to work alongside the speech and language therapist. Practitioner A remarked:

*Manager A often gives me time to sit with the child and do Routes for Learning and take them out and work with Speech Therapist A at the same time, so she’ll maybe sit with Speech Therapist A and say right are you free this date, and you and Practitioner A can go out and take a child with you and do some Routes for Learning. Erm so Manager A does allocate quite a lot of time for me to do that.*

Time to prepare and gather resources to use during assessment and for linked curriculum work was also seen as an important facilitator by Practitioner A, who commented:

*As for preparing resources for it i.e. getting stuff set up like I did erm Manager A also gives me that time so I do, I am given quite a lot of time... She gives me the time and it all depends on what’s going on that day, what classes we’re in.*

**4.3.2.3.6 Basic theme: Staff**

The feelings and attitudes of different staff members were seen as being an important facilitator in the use of RfL. This issue was commented on more by Manager A than Practitioner A, possibly as it is seen as more of a management or leadership issue. Manager A’s comments related to her own classroom situation and the teaching assistants working with her, but also to the arrangements with other classes within the school. Manager A expressed that implementation of RfL was directly affected by staff members and commented “Yeah it depends on the class and the staff you’ve got and how they feel about working with it and how comfortable they are with it.”

The level of enthusiasm of staff members for RfL was also cited as important as a facilitator and Manager A also saw the influence of her own interest and enthusiasm on staff working in her own classroom as well as throughout the school. Manager A commented:
Enthusiastic staff. And someone like me who goes round telling everybody about it. Yeah, what you need is enthusiasm from the staff. I’ve got it in there. I’m lucky cos they are, they will do it. And they’re all great, so.

4.3.2.3.7 Basic theme: Space

The availability of an appropriate space to carry out RfL assessments on a one to one basis was identified by Practitioner A. She commented that sometimes a private space out of the classroom was needed and said an appropriate place would be “Either in the sensory room, a quiet room, things like that.”

Having access to a more flexible space outside of the classroom that could be used in different ways to suit individual needs was also seen to be an advantage in facilitating the use of RfL. Practitioner A stated:

Yeah, like for some of the wheelchair students I would take them in the sensory room and maybe get them out their chairs and erm give them that freedom as well. But with Pupil A I needed a table. I needed to keep her focused and try and see. If she’s sat out she doesn’t always focus.

4.3.2.4 Research Question Four

What are the barriers to implementation of RfL?

The organising theme relating to Research Question Four is ‘Barriers’ as illustrated with the related basic themes in Figure 4.5 below. As described in the previous section it can be seen by the thematic map for School A (Figure 4.5) that there was an overlap between basic themes for this organising theme and the ‘facilitators’ theme.
4.3.2.4.1 Basic theme: Recording

In terms of recording for RfL a perceived barrier was that schools had to design the supporting paperwork for recording progress themselves and that it was difficult to record the whole range of information gained through doing RfL assessments. The published Routemaps could not record the whole range of information necessary for example, who carried out the assessments, information about the context and equipment used, the responses seen and so on. Practitioner A commented:

*Talk to Manager A about it mainly but there is, on the Routes for Learning sheet erm there is a box for comments underneath, so I can write comments on it, but you’re not always going to be able to put comments because it’s not a big box and the amount of times you have to do the Routes for Learning, so but no I do just feedback only with her and give her a bit of insight on what I’ve done.*

This issue was compounded in terms of finding ways to record a number of different assessments used with different children within a mixed ability class of students. Manager A found that there was repetition and overlap between the recording systems.
of different assessments used within the school. Manager A commented that “It’s copying the same data sometimes can be a bit annoying and things like that but it is individualised and you choose what suits you.” She felt that this was a barrier for all schools as well as School A and remarked:

Yeah, they all do little parts of the assessments so at the moment there isn’t, well there isn’t anything, that’s what every school’s having to do at the moment so. It’s a shame but, it’s hard cos you have to do all the different paper work design yourself.

4.3.2.4.2 Basic theme: Training

Manager A discussed how because the classes in School A change every year this meant that staff needed to be re-taught about RfL. Also it was felt that some aspects of RfL, in particular the wording of some statements, were difficult to understand for some staff. Manager A remarked about the wording of RfL “With the Routes I think the wording’s a bit, needs to be changed maybe.”

Manager A felt that if staff did not access support in understanding the wording of some aspects of RfL they would then not put it into practice and commented:

That’s where the other staff need to help, to ask the therapist to help them to do it if they’re struggling so, but it is the wording I think, that puts them off cos they look at it and they think I don’t understand what that means. So they just put it down and that’s it.

4.3.2.4.3 Basic theme: Time

Time was seen as a barrier by interviewees at School A, in terms of time for planning and reading the RfL materials and in being able to conduct RfL assessments. This was related to the time pressures of having to balance the time demands of RfL with other work tasks and commitments. Practitioner A felt that she had insufficient time to familiarise herself with the RfL materials and commented “I haven’t had that much time to sit down and have a look properly through Routes for Learning materials you know or look on the internet or anything.”
Manager A talked about the time constraints on all practitioners in terms of being able to implement RfL and commented “They all need to be doing what Practitioner A was doing with Pupil A on a regular basis, but it’s fitting that into the busy schedule of the day.” Manager A felt that this was the main barrier to using RfL and also said “Probably the time aspect, and balancing all your other jobs alongside it.”

4.3.2.4.4 Basic theme: Staff

The feelings and attitudes of staff were seen as potential barriers in implementing RfL in School A. This was noted particularly by Manager A who felt that some staff members felt unable or unwilling to teach children with PMLD and therefore to use RfL. She commented “Yeah it depends on the class and the staff you’ve got and how they feel about working with it and how comfortable they are with it.”

Manager A discussed how staff attitudes and fears influence the use of RfL and can act as a barrier. She remarked:

Not everybody wants to do it and not everybody’s you know, we’re not all into teaching PMLD students, and they all hold their hands up and say no I couldn’t have a class like you’ve got… and things like that, I couldn’t do it. And if you’ve got that aspect you know you’re never going to be able to grasp the Routes for Learning cos you’re not going to want to, so it’s probably getting that on board and things like that, probably are the main barriers.

4.4 Semi-structured interview data - findings for Case Study B

4.4.1 Overview

In this section the thematic analysis for Case B in School is given. First an overall thematic map is given. As will be seen from this map, although the data was analysed inductively as the questions in the semi-structured interviews were linked to the research questions, the organising themes therefore fitted into the four research questions. For each organising theme is then illustrated by a diagram showing the constituent basic themes. Each basic theme is then described with the use of supporting illustrative quotations taken from the semi-structured interview data.
4.4.2 Thematic analysis

The transcriptions from the semi-structured interviews with Practitioner B and Manager B were analysed together using primarily inductive thematic analysis. As the interview questions were formulated using the research questions and propositions deductive thematic analysis was also used. The data were analysed using the process outlined by Braun and Clarke (2006) as described in Chapter Three. The following diagram, figure 4.6 shows the final thematic map constructed after analysis of the semi-structured interviews undertaken in School A. Where basic themes link to each other or to more than one organising theme this is shown with a blue arrow. The thematic analysis process produced four organising themes and seventeen basic themes. There are separate sections for each organising theme and their related basic themes. These sections begin with a diagram showing the themes and then the basic themes are then described with the inclusion of illustrative quotations where appropriate.
Figure 4.6: Thematic map for School B
4.4.2.1 Research Question One

*How is Routes for Learning used in this setting?*

The organising theme relevant to research Question One is ‘RfL in practice’ shown with the six basic contributing themes in Figure 4.7 below.

**Figure 4.7: The organisational theme ‘RfL in Practice’ and linked basic themes**

![Diagram](image)

4.4.2.1.1 Basic theme: Current use of RfL

In September 2013 children and young people with PMLD in School B were moved from a separate class into mixed ability groups. As there had been a recent change in the way classes in School B were organised this was reflected in descriptions of how RfL was currently being used in this setting. Practitioner B’s role had changed from being a class based teacher to a specialist role working with children and young people with PMLD who were taken out of class for more intensive work. With regard to her current role in using RfL Practitioner B commented:
Basically I bring students or children out in the mornings and we do specific Routes for Learning activities.... Staff come from those classes as well so that it’s not just me...so I’m trying to teach the staff as well as the children and then they take it away and carry on in class.

Classroom staff accompanied the pupils to work with Practitioner B to learn about working with students with PMLD and using the RfL materials and their role was to continue the work with these students in the classroom context. Practitioner B discussed the range of staff members coming to observe and work with her to carry out assessments and remarked “No it’s anybody really. Erm the young girl that came in just now, she’s an NQT, so she comes in but it could be TA2s, TA1s, anybody that feels that they can benefit from coming in and seeing.”

Manager B also gave a description of the current arrangements for the implementation of RfL and for Practitioner B and explained some of the reasoning behind this. She commented:

> See at the moment erm it’s been, things do change rapidly sometimes, but at the moment Practitioner B takes students into her room and does some intensive work and then with the staff from the classes concerned. The idea is that knowledge would then be brought back into the classes and the classes could work with the students on Routes for Learning and develop their knowledge and so on.

### 4.4.2.1.2 Basic theme: Staff training and learning

Practitioner B and Manager B had received training in either Routes for Learning (WAG, 2006) or Quest for Learning (Northern Ireland Curriculum, 2007). Practitioner B had been involved in training staff members at School B and also had delivered training or supported staff at other schools. She felt that part of her role at School B was to have an awareness of which adults were attuned to the communication of pupils with PMLD and to train new staff. Staff members were able to observe Practitioner B working with pupils with PMLD and were therefore able to learn and talk about Rfl, how to use sensory materials in assessment and how to demonstrate progression.
Regarding her role in staff training and learning Practitioner B commented:

*Erm so I’m teaching S and K, the other young lady in there, how to recognise that, how to deal with that, how to give him the next step, so yeah it’s kind of working out who knows what and who doesn’t know what and who’s attuned basically.*

Manager B discussed Practitioner B’s role in supporting the learning of other staff about RfL and other aspects of working with children and young people with PMLD and stated:

*So it’s given the students and teachers an opportunity to kind of learn about Routes for Learning…and how you can adapt a curriculum, how you can provide erm sensory materials that provide relevant opportunities for our students and demonstrate progression.*

### 4.4.2.1.3 Basic theme: Roles in implementation

Within the basic theme of ‘Roles in implementation’ were a range of responses linking to different roles including that of expert practitioner as well as the support of management and parental involvement. The role of the Speech and language therapist was also discussed within the interviews although in School B the SALT role was minimal with regard to RfL. In addition there were a number of comments made about the value of staff and others working together.

The role of the expert practitioner was key to the ways RfL was used in School B which is illustrated by the comments, made by Practitioner B (the expert practitioner) and Manager B, which described her expertise both in terms of working with children and young people with PMLD and of using the RfL materials. Practitioner B commented regarding her expert practitioner role: “I wouldn’t say I’m an expert in my field but I do know PMLD children and I know them inside out, and I know Routes inside out and I know which, who’s going to have problems doing what.” She commented further on her experience and expertise and stated:

*Because of the nature of some of our children, I’ve always worked with PMLD children and erm so I’m kind of, it sounds a bit big headed but I don’t, I’m attuned*
to what their communication skills are. Even if I’ve never met them I can work out how they’re doing what they’re doing.

Manager B reinforced these comments and said “Practitioner B is very good at what she does.”

Parents were involved in RfL in that they were aware of IEP targets and what their child was working on. Practitioner B said:

*Well erm, because we use them (RfL targets) as an IEP they (parents) are aware of what we’re doing and they will er they take on board what Route they’re on and what we’ve looking for... and in annual reviews it’s discussed if they need to know is there anything we can do at home, then that’s what those sessions are all about. Yes please, that would be great, can you..?*

When talking further about parental involvement Practitioner B commented on the support parents give:

*The parents will, I have one parent who, well probably a few, they’re really good, the parents in the school are very supportive and will try their very best to do whatever they can to assist with their children’s learning.*

At School B as part of the organisation of assessment for pupils with PMLD staff members were expected to work together with Practitioner B, to communicate what they had done and decide on and consult regarding next steps. Practitioner B commented “I expect them to come to me and say we’ve done this and we’ve done it over so long, and erm our next Route is. Do you agree.”

Practitioner B described her belief that all stakeholders should be involved in working with RfL and remarked “We’re all in the business of teaching.” Practitioner B explained this further and commented “You get that big family of educators rather than we only teach in a little room here, on in this building, in this little plot, nothing happens anywhere else.”
The role of the speech and language therapist in School B was discussed however due to the limited time allocated to the school there was no real impact on RfL. Manager B stated:

*We actually employ a speech and language therapist as a consultant, but you’re right the actual speech therapist from the authority is about half a day or something really, really miniscule really. I think on that basis it’d be very hard to co-ordinate anything really.*

The leadership team of School B were very supportive and positive of the use of RfL within school and this had an effective throughout the school. Manager B remarked “*The head teacher is very positive about it and you’ve got to have that positivity coming from the top so it goes from the top down.*”

This theme showed that a number of different roles played an important part in how RfL was implemented in School B.

**4.4.2.1.4 Basic theme: Adapting**

The basic theme of ‘Adapting’ brings together a range of comments with regard to how and why adaptations were made to the RfL materials to meet the needs of the specific children and young people with PMLD and the organisation at School B. All comments contributing to this theme were given by Practitioner B, probably because she was working at a practice level. Practitioner B felt that the RfL materials were adapted in different schools to suite the environment of particular pupils and commented “*But I think we probably all do something different and I think it’s a personal thing. Whatever suits the children you’re with. Whatever suits the establishment you’re in I think.*”

Practitioner B put forward that some Routes were more challenging than others in terms of their level of difficulty or the length of time they took to achieve and therefore needed to be broken down further. Practitioner B remarked:

*Erm, the other thing I’ve also done is erm, some of the Routes are a little bit difficult for them to grasp, as in it takes forever and a day and I’m talking months if not years, and that’s not fair. That isn’t fair on the child because they erm because*
it then goes into the same place as the B-Squared. We’ve come to a stop. Well we shouldn’t be coming to a stop, so what I’ve done is I’ve also taken some of the Routes that are a little bit more erm intensive and I’ve broken them down again.

Practitioner B also discussed how students could continue to work at a level within RfL or that sometimes RfL can be extended for some pupils and therefore RfL did not need to come to a stop. It was felt that due the nature of pupils with PMLD and how they learn that they may need repetition to retain learning. Practitioner B stated:

Now I disagree with that because I think that if you look at it properly you can actually extend each one that you’re doing. Erm in my opinion and that’s what I’d be looking at once they got to the end than, you know we don’t just stop doing Routes for Learning. It’s something just because they’ve reached the end of their assessment, the nature of the PMLD child that we tend to forget these things so it’s an ongoing thing really.

Practitioner B’s experience and expertise and knowledge and understanding of how children and young people with PMLD learn may have supported her confidence in making adaptations to the RfL materials.

4.4.2.1.5 Basic theme: Recording

This theme covers the ways in which RfL assessments were recorded at School B in terms of what specifically was recorded and when, how the assessments were shared and collated at different levels as well as the methods used. All the comments with regard to this theme were given by Practitioner B, again probably because she was working at the practice level.

School B had colour coded recording sheets which were shared between the different staff who were working with each pupil with PMLD. Practitioner B stated “All the staff, each class, also has a copy of their recording sheet and a copy of what Route they’re on at the moment” and “Yeah, so that’s all colour co-ordinated on here. So that’s the baseline colour and then as each assessment went on, I look at it every half term. I don’t reassess every half term, unless they’ve done amazingly good.”
Only key information was recorded on the RfL assessment sheets in School B to avoid unnecessary repetition of recording the same information and therefore staff only recorded ‘wow moments’ as Practitioner B described:

Class just have those erm there’s printed sheets on the board out there...Their recording sheets er, they’ve got their Routes for Learning target at the top and I’ve said only record wow moments. What, there is no point writing the same thing time and time again, you know, looked for ten seconds or tracked for five, and they you look again and you think well he’s looked for ten seconds again, tracked for five. Right ok so then you end up, there’s no point. There is no point. It means nothing. Er it just means a pen and paper exercise really, so yeah they just record wow moments.

Information from the individual records was collated. Practitioner B remarked “My head teacher does a graph... and she takes my folder every so often and updates everything for me.”

As well as the use of paper recording systems there was also the use of verbal recording as well as video. The use of iPads was an additional important way in which assessments were recorded and shared between staff and parents to demonstrate what the children and young people had done, provide contextual information and to effectively demonstrate their progress. Practitioner B commented:

Because I have these children in a morning we do a lot verbally as well, so there’s a lot of verbal that goes on...I also use, I’ve just recently been given a group iPad so I take video shots of the children as well... so I’ve got video shots of progression through doing the same thing... When I’m in here working I can take the video shot and wow, just look at this, take it back, this is what we’ve done, this is how he did it.

These comments show how records were kept and shared within school B using several methods at different levels. The purposes of this recording were to share between staff and parents, to enable consistency of approach and also to support recording (and therefore reporting) at a group or whole school level.
4.4.2.1.6 Basic theme: Reporting

The basic theme ‘Reporting’ was mainly commented on by Manager B. Practitioner B did discuss how assessments were reported to parents during annual reviews (see the basic theme ‘Roles of implementation’ in section 4.4.2.1.3).

Manager B had more of an awareness of reporting to other stakeholders and external bodies and mentioned governors as well as reporting to Ofsted. Manager B commented “With the Routes you can see progress and you can celebrate that progress and you can show parents, staff and obviously Ofsted inspectors, you know whenever they arrive that those children are actually making progress.” She also remarked “Governors, erm parents. Obviously you’re thinking about the Ofsted agenda all the time, so you’re reporting to Ofsted when they come in.”

4.4.2.2 Research Question Two

What is the rationale for Routes for Learning being used in this way?

The organising theme which relates to Research Question Two is ‘Rationale for RfL’ illustrated with the five contributing basic themes below in Figure 4.8.
4.4.2.2.1 Basic theme: Benefits of RfL

This basic theme outlines some of the reasons why RfL was selected in favour of other assessment tools. Interviewees expressed that RfL was the only assessment tool designed specifically for use with children and young people with PMLD. Practitioner B commented “I personally didn’t choose it. It was because it was there and as far as I’m aware it is the only one that was there and because we’d only ever used B-Squared.”

A clear perceived benefit of RfL for School B was that the small steps progress made by pupils with PMLD could be tracked and shown clearly. Manager B stated:

*With something like Routes for Learning you can actually show and demonstrate in a visual way as well that they’ve actually made small steps, but very significant steps for those children, relevant steps as well, it’s important very relevant steps.*

RfL was perceived to be easy to understand and that it made target setting easier for this group of pupils. Practitioner B remarked “This Routes for Learning makes their job an awful lot easier when it comes to teaching children with PMLD” and “You know come on
this is going to make your life so much easier because to try and find IEP targets for a child with PMLD traditionally has been extremely difficult."

Both interviewees said that RfL linked existing aspects of their work with children and young people with PMLD and brought them together into a more co-ordinated approach. Practitioner B remarked “And you tend to find because of the Routes for Learning it just slots into daily life.”

For staff members that already have experience and expertise in working with children and young people with PMLD the perception was that RfL was a common sense approach. Practitioner B commented:

\textit{Do you know the annoying thing is I sat with our deputy at the time and I said we could have done that, so why didn’t we do that, you know cos you think in the nicest possible way Routes for Learning isn’t rocket science. It’s just that somebody’s taken the time to collate it all and make it workable, you know.}

Manager B talked about the theoretical basis for RfL as a benefit. RfL linked together a range of teaching strategies and interventions already in use within School B and allowed progress to be demonstrated in a way that other assessments were unable to do. Manager B stated:

\textit{But all the theories and backup evidence I mean you know it is so very much based on the holistic... We’re a school where communication is very important so that all links, intensive interaction, all of that, you would have been using anyway and it suddenly kind of gives a validity to all these things that you might have been using anyway. All these strategies you’ve been using and kind of brings them together to something a bit more formal, something that can actually show progress in maybe all the strategies you were using already, but you couldn’t show progress in terms of P scales.}
4.4.2.2 Basic theme: Descriptions of RfL

Interviewees described RfL as an assessment tool with reference to where it fitted with other assessments. Manager B emphasised that RfL is an assessment tool and commented:

But it’s not a curriculum. I’m sure Practitioner B has told you we use the National Curriculum but she adapts it for the students she’s working with, so to make it relevant for them. Routes for Learning is an assessment tool.

Practitioner A talked about how RfL compared to other assessment tools and stated:

It gives our children who traditionally have already been on B-Squared or PIVATS er get to a certain stage at P-3-2 and that’s it and we can’t go any further, whereas I suppose Routes is like a precursor to that.

Staff members talked about how the Routes which pupils were working on ran right through the curriculum and throughout the school day. Manager B commented:

So er then in the afternoons or when they go back to their own class their sessions regardless of what it is, numeracy, literacy, history, geography, modern foreign language, the core route that they’re working on runs right the way through.

4.4.2.3 Basic theme: Nature of PMLD

A recurring theme throughout the interviews was the descriptions of the nature of children and young people with PMLD, their complexity, their needs and how RfL could meet those needs. Practitioner B stated that “They are extra complex.” Descriptions included ideas about the pace of learning, retention of learning, the need for support with generalisation and for repetition. Practitioner B commented “The nature of PMLD child that we tend to forget these things” and “The nature of our children, they don’t generalise very easily, particularly our PMLD children.”

Manager B discussed the nature of students with PMLD and the adjustments that needed to be made with regard to curriculum delivery. She remarked:
In terms of delivering the curriculum, PMLD or whatever you want to call, label our students as students who need a lot of help to process information... they need kind of a slower pace, more sensory delivery of the curriculum.

Also, issues and examples regarding the communication of pupils with PMLD were discussed including the potential subtlety of this communication and the necessity for attuned adults to recognise, understand and respond. Practitioner B gave an example of this subtle communication and commented “We have a little boy in Nursery, Reception who is beginning to use his breathing patterns as a sign of communication.”

4.4.2.2.4 Basic theme: Assessment and historical context

Practitioner B was very experienced in working both at the school and with pupils with PMLD and she explained how provision for pupils with PMLD had changed over the last two to three decades. With regard to changes in the educational provision for students with PMLD Practitioner B commented:

I’ve been here thirty years and when I first came we had a special care unit and we’d no National Curriculum, so we erm, particularly in the special care they were looked after. We got things off shelves and we put them on the floor and we’d be playing on the floor but there was no, we were educating them but there was nobody to say you sit down there and I want you to teach such and such a body to do duh di duh, because in the special care unit they were actually in that big room and they were from two to nineteen, so you’d got two year olds and you’d got nineteen year olds and that spread but we’d no equipment...So the other classes they didn’t have any children with PMLD in their classes because they were all in special care unit.

The context changed considerably with the advent of the National Curriculum introduced by the British Government as a result of the Education Reform Act (DES, 1988a) both for the children and young people and the staff who worked with them. Practitioner B described:

All this was pre National Curriculum and then the National Curriculum came in it was like whoah, what to do with this? Erm and everything just flew. The special
care unit was disbanded and the young people were then put into peer groups which was a hell of a shock for both, for teaching staff and for the children and the young people cos they’d gone from this looked after environment, positive environment, smothered environment to suddenly, oh my God, these things run around and they talk and there’s all this noise and you know.

In School B the way in which classes had been organised more recently in terms of the placement of children and young people with PMLD was of relevance to viewing the current arrangements in context. Up until the term in which the research took place Practitioner B had been a class teacher, with a class of PMLD students, and the current arrangement as described in Section 4.4.2.1.1 had been in place since September 2013. Thoughts about other assessments which were being used in the school were part of this theme. This theme also included opinions regarding the Quest for Learning materials which it was felt by Manager B had continued to develop more than was the case for RfL. She commented, “I think the benefits of doing that (the current arrangements) has been that other teachers know a little bit more about our PMLD students because up til then really Practitioner B did have a class.”

Both interviewees commented on the qualities of assessments other than RfL and some of the disadvantages of these for use with students with PMLD. Manager B stated:

- *Because we feel that the steps in terms of the P levels are too large to show any progress... because I think that it’s very, very disheartening especially for parents to talk to them and say yeah they’re on P2, you know, and every year they’re still on P2, and every Annual Review they’re still on P2.*

The PIVATS assessment was not used in School B as it was felt that there was a danger of it being treated as a curriculum rather than as an assessment tool. Manager B commented:

- *We don’t look at PIVATS at all...The head teacher doesn’t like PIVATS and doesn’t feel, she feels people end up teaching to PIVATS targets which isn’t the reason it was there, was meant to be more of a different kind of assessment tool.*
Practitioner B also described how prior to the use of RfL School B had used another assessment. This was felt not to be appropriate for use with pupils with PMLD in that after a particular point further progress could not be recorded, as the ability to communicate verbally was necessary to achieve later levels of the assessment. She stated:

*We’d only ever used B-Squared. And then suddenly you get to P-3, P-3-2 with a child with PMLD and they suddenly come to a stop because they can’t ask, they can’t tell you verbally, and it’s all about discussion thereafter, and you think well that’s a waste of time really. It’s not appropriate so then suddenly they come to a stop at like fifteen, and they’re still in school til they’re nineteen so what do they do then?*

The use of RfL linked in to the values held by Manager B in terms of children and young people with PMLD having a right to be able to demonstrate that they are able to make progress. She commented “*I obviously, you know such a simple thing and it’s not fair if a certain cohort of students can’t demonstrate that (progress), not because they’re not making progress but because the assessment tools we’re using just aren’t appropriate.*”

### 4.4.2.2.5 Basic theme: Future plans

As with the last section this theme of ‘Future plans’ helps to set the current views of the school within a temporal context. After having a term of Practitioner B working in the current way and not with her own class, members of the school’s management team were considering potential ways to build on this experience and planning changes which aimed to continue to develop the organisation of classes to best meet the needs of pupils with PMLD. This discussion involved descriptions of the future plans as well as an exploration of differences of these plans to previous arrangements and the potential advantages of the changes.

There was discussion regarding the challenges of teaching mixed ability groups of students with very different needs and the potential issues resulting from this kind of class organisation. This links to an implicit value around the right of students with PMLD
to have their need for quality educational experiences and to make progress met.
Manager B commented:

It’s actually very difficult when you’ve got a mixed group of students. It’s very hard to, what we tend to do is go down the middle somewhere don’t you and I feel personally that often, I’m not saying it’s happening here by any means but often and I’ve worked with other schools throughout the years. It’s often the PMLD students that are kind of side-lined cos they’re the ones that aren’t creating, you know they tend to sit quietly in the chair, so teachers and staff tend to focus on the others. I think there’s a fear that will happen anyway, so erm after Christmas we’re going to try Practitioner B back in class and see how we go with that, because I just feel maybe it might be the best option for our students with PMLD.

Practitioner B was aware that there were to be changes to the organisation of classes and therefore her role. There were plans to ensure that students with PMLD would still benefit from having contact with more able peers in different ways within the new organisation. Practitioner B commented:

There are arguments for and against, I understand that, erm but I’ve tried to work their day so that at some point in their day they will also have er interactions with peer group and more able peer group, more interactive peer group er, so that you know lunch times and things like that, whereas traditionally some of our children have eaten their lunches early, earlier in the quiet, but they don’t need to really, erm I think it’s all about the concentration between two people and they need to hear children playing, they need to see children playing and talking to them and you know playing games and things like that.

Practitioner B discussed the advantages of and disadvantages of the different ways of organising the educational experiences for children with PMLD and both interviewees expressed the view that this group of pupils would benefit from being in a specialist class with familiar staff as well as having opportunities to spend time with other peers within the school. Practitioner B commented:
And they need that extra input. They are extra complex... They already know us so that actually will enhance their learning and then in time they’ll be, go to peer groups for sensory stories or you know, group time, things like that. So hopefully they’re going to get the best of both worlds.

These opportunities for students with PMLD to spend time with the wider peer group within School B as part of the future plans were to some extent enabled by the experience and training gained by teaching staff as part of the current arrangements.

4.4.2.3 Research Question Three

What are the facilitators to implementation of RfL?

The organising theme relating to Research Question Three is ‘Facilitators’ as illustrated with the related basic themes in Figure 4.9 below. As can be seen by the thematic map for School A (Figure 4.9) there are six basic themes associated with this organising theme, two of which overlap with other organising themes, shown by the blue arrows.

Figure 4.9: The organisational theme ‘Facilitators’ and linked basic themes
4.4.2.3.1 Basic theme: Staff training and learning

The interviewees had both received official training in either RfL or Quest for Learning. The opportunities afforded to other staff to learn and benefit from the training, experience and expertise of Practitioner B was a key factor in facilitating the implementation of RfL. It was felt that staff members had gained a variety of knowledge and skills through being able to alongside Practitioner B.

Manager B commented that “It’s given the students and teachers an opportunity to kind of learn about Routes for Learning and it has been a learning curve for them” and said “I think it has worked generally quite well... I think the staff do feel they’ve learned a lot by going in to Practitioner B’s lessons, erm and maybe that’s all that was needed, you know, a term of doing that was all that was needed.”

Manager B described the wider feeling around the school with regard to the RfL training and said “I think training, I think there’s a good positive vibe about the whole thing.”

Practitioner B had valued the opportunity to work with newer staff members and support them to use RfL as a foundation for their future practice.

So yeah, this period that I’ve been doing this has been marvellous, it’s been lovely because I’ve been able to put in the groundwork with some of the new staff, S and K, that will carry on because S and K, they’re young, they’re enthusiastic. It’s not a case of been there, done that and bought the tee-shirt and even written a book about it, do you know what I mean? It’s all new to them so they’re like little sponges.

4.4.2.3.2 Basic theme: Benefits of progression

Both interviewees discussed how because RfL enables staff members to see progression for pupils with PMLD, that this positively influences staff (and pupil) attitudes and motivation therefore facilitates its implementation.

Manager B expressed that “I think people understand that it’s er it’s very good for our students to be able to show the progress they’ve made.” She extended this point by describing the way this impacted on the student experience and positive attitudes
towards RfL and said “Because you see the progress obviously it’s fantastic for the students. It’s also fantastic for the staff, and you end up in a nice kind of positive, you can see where things are going.”

Practitioner B reinforced this point in her interview, that RfL encourages staff by showing recognition of the impact of their teaching on the learning of students with PMLD because their progress can be demonstrated. She stated “That then gives teachers the idea that erm er oh we’re still doing good. Just because we’re not moving forward in great leaps and bounds, we’re still educating them, we’re still giving them chances to learn.”

4.4.2.3.3 Basic theme: Benefits of current class organisation

Both interviewees perceived a number of benefits of the current organisation of the teaching and learning of pupils with PMLD, which aided in the implementation of RfL.

Manager B commented about the value of other staff members gaining a greater understanding of working with student with PMLD through observing and working alongside Practitioner B and said that “It’s given them an opportunity to see how Practitioner B works.”

Further benefits described included the education and training of other staff with regard to working with students with PMLD and using the RfL materials. Manager B discussed her belief in inclusion and felt that this had been of particular value within the current class organisation. She stated “I think it’s been quite good in terms of educating yeah the other staff. I think it’s been good in some respects for the students to be in classes. Erm, cos it’s nice to have that inclusion.”

4.4.2.3.4 Basic theme: Attitudes to change

The theme of change was covered by both Practitioner B and Manager B, and staff attitudes to change were seen as both a potential facilitator and a barrier. It was expressed by Manager B that the ways in which changes are introduced are a key factor in their success and also that staff needed to be aware of the benefits of the change for themselves or their students. Manager B commented:
I do think things are always subject to change aren’t they? I mean you try different things you think will work and sometimes they don’t work as well as you think and sometimes they work better than you think. So you have to be prepared to take a risk don’t you and change things when you feel maybe they’re...

Manager B expressed a belief that for people to be positive with regard to change they need an understanding of how the change can have a positive impact. This was seen as part of the leadership role and manager B stated “I really believe that if people can see the change is going to be of benefit they usually follow.”

The attitudes of staff towards RfL and having an understanding of how it supports their teaching role was also seen as a key facilitator by Practitioner B who said “Having willing staff, basically, because unless you’ve got somebody who actually wants to do it and sees the benefit doing it, and actually realises that to be fair, this Routes for Learning make their job an awful lot easier.”

Both interviewees felt that RfL was of obvious benefit in terms of its appropriateness as an assessment tool for children and young people with PMLD and that therefore staff would have a positive attitude towards it. In addition the enthusiasm of the head teacher was another important factor in influencing staff attitudes to change. Manager B commented:

I think to be honest with you, with Routes for Learning, I think it’s very difficult to say that they couldn’t be of any benefit, but it depends on how it’s introduced isn’t it... I mean luckily we’ve got a very enthusiastic head about it, Practitioner B is obviously enthusiastic about it...I think sometimes it’s just your attitude to change, but I think Routes for Learning is obviously so beneficial it’s you know, I think it’d be hard not to have a positive attitude to it anyway.

4.4.2.3.5 Basic theme: Time

This facilitating factor was commented on only by the practitioner who was carrying out RfL assessments on a daily practical basis. Having sufficient time to carry out RfL assessments thoroughly was identified as a key facilitator by Practitioner B who commented “And time, you know, time to do it properly and to do it justice.”
4.4.2.3.6 Basic theme: Equipment

Having access to specific equipment including an iPad (a touch screen electronic tablet), sensory equipment and communication aids was also given as a key facilitator by Practitioner B. When asked about facilitators for implementing RfL Practitioner B commented “It’s having the equipment.” She talked about the range of equipment available to her which enabled her to identify appropriate equipment and experiences for each child and stated:

I mean I’m quite lucky in that I’ll fiddle about and I have access to, I have a cupboard full of communication aids, erm but it’s finding the right one for the right child. But like I say these iPads have come in now.

This also linked to the priority given to RfL by the leadership team in terms of providing funding for the purchase of this equipment, in particular the iPad. Practitioner B commented “So yes the tools, the iPad, they’re not cheap are they. They’ve given me one and it’s like yeah wow, thanks very much.” She praised the iPad as an important tool in supporting the use of RfL and said “It’s a brilliant teaching and learning tool, the iPad, so I would recommend that to anybody. Particularly for the Routes, but you know for PMLD in general I would say an iPad is essential.”

She further described the value of this specialist piece of equipment and gave an example of how it could be very motivating for some students with PMLD and stated:

Now this is a child, a young lady sorry, who you look at her and you think yeah, somebody’s making this up somewhere because she’s very good at presenting herself at being weak and er vacant and not interested in anything, until you bring out this iPad. And then she’s just amazing. You know it’s just like another tool.

4.4.2.4 Research Question Four

What are the barriers to implementation of RfL?

The organising theme relating to Research Question Four is ‘Barriers’ as illustrated with the related basic themes in Figure 4.10 below. There were two basic themes identified for this organising theme. As described in the previous section it can be seen by the
thematic map for School A (Figure 4.10) that there was an overlap between the ‘Attitudes to change’ basic theme for both the ‘Barriers’ and ‘Facilitators’ organising themes.

**Figure 4.10: The organisational theme ‘Barriers’ and linked basic themes**

4.4.2.4.1 Basic theme: Attitudes to change

Manager B talked about how staff attitudes to change could be a barrier to the implementation of RfL (or any other new strategy, programme or intervention). She raised the point that the success or failure of a change can be dependent on how it is introduced and discussed how an additional barrier to implementation would be if a number of changes were introduced at the same time. Manager B commented:

>You can put up your own barriers I think, depending on the enthusiasm of your staff...I think if there was a kind of a ‘something else, another change mentality’ in a school I think it could be difficult then and I think if you haven’t got that positive approach in the first place it probably is going to fail anyway so it’s kind of, that to me is the barrier, how genuinely enthusiastic are you to learn about this approach, or to understand the rationale behind it.
Manager B felt that if staff members were asked to make a number of changes and that the benefits of these were not clear that this could be a barrier. She said:

*I think when people come in with all changes willy nilly and they aren’t actually sure what the benefit is going to be or actually feel it mightn’t be of any benefit at all but still they have to change I think they, you kind of get a you know, people reacting badly to it.*

Also in relation to this issue of staff responses to a number of changes as well as other factors including class size Manager A commented:

*I think that’s a barrier cos it’s one more thing...It’s one more thing to get kind of get your head around, another assessment tool you know, another set of strategies or whatever. I think, you know, it can be a lot, depending on the size of your class or whatever for a teacher to take on board.*

It was felt by both interviewees that staff attitudes were influenced by a several factors including attitudes of managers and the age, level of experience and personality characteristics of individual members of staff. Manager B pointed out that if Practitioner B’s attitude was less enthusiastic how this might have a negative influence on the implementation of RfL and said:

*Now, if Practitioner B was going around going, ‘Oh you know Routes for Learning, it’s just such a pain to be doing it’ that would filter down I think and we’d all begin to feel a bit like that maybe.*

Both interviewees talked about the influence of individual staff members’ personal characteristics as a potential barrier to the use of RfL. Manager A stated “*It depends on the staff you deal with you know, and what their personality is like, where they are in their careers ... they can be enormous barriers.*” Practitioner B in her comment indicated that she had overcome barriers of this kind in the past and she said “*Erm, there may be in the past older teachers, educators who erm couldn’t get to grips and didn’t understand the importance of it really, erm but I just kind of stepped over that and did it myself.*”
Although many of these barriers were raised as potential difficulties in implementing RfL Manager B in particular gave the impression that she felt these were generally not present at School B.

4.4.2.4.2 Basic theme: Disadvantages of current class organisation

As the management team of School B were considering changes to the current teaching arrangements for children and young people with PMLD this meant that there were perceived disadvantages to the current model, raised by both Practitioner B and Manager B. Practitioner B discussed mostly practical barriers such as limited staff expertise and experience, the availability of classroom space, the staffing capacity issue of managing class of children with a very wide range of needs. On classroom size and space issues Practitioner B stated “Some of the classrooms are small, too small, the equipment that’s coming with them is huge. The children aren’t small, you know what I mean, I know it’s not hard but they’re taller than me, you know.”

Practitioner B talked about how staff members had received some training from her and said “I’ve been able to give staff an input now, they’ve worked it and worked it as far as they can go.” She put forward the view that other teaching staff found it challenging to be as attuned to the students’ communication as she herself was, due to working in mixed classes and being unable to devote the time needed to support pupils with PMLD. Practitioner B commented:

I’m attuned to what their communication skills are...Some of our teachers and TA3s, TA2s can’t do that because they’ve got the other main group of students to deal with as well. So I mean it’s difficult isn’t it. You need someone to sit there and...

Practitioner B also mentioned, on a whole school level, the impact of the current organisation on the ability of the school to accommodate new pupils, an issue not mentioned by Manager B. She stated “We’ve got children waiting to come in er and because our classes are small it starts having a knock on effect as well.”

Manager B discussed the disadvantages of children and young people with PMLD being in mixed ability classes. Manager B commented “It is actually very difficult when you’ve got
a very mixed group of students” and said “It’s very different how you deliver the curriculum for those students than you would for other students who are higher on the P levels.”

Manager B talked about the current arrangements being too ‘hotchpotch’ and felt that Practitioner B’s skills were not being fully utilised. She commented:

I think we just feel that it’s just maybe a little bit too hotchpotch you know and maybe we need a little bit more intensive. Practitioner B is very good at what she does, you know and we maybe just need to use Practitioner B’s skills more.

4.5 Cross-case Analysis

Due to the overlapping nature of some of the themes between research questions it was decided to conduct a cross-case comparison for the themes identified in relation to all of the research questions together. This was achieved by listing all of the basic themes identified from both case studies and grouping these into synthesised organising themes.

The original and synthesised basic themes with the synthesised organising themes are shown in Table 4.2 below. The themes are marked A or B or A/B to show which case they were originally from, Case Study A or B or both.
An explanation of each of the synthesised organising themes is given in the paragraphs below. The first three of these organising themes related to issues largely linked to implementation or to Research Questions Three and Four whilst the final two themes related more directly to the use of and rationale for RfL, therefore linked to Research Questions One and Two.
Whole school issues

The majority of contributing original basic themes for the synthesised organising theme of ‘whole school issues’ originated from data from School B. This was partly due to the fact that they were in the process of reflecting upon and making changes to their provision for the education and assessment of pupils with PMLD which included changes to the organisation of classes and affected all pupils and teachers within School B to some degree. This meant that there was a lot of data regarding past, current and potential future teaching arrangements for children and young people with PMLD at School B as well as discussion and justification of the changes in terms of the advantages and disadvantages of each structure. In contrast the contributing basic themes from School A were with regard to the organisation and whole school systems linked to recording and to the management of specialist support.

People issues

The synthesised organising theme of ‘people issues’ was largely made up of themes related to staff training and learning. This incorporated the theme of individual personalities or attitudes to change but also attitudes towards working with pupils with PMLD and using the RfL materials. Both schools had given opportunities for staff to receive training from staff within the school on RfL in the form of formal training sessions as well as modelling the use of RfL materials and offering the option of co-working. In School A training was not specifically on RfL but rather on sensory integration and delivered by Manager A whereas the RfL modelling and co-working opportunities were offered by the visiting speech and language therapist to the school who was also acting in an advisory role. In School B both the training and modelling roles were met in-house with Practitioner B providing staff training and support. School A staff had not received specific training in RfL and were basing their use of the resource largely on the RfL published materials whereas in contrast, both Practitioner B and Manager B in School B had received training from either the RfL or the Quest (CCEA, 2007) authors.
Practical issues

Practical issues for both schools were linked to the basic themes of time, equipment and space. The majority of interviewee comments fitting these themes were given by the practitioners, those staff members using RfL on a day to day basis. Practitioners from both schools discussed the need for sufficient time to conduct RfL assessments effectively. School A raised the issue of needing to find an appropriate space to carry out RfL work and talked about how different spaces might be more suitable for different situations or to meet the needs of particular students. Space was not raised by School B, perhaps as there was a dedicated room for RfL use. Finally equipment was discussed as a facilitator at School B, possibly as they had whole school status linked to communication and had a dedicated store of communication aids which included access to a new iPad. In School A equipment was more related to the theme of time, in terms of being given time to gather the relevant resources.

RfL in practice

The synthesised organising theme of ‘RfL in practice’ was made up of the two synthesised basic themes of ‘recording progression’ and ‘RfL in action’. Interviewees from both schools discussed how RfL assessments were recorded and reported. Data from School B was much richer for this theme than in School A. Interviewees from both schools talked about how RfL assessments were shared with parents, and this seemed to occur through IEP meetings and Annual Reviews. From interview data it seemed that School B staff gave more explanations of the routes that children were working on and discussed with parents how individual pupils could be further supported at home.

In terms of RfL in action interviewees from both schools gave descriptions of RfL, which again were more detailed from School B, perhaps due to their longer experience both with pupils with PMLD and RfL, more specific training and greater expertise. All of the remaining basic themes contributing to this synthesised organising theme originated from the interview data from School B. Practitioner B had a great deal of experience and expertise in working with student with PMLD and in using RfL. She felt able to make adaptations to the RfL materials to either further break down the routes or to extend them as necessary in response to the needs of individual children or young people.
Manager A of School A in contrast had said that despite staff members finding it difficult to understand some of the concepts or terminology of RfL she did not feel that it would be appropriate to adapt the materials to accommodate this. Interviewees from both schools discussed other assessments, with School A staff more likely to use a combination of assessments and School B focusing mainly on RfL for this group of students. Possibly due again to the greater experience and expertise within School B, there was much more discussion than in School A regarding the nature of pupils with PMLD and therefore how RfL was suited to meeting their needs.

**Rationale for using RfL**

Interviewees from both schools were clear that RfL met a need in terms of offering an appropriate assessment tool for children and young people with PMLD. They both offered a range of benefits of the use of RfL for the whole range of stakeholders from the pupils themselves, their parents, school staff and the whole school. It was felt that RfL was the only existing and relevant assessment tool which could track and demonstrate progression for this group of learners. The views from staff interviewed in both schools were that RfL was uniquely appropriate for use with students with PMLD and that RfL was used throughout the school day in both the formal and informal curriculum as it reflected the learning, developmental and assessment needs for these pupils.

**4.6 Data from each school applied to the original propositions**

The propositions relate to the Research Questions as shown in Table 3.3, Section 3.5.1.1 in Chapter 3. Below in Table 4.3 the propositions are related to the data gained from both School A and School B to allow examination between anticipated and actual outcomes from the research as well as to examine similarities and differences between the two cases.
Table 4.3 Data for each case mapped on to the propositions

<table>
<thead>
<tr>
<th>Proposition area</th>
<th>Proposition</th>
<th>School A</th>
<th>School B</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Schools may adapt the materials to meet the needs of their setting</strong></td>
<td>The RFL materials are being used in a variety of ways.</td>
<td>School A felt that the wording of the RFL needed to be changed to make it easier to understand.</td>
<td>School B broke down the RFL into smaller steps to better show progress. They also felt that RFL could be extended.</td>
</tr>
<tr>
<td><strong>Schools may supplement the materials to meet recording and reporting needs</strong></td>
<td>Participants may use other published ‘quantitative’ assessments to supplement RFL.</td>
<td>School A used a variety of different assessments and were trying to integrate these. Use of B-Squared, PIVATS and were trialling a new system.</td>
<td>School B management used the RFL information to generate tables and graphs. They used B-Squared on an annual basis.</td>
</tr>
<tr>
<td></td>
<td>Participants may have developed other systems to supplement RFL.</td>
<td>Not applicable in School A.</td>
<td>Not applicable in School B.</td>
</tr>
<tr>
<td></td>
<td>Participants will have designed different recording systems.</td>
<td>School A had individual recording sheets for RFL plus were trialling a new system to integrate different assessments.</td>
<td>School B had individual RFL recording sheets plus collated progress information in tables and graphs.</td>
</tr>
<tr>
<td></td>
<td>Participants will have designed ways of reporting on RFL assessments to parents and other stakeholders.</td>
<td>Use of photographs, sharing IEPs, reporting in Annual Reviews, sharing individual recording sheets on request.</td>
<td>Use of video, sharing IEPs, reporting in Annual Reviews, sharing individual recording sheets.</td>
</tr>
<tr>
<td></td>
<td>Participants will have had to work out how to ‘fit’ RFL with the drive to provide data to the LA and on a national level.</td>
<td>Ongoing trialling of different systems to achieve this including B-Squared, PIVATS, new systems.</td>
<td>Use of annual B-Squared assessments as well as RFL information.</td>
</tr>
<tr>
<td></td>
<td>Participants may adapt the RFL to be more quantitative for reporting and school improvement</td>
<td>School A had not adapted RFL in this way.</td>
<td>Although School B had broken down RFL Routes down further into emerging, developing, confident this was not</td>
</tr>
</tbody>
</table>
Schools may use the materials selectively in response to perceived need

- Participants may use RfL with particular children in preference to other assessments.
- School A use RfL with pupils with PMLD and those who are seen as complex and who do not ‘fit’ into other systems.
- School B used with pupils with PMLD.

That differing levels of staff experience and expertise will influence how RfL is used

- Participants will have had differing access to training or resources.
- Neither the manager nor the practitioner had specific training in RfL. Manager A had training in sensory integration. Practitioner A had opportunities for on the job training from the SALT. Both staff had access to the RfL materials.
- Practitioner B had specific RfL training from members of the RfL team. Manager B had training in Quest for Learning from NI trainers. Other staff members trained via modelling from and working alongside Practitioner B.

| Participants will have differing levels of experience in working with children with PMLD. | Both School A staff members had 6-7 years’ experience with pupils with PMLD. | Both School B participants had worked with children with PMLD throughout long careers in special education (over 20 years). |
| Participants will have different levels of experience in using RfL. | Both School A participants had approximately 2 years’ experience of RfL. | Practitioner B had used RfL since its launch. Manager B had 2 years’ experience with RfL. |

4.7 Summary

Chapter Four has described the findings from this research. This has included a documentary analysis of the RfL materials, narrative accounts describing contextual information drawn from observations of RfL in practice and thematic analysis of the semi-structured interview data. This was followed by a cross case analysis which produced the overall synthesised themes which will be examined further in the next chapter. Finally a table was given which summarised how the findings from each school linked to the original propositions.
Chapter 5 - Discussion

5.1 Chapter Overview

In Chapter Four the full findings were discussed and all of the basic and organising themes identified in the thematic maps, produced as part of the analysis of the semi-structured interview data, were described. This chapter will discuss the findings presented in Chapter Four in relation to each of the cross-case analysis synthesised organising themes which are as follows:

- Whole school issues
- People issues
- Practical issues
- RfL in practice
- Rationale for using RfL

These themes will be explored in greater detail and related to the literature. The theoretical perspectives that informed this research relate to the definitions and purposes of assessment and how this links to the specific needs, unique learning profiles and abilities of pupils with PMLD. In addition issues related to the effective implementation of interventions and approaches in education have been of particular significance and relevance to this study. Throughout this discussion section the original research identified in the literature review from Chapter Two will be revisited and utilised to link the theoretical perspectives with the findings from this study. Finally, a critique of the study is given and the implications of this research are discussed.

5.2 Discussion of the cross-case analysis organising themes

The following subsections discuss each of the cross-case analysis organising themes in turn, as outlined above in Section 5.1 and also in more detail in Table 4.2 and Section 4.5 in the previous chapter. The work of Durlak and Dupre (2008) and Blase et al. (2012) are referred to extensively in this section (See Section 2.6.4) as both articles have been helpful in examining the findings and structuring the discussion section. Comparisons are
made between the data gained from the two schools which are linked to the existing literature and a number of key findings are identified and discussed in the subsections below.

5.2.1 Whole school issues

This synthesised organising theme was made up of two synthesised basic themes: ‘Organisation over time’ and ‘Organisation and systems’. The first of these was wholly made up of contributing basic themes drawn from School B semi-structured interview data with regard to the present and planned future organisational systems for the teaching, learning and assessment of pupils with PMLD. This included an examination of the benefits and disadvantages of these different arrangements for this group of pupils and for staff and students within the wider school environment. At School A pupils with PMLD were part of mixed ability classes and had been so for a period of at least two years. It is likely that the arrangement was seen as typical for this setting, and therefore the historical context may not have had the same degree of importance in this school. In contrast the synthesised basic theme of ‘Organisation and systems’ was drawn from School A data which related mainly to whole school systems for recording assessment information and for managing specialist support.

As indicated in Chapter Four it seemed likely that the comparatively rich data from School B for this theme could be due to that school being in a process of change, which caused staff to reflect much more on these whole school issues. The status of the two staff members within School B may have been higher than those in School A due to their roles. The manager in School B was the deputy head teacher and the practitioner a teacher; whereas in School A the manager was a class teacher and the practitioner a teaching assistant. School B interviewees may therefore have been better positioned strategically and had more input into whole school decision making thus increasing the likelihood of them taking and discussing more of a whole school perspective. In addition the School B interviewees had completed training specifically in either RfL or Quest for Learning (CCEA, 2007) which gave them increased expertise in the form of training than staff members interviewed in School A and they also had greater experience of working with students
with PMLD. Again this may have influenced the degree to which staff members from the two schools took either a whole school or practice based perspective.

According to Durlak and Dupre (2008) (see Section 2.6.4) to understand successful implementation a multi-level ecological perspective is needed which includes community level factors, provider characteristics and innovation characteristics. The organisational factors within this synthesised organisational theme ‘Whole school issues’ can be related to the ‘Prevention Delivery System’ variable identified by Durlak and Dupre (2008) shown as part of Figure 5.1 below, which illustrates the different factors identified in their ecological framework for understanding effective implementation. The bidirectional arrows in the diagram indicate that the variables can interact with each other and the prevention delivery (organisational capacity) and support (training and technical support) systems to influence implementation.

Figure 5.1: Ecological framework for understanding effective implementation, from Durlak and Dupre (2008)
The Prevention Delivery System (Durlak & Dupre, 2008) is linked to general organisational factors including having a positive work climate, organisational norms regarding change, the integration of innovative practices into existing systems and routines and having a shared vision. At both Schools A and B a positive work climate, in terms of there being a team approach for those working with students with PMLD, and supportive leadership were noted by interviewees. In School A, interviewees implied that other staff members from within the school were less confident in working with this group of pupils and therefore with RfL. In School B although Practitioner B had a great deal of expertise and experience this was not the case amongst the wider staff within the school and this therefore influenced the decisions made regarding future provision for pupils with PMLD and the use of RfL.

Blase et al. (2012) describe how implementation drivers are the processes needed at different levels to successfully introduce, sustain and improve effective implementation. These drivers are grouped in three domains comprising competency, leadership and organisational. The competency and leadership drivers will be discussed later in this chapter. Organisation drivers according to Blase et al. (2012) include systems intervention, facilitative administration and decision support data systems. These drivers enable the development of an environment which is conducive to supporting a new way of working including the provision of resources and policy design. This promotes the use of data to inform decisions made at different levels for example student, classroom and whole school. These organisational factors are an important aspect of implementation as they influence expectations, how the intervention is carried out and staff attitudes regarding the intervention.

In both Schools A and B the assessment of students with PMLD was seen as a priority and the use of RfL was supported with the provision of resources in terms of equipment, time and training. In both schools data were gathered at the individual pupil level in the form of RfL Routemaps and recording sheets. School A staff were investigating whole school ways to record a range of progress information from different assessments. In School B interviewees discussed how data regarding pupil progress were gathered and collated by the head teacher which could be used to inform decision making regarding the use of RfL. Systems intervention to some extent links to external accountability and interviewees
from both schools discussed how RfL supported their reporting to Ofsted and other stakeholders. Additionally, Blase et al. (2012) promote the identification and nurturing of a ‘champion’ to support the implementation of a new intervention and again in both schools those interviewed could be viewed as fulfilling this role.

5.2.2 People issues

This synthesised organising theme was made up of two synthesised basic themes: ‘Staff training and learning’ and ‘Roles in implementation’. The findings related to these themes are described below.

5.2.2.1 Staff training and learning

The basic themes making up this synthesised basic theme were similar from Schools A and B, with both schools raising staffing issues, in terms of training and learning, being able to act either as a potential barrier or facilitator to implementation. Blase et al. (2012) describe competency drivers as one domain of a number of implementation drivers. Competency drivers aim to improve individual competency and confidence enabling effective implementation and include staff selection, training, competence coaching and performance assessment. Individuals in both schools had opportunities to improve and develop their competency and confidence in implementing RfL. Performance assessment was not specifically addressed by interviewees although discussion regarding accountability measures and reporting to parents and outside agencies linked to this issue. Staff members in each school experienced training and coaching for competence in different ways as outlined below.

In School A both interviewees had access to the RfL materials and the informal training and support of a speech and language therapist, however neither of these staff members had received specific training in RfL. These interviewees had experienced using RfL materials and related activities for at least two years. Other staff members based in classes with pupils with PMLD were able to access these more informal training opportunities but the degree to which this occurred was unclear.

In School B the interviewees each had over twenty years’ experience working with pupils with PMLD and had received specific training in either RfL or the closely related Quest for
Learning (CCEA, 2007) materials. Other staff members from School B had received ongoing training for a term through being able to observe and work alongside Practitioner B during small group withdrawal sessions.

Across both schools there was a small group of staff trained in RfL (to some degree) and the level of expertise and experience of these small groups varied between the schools. This impacted on the ways in which they implemented the RfL materials in terms of their confidence and ability to adapt the materials for their own pupils and context. In both schools the dissemination of the skills and knowledge related to RfL to additional staff was a challenge, related to capacity issues, the availability of training opportunities, competing priorities in the school in addition to staff attitudes to change (explored later within this section). In School B implementing RfL may have been a greater challenge because of the simultaneous change to mixed classes from the previous organisation where pupils with PMLD were taught in a single class. This may have been difficult to manage as an organisation to effectively balance ‘on the job’ training for staff with the quality of the educational experience for all students. Staff members accommodating a number of changes concurrently may experience ‘Initiative overload’ which can, according to Ofsted (2010), lead to the diminished potential effectiveness of each individual initiative. This may have influenced the decision at School B to consider further adaptations to the organisation of classes in School B.

This highlights, as described in Chapter 2, the need identified by the Salt review (DCSF, 2010) for more widely available specialist training for less experienced teaching staff in ways of working effectively with pupils with PMLD. For this research it follows that this would impact also on the use of the RfL materials. A facilitating factor would be for staff to engage with the wider community of teachers and others who teach pupils with PMLD, to share ideas and support and access resources and training materials at local and national levels, for example by accessing on-line training opportunities and forums (for example the SLD Forum run by the DfE (2012b) and the training materials, which advocate the use of RfL, produced by the DfE (2013a). This is of particular importance currently because of the decline in the number of teachers with specialised training (Salt review, DCSF, 2010) and the number of this group of students with complex needs continuing to rise (Male & Rayner, 2007).
The ‘Staff’ basic theme from School A and ‘Attitudes to change’ from School B covered similar areas in that they both related to the individual characteristics or personalities of staff members and their attitudes and willingness not only regarding the use of RfL, but also to working with students with PMLD. Within School B there was a greater emphasis on staff attitudes to change in general, with more specific detail on attitudes to the introduction of RfL of teaching staff with children and young people with PMLD in their classes for the first time.

Durlak and Dupre (2008) identify provider characteristics as being a factor affecting the implementation process. These include self-efficacy, or the extent to which providers are able to do what is expected, and skill proficiency, in terms of whether providers possessed the skills necessary for implementation. All interviewees had sufficient self-efficacy, in that they felt able to use RfL, and were proficient enough in the skills necessary to impact positively on the implementation of RfL. Durlak and Dupre (2008) identify training and technical assistance as factors related to the prevention support system which can ensure that practitioners are proficient in the skills needed and that they have the resources to support ongoing implementation. Staff in both schools had received training and ongoing support was provided by expert practitioners within the school and in School A by the speech and language therapist.

This may not have been the case for other staff members in the schools. The Salt Review (DSCF, 2010) found that many newly qualified teachers felt inexperienced or insufficiently prepared to teach learners with PMLD and it seems likely that this factor would have also impacted to some degree on staff attitudes towards the implementation of RfL. Research undertaken by Chapman, Ainscow, Miles and West (2011) on the ways in which leadership can promote the education of children with SEN and disabilities indicates that the attitudes, beliefs and actions of teachers are fundamental to creating the contexts in which pupils can participate and learn, and suggests that systems need to be in place for teachers to be both supported and challenged to explore more effective ways to support the learning of all students. This has implications for school leadership which is explored in the next section.
5.2.2.2 Roles in implementation

This synthesised basic theme was made up of data drawn from both schools regarding the roles of different stakeholders in the implementation of RfL which incorporated that of leadership.

For both schools the roles discussed as being important included the expert practitioner, the school leadership team and parents. In School A the practitioner role was mainly undertaken by the teaching assistant with the class teacher acting as manager and sharing the role of RfL expert with the speech and language therapist. Manager A also acted as a champion within the school for RfL. In School B a teacher was the expert practitioner as well as being the RfL champion. In both schools there was good support from the senior leadership team with time, resources and training opportunities allocated to the use of RfL, with roles clearly allocated for responsibility for RfL. Durlak and Dupre (2008) state that effective leadership is crucial to implementation and describe how a programme champion with the right status can have an influence from adoption to sustaining the intervention through a process of diffusion.

There appeared to be distinct qualitative differences between how the practitioners approached the use of RfL in each school, with School A staff seeming calm and quiet and School B staff more overtly enthusiastic and more energetic. This may have been due to the character of the expert practitioner in each school, to the whole school leadership style or general ethos.

Neither school had close partnerships with parents to the extent recommended by the RfL materials (WAG, 2006) which promote the engagement of parents, carers and other family members at all stages as part of a multi-disciplinary team involved with the learner. In both schools parents were involved in the use of RfL to the degree that they were informed about IEP targets and that progress was discussed in Annual Reviews, using photographs or videos. However slightly more parental involvement was suggested by interviewees in School B than School A, with Practitioner B talking about how some parents asked how they could support their child at home with similar activities.
As well as the organisation and competency drivers discussed in earlier sections of this chapter Blase et al. (2012) show leadership drivers as the underpinning foundation of implementation drivers (see Figure 2.3, in Chapter 2). For effective implementation the leadership drivers or strategies need to respond to the challenges encountered during the process. Blase et al. (2012) describe how different leadership strategies are needed for different challenges at classroom, school and systems levels. They state that there is a relationship between successful implementation and having administrative support for teachers learning new instructional methods and that when teachers perceive that a new practice is valued by school leaders it is more likely to be implemented at the classroom level. The findings from this study support this in that the interviewees felt that head teachers and leadership teams in both schools valued the RfL materials and demonstrated this through various support mechanisms including training, providing resources including time and technical support in terms of facilitating organisational and administrative practices.

Blase et al (2012) differentiate between adaptive and technical leadership where technical leadership is effective when there is agreement about issues and resolutions and resources are available within the school to technically implement a new practice. Adaptive leadership is needed to undertake ‘deeper’ change where existing practices are challenged and practitioners are expected to undertake new roles, values and approaches to their work. In both Schools A and B technical leadership was effective in supporting RfL with those practitioners who had existing skills which could be adapted. However where adaptive leadership was required for example in terms of scaling up the use of RfL within the wider school this was more demanding and time consuming and a process which needed to take place over a longer period of time. Blase et al. (2012) describe how multiple stakeholders are involved in the adaptive leadership approach and that the emphasis is on developing consensus to challenge existing practices and agree on a course of action. Both schools in this study had multiple leaders in place to support the implementation of RfL. The ways that classes were organised was different in both schools and this influenced the degree of adaptation expected from the wider staff, in that teachers in School B had experienced a large shift to mixed ability classes which
included students with PMLD whereas some classes in School A were already mixed, meaning that they could focus on a single change – that of introducing and using RfL.

5.2.3 Practical issues

This synthesised theme of ‘Practical issues’ was made up of basic themes related to having the time, space and equipment available to use RfL. Comments regarding these areas tended to be made more by the practitioners who were using the RfL materials on a daily basis and they appreciated that this allocation of time, space and resources was encouraged and supported by the school leadership team.

Having sufficient time to plan, prepare resources and to use RfL effectively was raised by interviewees from both schools as a facilitating factor for implementation. For the practitioner in School A however time was also a barrier as, having less training and experience than the School B practitioner, she felt that she needed more time to explore the RfL materials in detail. Both interviewees in School A talked about the competing pressures on time for staff and being able to balance RfL within a range of different priorities.

Identifying an appropriate space to carry out RfL assessments was a theme discussed by Practitioner A as there was no dedicated space for this process. This meant that she had a range of choices to suit different assessments and different pupils but this could also potentially lead to timetabling and room availability issues. Practitioner B had a room in which she carried out assessments and where a number of resources related to RfL were stored, and therefore the majority of assessments were undertaken there. In both schools work towards RfL steps were also taking place throughout the school day and across the whole curriculum. The RfL additional guidance booklet (WAG, 2006) advocates the allocation of particular times to assess and record progress including a time to discuss assessments with other staff and this happened informally in both schools.

In both schools there was a range of equipment which could be used for the assessment of RfL steps and also to support activities to support progress. School B particularly valued the use of an iPad as a motivator for students, to share progress in the form of video clips with parents and other stakeholders and as a training tool. This use of
photographic or video evidence for these and for moderation purposes in conjunction with the RfL DVD is recommended in the RfL materials (WAG, 2006).

5.2.4 RfL in practice

This synthesised organising theme is made up of two synthesised basic themes which are ‘Recording progression’ and ‘RfL’ in action. Each of these themes is discussed in turn in the following sections.

5.2.4.1 Recording progression

This synthesised basic theme comprises basic themes on recording and reporting from both schools as well as themes related to targets and progression.

The RfL materials state that significant new responses showing progress should be recorded in a concise and manageable format. Both schools had designed simple paperwork to record progress for individuals using RfL. School B had developed these further in that they had adapted and broken down the RfL steps on the Routemap. Practitioner B also discussed only recording ‘wow’ moments which showed noteworthy progress, to avoid unnecessary repetition in record keeping. Practitioner A said that School A’s recording sheets did not allow space for commenting in any level of detail. Much information was shared verbally between staff in both schools and there did not appear to be formal written mechanisms for recording more detailed information for example the particular activity, resources, staff members or other contextual factors regarding the assessment undertaken. The RfL Additional Guidance booklet (WAG, 2006) advocates recording this level of information to describe what strategies were used by the learner and what kind of prompting or level of support was needed by the pupil, to inform future planning.

Van Walwyck (2011) also stated that an agreed and consistent record-keeping system is important to track pupil progress over time and which should incorporate detail on the nature of individual responses rather than using a tick-box approach. Van Walwyck (2011) found that although the RfL materials give a good overview of best practice in relation to recording they do not provide exemplar templates for recording and therefore investigated how practitioners in other schools had dealt with this issue by requesting
information from contributors to the SLD Forum (DfE, 2012b). Respondents to this request had developed their own methods of incorporating more assessment information and did so in a variety of ways, including the use of a spreadsheet package with links to teaching strategies, assessment activities, what to look for, detailed assessment activities and hyperlinks to video evidence. Manager A was investigating the use of similar recording systems which could meet the needs of the whole range of students in mixed classes but these were not yet in place. Data from School B regarding recording and reporting were much richer and more detailed than that from School A which could be explained by one or more of a number of factors including: that they had been using RfL for a longer period and had therefore had more time to adapt and develop the materials for their setting; that staff in School B had specific RfL training; that they were more aware of these issues as they were in the middle of a process of change; that they had access to iPads to use video recording as part of their assessments; or that due to their current organisation School B had to share records between a greater number of staff members.

Both schools reported pupil progress using RfL to parents during Statement Annual Reviews. School B discussed reporting to other stakeholders including the school governing body and to Ofsted. This highlights another important role for assessment in terms of teacher and whole school accountability. Van Walwyck (2011) discussed how the purpose of assessment can be ‘for learning’ for the pupils or ‘of learning’ to evaluate teaching methods and to demonstrate school effectiveness. This was incorporated into the group of ideal criteria identified by Van Walwyck (2011) that should be part of an effective system of measuring progress. This view that RfL could or should meet both of these purposes is a matter of debate for example Lacey (2014) contributed to a query regarding use of RfL on the SLD Forum:

Routes for Learning is a formative assessment tool and is not good for summative use. Although the behaviours on the map are all given numbers, learners do not conveniently travel from 1-43 in a tidy way. Sometimes they even seem as if they are going backwards because they revisit earlier developmental stages to add another bit of understanding. Some schools have tried to suggest how far the developmental behaviour individuals is established through using a percentage
but I personally don’t think Routes should be used that way… Let’s just record the progress individuals have made and celebrate the idiosyncratic nature of their journeys through the earliest stages of development.

Lacey (2014)

As put forward in Chapter Two (Broadfoot, 2007) (Section 2.3) due to the uneven learning profile of students with PMLD, alternative measures may be more appropriate for evaluating the skills and abilities of school staff and whole school effectiveness, for example through observing and interviewing teaching staff to evaluate the quality of their interactions and work with pupils. The RfL authors emphasise that the main aims of the materials are to: give a baseline assessment; track and support on-going progress and to support positive reporting to parents. RfL assessments were not designed to be reported quantitatively with summary scores. In the RfL Additional Guidance booklet (WAAG, 2006) there is a brief suggestion that some key behaviours could be the basis of ‘summative descriptors’ which could be used to demonstrate school effectiveness.

School A interviewees emphasised that targets originated from each child’s Statement of SEN and that IEP and RfL targets ‘cascaded’ into the Statement. This was seen as a facilitator for the implementation of RfL as it linked to activities that the staff already undertook. In School B being able to demonstrate progression for learners with PMLD was a facilitator of RfL because of the positive influence this had on staff attitudes and motivation.

5.2.4.2 RfL in action

This synthesised basic theme was made up of a range of basic themes drawn from both Schools A and B. These included the assessment and historical context, the nature of PMLD, descriptions of RfL, adapting RfL and links with other assessments.

School B staff gave a great deal of information related to the historical context of how classes were organised to meet the needs of children with PMLD and this was probably due to their extensive experience working with this student group and that they were in the process of changing their provision.
Interviewees from both schools discussed the nature of PMLD although the vast majority of the data supporting this theme came from School B, probably due to their longer experience and more in depth training. Staff from both schools talked about pupils with PMLD in relation to the P-levels as operating from level 1 to 4. These pupils were described as extra complex and needing support to process information. Interviewees from School B talked about students with PMLD finding it challenging to generalise or retain knowledge and understanding. It was felt that they needed a slower pace and more sensory delivery of the curriculum. Staff members needed to be attuned to recognise, understand and respond to the potential subtlety of the communication of this group. These contributions link to the principles of the definition of PMLD given by Samuel and Pritchard (2001) in that there is a balance between the complexities associated with PMLD and the supportive conditions needed to enable these young people to engage and achieve.

Descriptions of RfL from School A were in relation to how the materials meet the assessment needs of the lower ability children. There was a perception from all interviewees that RfL brought together existing practices into a more cohesive framework for assessment for example, intensive interaction and sensory work. Manager B emphasised that RfL is an assessment tool and not a curriculum. There is less danger with RfL than other more checklist style assessments where there may be a blurring of assessment and curriculum (Martin, 2006). All interviewees talked about how RfL is relevant to pupils with PMLD and how the core route pupils are currently working on can be supported throughout the school day and the whole curriculum. Durlak and Dupre (2008) identified characteristics of an innovation as a factor affecting the implementation process and these include compatibility of the innovation with an organisation’s priorities and values. Interviewee responses described above indicate that RfL is a good fit with existing policies and practices and organisational values related to inclusion and equality of opportunity for this student group.

The basic theme of adaptation came from participants in School B. The remaining innovation characteristic discussed by Durlak and Dupre (2008) as a factor affecting the implementation process is adaptability, in terms of the degree to which the innovation can be modified to fit provider preferences, practices, needs, values and norms.
Practitioner B felt confident enough in her own experience and expertise to make changes and adaptations to the RfL materials to break down or extend some steps on the to meet the needs of individual pupils. This links to the hierarchy of skill development described by Haring, Liberty and White (1981) at the practitioner level as adaptation is the final stage in their model after acquisition, fluency, maintenance, generalisation and application. Manager A expressed that practitioners in School A found it difficult to understand some of the language in the RfL materials but felt less able to adapt the RfL materials. This could indicate that School A with less experience and expertise currently are at developing fluency in the use of RfL and are so at a less advanced stage of the hierarchy.

Blase et al. (2012) outline the stages of implementation which consist of: exploration and adoption, program installation, initial implementation, full implementation, innovation and sustainability. Innovation is the stage which relates to adaptation, and Blase et al. (2012) state that whilst it is a common assumption that some adaptation of an innovation is required to overcome implementation challenges that there should be a definition of core components of the intervention which should not be adapted. From examination of the RfL Additional Guidance booklet (WAG, 2006) it would be possible to identify a number of key elements of the resource although these are not listed for the purposes of fidelity and adaptation. Blase et al. (2012) advise that is prudent to implement an innovation with fidelity first before considering making adaptations and improvements. Staff from School A are at this stage and are using RfL exactly as described in the materials, whereas School B are in the process of developing and improving the materials to meet the needs of their particular students and setting.

Interviwees from both schools discussed other assessments which had been used with students with PMLD and the differing purposes of these. It seemed that another assessment, for example B Squared, might be used on an annual basis in order to give quantitative progression data for reporting whilst the RfL was used as a formative assessment on a practice level with this group of pupils. In School B RfL data was collated by the head teacher and presented in graphs to meet leadership needs regarding the recording of pupil progress.
5.2.5 Rationale for using RfL

This final synthesised theme is made up of the basic themes ‘Benefits of RfL’ and ‘Links within class’. Basic themes from other areas could also contribute to the rationale synthesised theme as they also give reasons to support the use of RfL however these themes are already discussed in earlier sections for example, ‘Descriptions of RfL’, ‘Nature of PMLD’ and ‘Benefits of progression’.

Staff members from both schools discussed the benefits of RfL for pupils, parents and staff as well as at the whole school level. The interviewees described their belief that RfL is the only assessment available which meets the very specific needs of children and young people with PMLD. A major benefit of RfL is the way that it enables staff members to see progression and to gain a sense of their own impact on the learning of these students. Practitioner A described how her views about pupils with PMLD changed from being about what these children could not do, to focusing more on what they can achieve. Practitioner B discussed how RfL can make teaching students with PMLD much easier for staff members and how it supports the design of appropriate IEP targets for these pupils. Additionally School B interviewees appreciated the underlying theoretical basis for RfL and felt that the RfL materials linked and coordinated existing aspects of their work with pupils with PMLD and allowed progress to be shown through many strategies which were already in place.

As described in Section 5.2.2.1, Durlak and Dupre (2008) identify provider characteristics as being a factor affecting the implementation process. These include perceiving the need for the innovation and seeing its benefits. For those interviewed there was a perceived need for the RfL materials because they were viewed as being the only assessment of its type and were relevant to the needs of pupils with PMLD. The interviewees were also clear that there are a number of benefits of RfL.

School A interviewees talked about how the routes being followed and assessed using RfL linked with other classroom activities and the curriculum as well as throughout the other periods within the school day for example during feeding and bathroom routines. This was also discussed by School B staff members when they were giving descriptions of RfL saying that children worked on their particular core route at that time throughout all the
different curriculum areas. This shows as discussed earlier that staff members interviewed had a sufficient sense of self-efficacy and skill proficiency which are two of the provider characteristics identified by Durlak and Dupre (2008) which are factors for successful implementation.

5.3 Summary of findings

The current study found that there were a number of factors influencing the implementation of RfL as shown by Durlak and Dupre (2008) in their ecological framework for understanding effective implementation. There were factors operating at different levels and this included community level factors, organisational factors, provider characteristics and innovation characteristics as well as factors related to the prevention support system offering training and technical assistance.

Because local contexts can be so different there were a whole range of influences contributing to the capacity of the two schools in this study which affected the implementation of the RfL assessment approach. The themes emerging from both schools were similar in nature although contributions from School B tended to be richer and more detailed than those from School A. A likely explanation for this is the increased training, experience and expertise of both interviewees in School B in terms of working with students with PMLD and also with RfL. This increased their confidence in carrying out RfL assessments, their self-efficacy and their willingness to adapt the materials in response to their setting and pupils. The level of leadership support as well as staff attitudes, values, beliefs and principles also influenced implementation of RfL.

However, having a higher level of expertise amongst a limited number of staff members did not necessarily lead to a greater impact on the implementation of RfL or the practice of other staff across the school. The ways in which classes were organised to meet the needs of students with PMLD and the length of time the organisation had been in place was another important factor influencing implementation of RfL by other staff. Where teaching staff already had experience in working with children with PMLD in mixed classes they were more able to include RfL in their daily practice whilst staff who were new to teaching mixed classes may have found using RfL more of a challenge. From the schools in this study it seems that first developing experience and expertise in working
with pupils with PMLD may enable the acquisition of knowledge and skills which can provide a foundation for the effective use of RfL. The levels of staff knowledge, expertise and experience, the availability of training opportunities and sources of support all influence the options regarding how classes are organised in terms of where pupils with PMLD are placed.

This research reinforces the view of the Salt Review (DCSF, 2010) which recognised a growing gap in the work force specialising in teaching pupils with SLD and PMLD, and made recommendations regarding increased training opportunities. Information about and access to the online training materials could increase staff capacity to understand the ways in which pupils with PMLD learn and develop skills and raise awareness of the necessary attunement and communication skills, however practical experience and modelling are also an important factor in developing staff expertise. Training is particularly important to ensure a skilled workforce to meet the needs of the increasing numbers of pupils with PMLD in education (DCSF, 2010).

Van Walwyck (2011) in her evaluation of the RfL materials found that a more thorough recording system needed to be developed by schools to supplement the Routemaps. This could record detail of the specific stimuli responded to (or not), the kind of responses seen, the setting and staff member involved to give sufficient information to other current and future teaching staff. In both schools studied this kind of information was largely shared verbally rather than in a written format with some recording of progress using photographic and video evidence.

In line with the RfL recommendations both schools in this study were using the materials as intended for formative assessment or assessment for learning. They had not attempted to record information quantitatively at a classroom level although there was some indication that School B leadership had collated RfL information to present it graphically as part of recording whole school data.

There was a marked difference between the schools in terms of the role of other professionals external to the school with the speech and language therapist playing a key training and supportive role in School A and no equivalent professional role for School B. In addition there appeared to be less parental involvement than originally anticipated by
the researcher. There is clear guidance in the RfL materials regarding the importance of the role of a range of stakeholders including parents with the justification that this leads to increased knowledge and understanding of the child which in turn contributes to more detailed and accurate assessments and greater opportunities for learning and progress.

Van Walwyck (2011) designed a set of criteria to be met by a successful system of measuring progress of children with PMLD. She found that the RfL materials met the majority of these criteria and identified a number of advantages and disadvantages as identified in Section 2.5.4. The schools in the current study also found that schools needed to develop their own more detailed recording systems. Whilst Van Walwyck (2011) makes a good argument for taking account of other skills for example physical skills and how these can impact on cognitive development however this is not enough justification for adapting the RfL materials to this extent. Rather, this is a case for the involvement of all professionals and carers working with a learner, using a range of appropriate assessments in different areas, to support the best possible progress in their development of skills, knowledge and understanding as proposed by the RfL Additional Guidance booklet (WAG, 2006). Van Walwyck’s (2011) assumption that there could or should be just one assessment to meet the many and varied needs of children with PMLD may be unrealistic. This is especially the case in terms of gaining information related to school performance from RfL which has primarily been designed as a formative assessment.

5.4 Critique of methodology and limitations of the research

This section will critically evaluate the research study, first focussing on the research design. This will be followed by an examination of some limitations of the research including

5.4.1 Case study design

This research used an exploratory multiple embedded case study design to investigate the research questions. The limitations of case studies are discussed in Section 3.9.2 the main one of which is the lack of generalisability (Somekh & Lewin, 2012). However, Yin (2014) argues that case studies are generalisable to theoretical propositions and that they can
expand and generalise theories. Somekh and Lewin (2012) discuss that a good case study can have naturalistic generalisation, where the reader can recognise experiences that reflect their own and can generalise this to their individual situation. The aims of this study were to: contribute to knowledge of how RfL can be used in practice; identify the facilitators and barriers to using RfL; and contribute to theory by gaining further understanding of the assessment needs of children and young people with PMLD. An exploratory case study design was appropriate to meet these aims as it can contribute to the knowledge of the individual, social, political phenomena and allows the preservation of the holistic and meaningful features of real life events (Yin, 2014). Whilst it could not be claimed that the schools within this study are representative of practice in other schools it is intended that others can learn from the findings and identify opportunities for application to their practice and to have a positive impact on the assessment of children and young people with PMLD.

This small scale exploratory study enabled an in depth exploration of the experiences and views of a small number of participants. Being able to investigate the views of both managers and practitioners, conduct observations and examine the RfL materials enabled a range of viewpoints to be represented and for triangulation across these data sources. This means that the findings are strengthened as they are based on a range of sources of converging information.

Case study research can be very time consuming and therefore the researcher was aware of the potential challenge of ensuring that this case study was well defined to maintain focus on the research aims and also for practical and capacity purposes. This was done in order to generate manageable levels of data and therefore other potential data sources were not gathered for example, copies of school policies, RfL recording paperwork and parents’ views. However, sufficient sources of data were gathered to gain a good range of evidence in response to the research questions.

The findings regarding the process of implementing RfL are dynamic in that the data gained reflect not only a snapshot of the current time but also of current perspectives on the past and plans for the future. Implementation is a fluid process and therefore staff
are continually reflecting on and evaluating their practice and making adaptations to the innovation but also to their own approaches and views.

5.4.2 Sampling of participants

The sampling of participants for this study involved the use of professional contacts (School A). Further potential schools were identified and the other participating school was selected (School B) through recommendation from School X (see Section 3.6.2). The use of convenience and snowball sampling may have had limited the range of participants in that they may have had very similar values and approaches. The researcher was committed to undertaking the research in the local geographical area for practical reasons. Without these restrictions then other sampling methods could have been used for example, the use of on-line forums, however this would have had its own issues in terms of participants self-selecting and would still not therefore have been an entirely representative sample of schools using RfL. The schools selected by the researcher met a range of inclusion and exclusion criteria but also were different in various aspects as outlined in Chapter Three.

5.4.3 Semi-structured interviews

As described in Section 3.9.4 possible limitations of the use of semi-structured interviews are that they can be time consuming to carry out, transcribe and analyse (Cohen et al. (2011). The interviews were time consuming in that the transcription and analysis took a long time to complete, however this is also a strength of this method in that it allows the researcher to access the recordings as many times as necessary and to become immersed in the data. This led to deeper engagement with the data and increased understanding of the participants’ views.

Another potential disadvantage identified by Yin (2014) is that interviewees may show response bias. The researcher remained aware of this issue throughout the interviews and the wording of questions was designed to be relatively open and non-judgemental, and the use of interviews with managers and practitioners as well as observation data helped to support the views expressed by staff members.
5.4.4 Thematic analysis

A possible limitation of analysis of interview data is the maintenance of an appropriate balance between retaining the sense of the interview and fragmenting the data (Cohen et al. 2011). The researcher consciously attempted to code the data whilst holding on to the overall sense and meaning of the interviews. Coded sections and quotations were of sufficient length to carry real units of meaning which related to the whole rather than shorter codes which could result in oversimplification or losing the essence of the data. To ensure that themes were appropriate and reflected the views of participants member checking was used where participants were emailed thematic maps and asked for feedback.

Thematic analysis is a time consuming and recursive process but gave a depth of information on which to base broader findings. On coding it was challenging to separate RfL, the organisation of classes and the general curriculum and teaching for children with PMLD as these themes were so interlinked, particularly in School B. There were overlaps between themes as shown on the thematic maps for each school and this was tackled by the researcher by putting some codes in more than one theme to ensure each theme was supported by all the relevant codes. This was noted particularly in the mirroring of some potential barriers and facilitators, because participants tended to describe barriers as the absence of facilitators and vice versa. The use of an inter-rater checking process (Creswell and Plano Clark, 2011) would have helped to further ensure reliability in the coding process particularly where codes appeared more than once. Time constraints did not allow the use of an inter-rater for this research however this would have involved asking a colleague to check the coding process as well as the construction of themes.

5.4.5 Member checking

Member checking is defined by Creswell and Plano Clark (2011) as an approach in which the researcher takes summaries of the findings back to the participants in the study to ascertain if they are an accurate reflection of their experiences. The member checking procedure for this research comprised sending thematic maps of the data to participants from their setting. This meant that there was limited information for participants on which to base feedback. Giving the transcripts of interviews may have offered greater
opportunity for participants to correct factual errors. Sending these maps via email, rather than in person through face to face discussion, may also have reduced the probability that participants would reply to offer feedback.

5.5 Implications of the research findings

The potential implications of the research findings from this study will now be considered in turn with regard to children and young people, special schools and educational psychology practice.

5.5.1 For children and young people

This research has illustrated the value of the RfL materials in supporting and understanding of the ways in which children and young people with PMLD develop. The research highlights how the progress made by this group of pupils can be assessed, demonstrated and shared with others and how next steps can be made. The RfL assessment approach recognises the lateral progress of students with PMLD. It encourages a focused and evidence based approach by families and professionals to track progress and plan focused opportunities to support further learning. The research emphasises the importance of children having a relationship with one or more adults who are attuned to their communication and other needs in order to maximise the opportunities for learning and for recording the progress in learning. This enables them to have focused intervention and learning relevant to their development. The research indicates that RfL is a strategy which enables pupils with PMLD to have their needs identified and met, to be included and to have their communication ‘heard’. The use of a consistent team approach should minimise the possibility of their communication being misinterpreted and enable the building of a shared understanding of how a child thinks, feels, responds and learns, their preferences and dislikes. This study indicates that because staff members can see progress more effectively through using the RfL materials they have a more confident and enthusiastic approach with children and this may well impact on the motivation of both staff and pupils. The research indicates that having their progress recognised using RfL and celebrated may result in an increase in pupil engagement.
5.5.2 For special schools and teaching staff

This research raises the issue of how the organisation of classes with regard to students with PMLD can impact on their learning experiences as well as on the demands made of the teaching staff. Decisions related to this organisation will be related to staff attitudes to working with children with PMLD which in turn links to the training, expertise and experience held by teaching staff.

This study highlights the importance of having staff trained in working with students with PMLD as this can act as a foundation for implementation of RfL. In addition the ongoing support of an RfL champion who can offer advice and opportunities to observe and share practice is key. It is important that ways of disseminating good practice in using RfL are established across the special school staff to build their skills, ensure a consistent approach and to provide cover and contingency plans for when those staff usually working with these students are not available.

This research indicates that effective RfL implementation is more likely when it is the only new intervention introduced.

A further aspect of this research was that schools need to consider strategies to involve parents more meaningfully in the assessment process as part of a multi-disciplinary team. This will enable a consistent approach, minimise misunderstandings of pupil communication and be a significant factor in maximising opportunities for progression.

Schools using RfL will need to make decisions on how to record assessments and how this will fit with meeting the requirements to report nationally or to external bodies such as Ofsted. This involves discussion of values with regard to the purposes and functions of assessment as well as incorporating logistical factors. There is continuing debate on whether RfL could or should meet additional purposes in the drive for quantitative, performance data that is not necessarily related to the learning of that individual pupil, and schools will approach this decision in different ways.

The roles of teachers and teaching assistants in RfL assessment, and formative assessment as a whole, were influential in terms of the implementation of RfL within Schools A and B. This is due to a number of factors including differences in the training,
knowledge and experience of each professional, their position within the management structure of the school, the activities they normally undertake, their responsibilities and the status of their role.

In School A, although Manager A was one of several staff with responsibility for RfL within the school it was the teaching assistant, Practitioner A, who undertook day to day RfL assessments. Practitioner A had less training and knowledge regarding RfL and of the development of students with PMLD then Manager A, but like other TA colleagues she had developed more experience of direct formative assessment using the RfL materials. In School B, however, Practitioner B was a qualified teacher with a great deal of knowledge, experience and expertise in working with pupils with PMLD and undertaking RfL assessments, both as a class teacher and on a withdrawal basis. This meant she had greater status within the school than Practitioner A and that day to day expertise in carrying out RfL assessments was less distributed in School B than School A. The intention of the senior leadership team in School B had originally been to utilise Practitioner B to train other staff throughout the school, however plans changed after a term to enable her to go back to teaching a PMLD class. These factors of knowledge, experience, expertise and status need to be considered when schools make decisions about how to introduce RfL and which professionals to involve to support effective implementation.

5.5.3 For educational psychology practice

As outlined by Frederickson (2002) EPs play a role in advising schools and use an awareness and knowledge of the research evidence regarding the effectiveness of different interventions. EPs therefore need to have access to information regarding a range of interventions, practices and resources to be able to share this with schools. This has implications for the training and continuous professional development of EPs. With the increase in children with PMLD, EPs need training opportunities to gain an awareness of RfL, how it can be used, the rationale for its use and the barriers and facilitators affecting its implementation. In addition for EPs to share their knowledge with the appropriate school staff they may need to develop better links with special schools.

EPs have an understanding of the different kinds and purposes of assessment and also of the real world challenges for schools in terms of the competing demands and
expectations from different stakeholders including children, parents, managers, local authorities, Ofsted and the government. A clear rationale is needed to make a case for the use of formative assessments like RfL at a time when schools are required to be publicly accountable and obliged to be able to demonstrate progress, most often in a summative and quantitative way. Both schools in this study had made attempts to some degree to adapt RfL outcomes to make them more quantifiable to contribute towards accountability measures. Like school staff, EPs undertake a range of assessments, including both formative and summative, for a range of purposes including to: gain a picture of a child’s strengths and abilities, track progress and identify the next steps for future learning. EPs can play a role in supporting schools to develop assessment strategies to meet the individual teaching and learning needs of children and young people (formative assessment) as well as to examine ways in which to undertake and record summative assessment.

EPs have expertise and understanding of issues surrounding implementation and are able to offer support to school staff in this respect. As described by Cline (2012) EPs have an awareness of real life settings and their potential limitations (for example, financial, staffing changes) and are therefore well situated to support school staff to identify the key features of an intervention and to make a ‘realist evaluation’ of implementation to assess the effects of changing key conditions. This can be shared with school staff through routine work within schools or through offering training. As Cline (2011) outlines EPs are able to look beneath the surface of observable inputs and outputs of an intervention and to examine underlying causal mechanisms and key contextual factors that may influence outcomes separately and in combination. With their knowledge of practice within a variety of different schools and relationships with school staff Cline (2011) describes how EPs are well located to form propositions about what programme elements work for whom and in which circumstances, and to be able to fine tune these as new evidence is drawn from different settings. EPs can then share good practice and could also support schools and SENCOs to forge links to enable them to support each other, both with the teaching of pupils with PMLD and with the implementation of RfL.
5.6 Considerations for future research

As a result of consideration of the findings and limitations of this research a number of areas have been identified for potential future research.

This study was an exploratory case study to gain an understanding of the ways in which RfL is used in schools, why it is used in these ways and the barriers and facilitators to its use. An exploratory case study methodology was used because there has been limited research in this area to date. This research was tightly defined to ensure its completion within time and other constraints. Future research could explore these research questions further with more in depth exploration of each case incorporating more data sources which could include examination of the schools’ assessment policies and examples of pupil records, interviewing a greater range of staff, talking with parents about their perceptions of RfL or attending and observing planning meetings or annual reviews.

A case study could also be used to give a more in depth view of an individual pupil’s experience in relation to RfL with observations made over a period of time and the collection of additional sources of data as outlined above.

A key theme of implementing RfL raised in this research was staff awareness of, and access to, training for RfL on a training course or an ongoing support level. It would be useful to investigate the training opportunities available specifically related to RfL and to examine how this impacts on its use.

Each school that took part in this study had different professionals with different roles leading on and using RfL. The question of which staff members are involved in RfL in schools is a key question for the research planned and begun by P. Lacey (personal communication 19 February 2014) which is to use a questionnaire via the SLD-forum (DFE, 2012b) followed by a number of case studies. Indeed, this research has been requested during correspondence to inform the development of this wider-scale research. This will be a valuable next step in the research regarding RfL and will enable the sharing of good practice.
5.7 Summary of discussion

This chapter has discussed the findings from the current study focusing on the organising themes developed through cross-case analysis. These themes were: whole school issues; people issues; practical issues; RfL in practice and the rationale for using RfL. The area of assessment for pupils with PMLD is a field of growing interest and is increasingly on the agenda for special schools. P. Lacey (personal communication 19 February 2014), has planned research on identifying schools using RfL or Quest for Learning (CCEA, 2007) and how the materials are being used. The findings of the current study may act as a foundation for Lacey’s work and other studies in this developing area of research.


B-Squared, Connecting Steps software, http://www.connectingsteps.co.uk/ accessed 29.06.2012,


DFE (2013a). *Training materials for teaching SEND students.* [http://www.education.gov.uk/complexneeds/modules/Module-2.3-The-curriculum-challenge/All/m07p000a.html](http://www.education.gov.uk/complexneeds/modules/Module-2.3-The-curriculum-challenge/All/m07p000a.html) Accessed 17.5.13


Appendix A – Systematic literature search results


<p>| 16 | Collaboration and Integration of Services in Greek Special Schools: Two Different Models of Delivering School Services | Xanthacou, Yota; Kaila, Maria. <em>International Journal of Inclusive Education</em> 15.8 (2011): 797-818. |</p>
<table>
<thead>
<tr>
<th></th>
<th>Title</th>
<th>Authors</th>
<th>Journal</th>
<th>Volume Issue Year</th>
</tr>
</thead>
</table>
Appendix B: RfL Routemap
Appendix C: Example from the RfL materials (WAG, 2006)

ROUTE PLANNER (EXTRACT)

- Anticipates within social routines (17)
- Redirects attention to second object (18)
- Random activities cause effect (19)
- Looks briefly after disappearing object (20)
- Action on reactive environment (21)
- Communicates 'more' (22)
- Contingency responding (23)
- Purposeful action on everyday environment (24)
ASSESSMENT ACTIVITIES / THINGS TO TRY

Using an action which you have established that the learner can do (e.g. kicking, pressing a switch), use a reward and observe the rate of response.

THINGS TO LOOK FOR

Look for:

- the learner making something happen independently
- the rate of action increasing when it has an effect; for example, kicking increases when it causes a mobile to move
- whether the learner waits for a reward before pressing a switch again, etc.

Refer to Contingency Awareness (26).

TEACHING STRATEGIES (TO MOVE PUPIL TO NUMBERED STEP)

At this stage the learner may not fully understand the connection between his/her action and the outcome. Ensure the action obtains a consistent result for the learner to establish the link.

Using a string attached to the learner’s ankle to produce movement of a mobile may be a particularly effective technique: the more the learner kicks, the more the mobile moves. It is important that the learner receives good feedback.
Appendix D: Information sheet for participants

Information sheet

An investigation into how the Routes for Learning assessment approach has been implemented by professionals working with children and young people with profound and multiple learning disabilities.

Invitation

As a professional using the Routes for Learning assessment approach with pupils with Profound and Multiple Learning Difficulties (PMLD) you have been invited to take part in this research project. The research is to be carried out by a trainee educational psychologist. This information sheet outlines the aims of the research and what it means for you if you decide to take part. Please read through this information to inform your decision on whether you would like to be involved.

Why is this research being done?

I am a trainee educational psychologist on placement in the local authority and studying at Manchester University. As part of my studies I became aware that since the launch of Routes for Learning in 2006 there has been very little research that shows how it is being used in practice. I hope that this study will increase understanding of some of the ways the approach can and is being used and of some of the issues in its implementation. Your school has been selected to take part because you are using Routes for Learning and are part of the local authority.

What will happen if I take part?

I will ask to interview members of school staff and other professionals who use the Routes for Learning approach within your school. The interviews will be recorded and will take between 30 and 45 minutes. I may ask you to check your interview transcript later. I will feed back general findings to you either in person or in writing. I would also like to observe Routes for Learning being used in practice. Please get in touch to ask any questions regarding the research. Please sign the enclosed consent form if you are willing to take part.

What might the benefits be of taking part?

This research could add to the evidence base for the use of Routes for Learning and raise awareness for how it is used within special schools. This might help to show how the approach can be used in other settings by a range of professionals.
What happens to the data collected?

Only the researcher will have access to the data generated, and the University Supervisor will view the anonymised data and act as custodian for the data. The data will be stored securely and retained for a period of five years after submission of the thesis in line with Manchester University regulations. Recorded interviews will be saved on an encrypted memory stick and be deleted on completion of a transcript. All electronically stored data will be anonymised and personal data including contact details will be kept in a secure filing cabinet and destroyed as soon as possible.

How is confidentiality maintained?

Codes will be used instead of school or staff names to keep information confidential. Information shared in interviews will remain confidential (in line with the school’s safeguarding procedures). Any direct quotes used will be anonymised.

What happens if I do not want to take part or if I change my mind?

You do not have to take part and if you decide to withdraw from the research at any stage you can do so without giving a reason and your data will be destroyed. Your participation or non-participation will not have any effect on the service you would normally receive from the educational psychology service.

Will I be paid for participating in the research?

There is no payment offered for your participation.

What is the duration of the research?

Interviews will take place in the Summer or Autumn term 2013 and the thesis will be published in Autumn 2014.

Where will the research be conducted?

The interviews will be carried out within your school or setting. Analysis of the data will take place at the researcher’s home or at Manchester University and will be conducted by the researcher.

Will the outcomes of the research be published?

The outcomes of the research will be published as a thesis and may also be published in an academic journal.

What happens after the research?

After the research I will write to you with a summary of my findings. I will also share these findings with the local authority educational psychology service.
Criminal Records Check

The researcher has undergone a satisfactory criminal records check and can therefore conduct research on school premises.

Contact for further information

If you have any questions about this research the researcher and supervisor of the project can be contacted for further discussion on any aspect of this study.

(Researcher): Heidi Nothard

Address: Doctorate in Educational and Child Psychology, Educational Support and Inclusion (ESI), School of Education, Ellen Wilkinson Building, The University of Manchester, Oxford Road, Manchester, UK, M13 9PL.

Email: heidi.nothard@postgrad.manchester.ac.uk

Telephone: 0161 275 3511 or 3460 (Please leave a message with Jackie Chisnall - Programme Secretary)

Catherine Kelly (supervisor):

Address: Doctorate in Educational and Child Psychology, Educational Support and Inclusion (ESI), School of Education, Ellen Wilkinson Building, The University of Manchester, Oxford Road, Manchester, UK, M13 9PL.

Email: catherine.kelly@manchester.ac.uk

Telephone: 0161 275 3511 or 3460 (Please leave a message with Jackie Chisnall - Programme Secretary).

What if something goes wrong?

You can contact the researcher or supervisor at any point during or after the research if you require assistance with anything related to the research conducted.

If there are any issues regarding this research that you would prefer not to discuss with members of the research team, please contact the Research Practice and Governance Co-ordinator by either writing to 'The Research Practice and Governance Co-ordinator, Research Office, Christie Building, The University of Manchester, Oxford Road, Manchester M13 9PL', by emailing: Research-Governance@manchester.ac.uk, or by telephoning 0161 275 7583 or 275 8093.
## Appendix E: Operational risk assessment

<table>
<thead>
<tr>
<th>Risk</th>
<th>Level of risk</th>
<th>Contingency plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>No participants recruited</td>
<td>Low</td>
<td>Link with school manager to contact participants. Re-issue letters and information sheets where necessary. Invite additional staff/professionals from the school if appropriate and possible within timescale.</td>
</tr>
<tr>
<td>Consent forms not received.</td>
<td>Medium</td>
<td>Link with school manager to contact potential participants. Re-issue letters and information sheets where necessary.</td>
</tr>
<tr>
<td>Individual participant does not give consent to participate.</td>
<td>Low</td>
<td>This participant would not take part in the research. Invite other staff members/professionals where available and appropriate.</td>
</tr>
<tr>
<td>Individual participant withdraws consent to participate.</td>
<td>Low</td>
<td>This participant would not take part in the research. Invite other staff members/professionals where available and appropriate. Destroy any data already gathered.</td>
</tr>
<tr>
<td>Participant absent during research process.</td>
<td>Low</td>
<td>Arrange later opportunities for observations and interviews where possible. If not then invite other potential participants where possible and appropriate and time allows.</td>
</tr>
<tr>
<td>Researcher absence</td>
<td>Low</td>
<td>Researcher inform participants and reschedule where possible.</td>
</tr>
</tbody>
</table>
## Appendix F: Timeline and time budget

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Activity</th>
<th>Completed by</th>
<th>Time Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Preparation</strong></td>
<td>Familiarisation with RfL materials and resources including DVD.</td>
<td>May 2013 + ongoing</td>
<td>2 days</td>
</tr>
<tr>
<td></td>
<td>Submit thesis proposal.</td>
<td>Aril 2013</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prepare thesis panel presentation.</td>
<td>April 2013</td>
<td>1 day</td>
</tr>
<tr>
<td></td>
<td>Attend thesis panel.</td>
<td>25.4.13</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Make any changes to submission.</td>
<td>May 2013</td>
<td></td>
</tr>
<tr>
<td><strong>Thesis plan</strong></td>
<td>Update literature review.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Write A2 – Thesis plan</td>
<td>End of May 2013</td>
<td></td>
</tr>
<tr>
<td><strong>Pilot</strong></td>
<td>Contact pilot special school and conduct pilot semi-structured interview.</td>
<td>September 2013</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adapt semi-structured interview questions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Identify participants</strong></td>
<td>Contact further special schools to establish 2-3 cases.</td>
<td>October 2013</td>
<td></td>
</tr>
<tr>
<td><strong>Gain consent</strong></td>
<td>Consent letters to potential participants.</td>
<td>Late 2013</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consent replies expected.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reminders/checks given.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Data gathering</strong></td>
<td>School A: semi-structured interview (management).</td>
<td>September 2013</td>
<td></td>
</tr>
<tr>
<td></td>
<td>School A: semi-structured interview (practitioner).</td>
<td>September 2013</td>
<td></td>
</tr>
<tr>
<td></td>
<td>School A: semi-structured interview with support service professional if appropriate.</td>
<td>December 2013</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Submit reflective report to thesis panel</td>
<td>September 2013</td>
<td></td>
</tr>
<tr>
<td></td>
<td>School B: semi-structured interview (management).</td>
<td>December 2013</td>
<td></td>
</tr>
<tr>
<td></td>
<td>School B: semi-structured interview (practitioner).</td>
<td>December 2013</td>
<td></td>
</tr>
<tr>
<td></td>
<td>School B: semi-structured interview with support service professional if appropriate.</td>
<td>December 2013</td>
<td></td>
</tr>
<tr>
<td><strong>Data analysis</strong></td>
<td>Transcription and thematic analysis of semi-structured interview data – school A.</td>
<td>January 2014</td>
<td>2 days</td>
</tr>
<tr>
<td></td>
<td>Transcription and thematic analysis of semi-structured interview data – school 2.</td>
<td>February 2014</td>
<td>2 days</td>
</tr>
<tr>
<td></td>
<td>Member checking.</td>
<td>April 2014</td>
<td>Half a day</td>
</tr>
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<td></td>
<td>Presentation of results.</td>
<td>April 2014</td>
<td></td>
</tr>
<tr>
<td>Feedback to participants</td>
<td>April 2014</td>
<td>4 days</td>
<td></td>
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<tr>
<td>Write up</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Writing methodology</td>
<td>Dec 2013</td>
<td></td>
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</tr>
<tr>
<td>Submit thesis abstract</td>
<td>Jan 2014</td>
<td></td>
<td></td>
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<tr>
<td>Write up results section</td>
<td>April 2014</td>
<td></td>
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<tr>
<td>Write up conclusion</td>
<td>May 2014</td>
<td></td>
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<tr>
<td>Final literature review check</td>
<td>May 2014</td>
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<tr>
<td>Complete write up</td>
<td>May 2014</td>
<td></td>
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<tr>
<td>Give notice of submission</td>
<td>May 2014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Submit thesis</td>
<td>June 11th 2014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mock oral examinations with tutors</td>
<td>June 2014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral examinations with examiners (vive voce)</td>
<td>July 14th 2014</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix G: Consent form for participants

Consent form

An investigation into how the Routes for Learning assessment approach has been implemented by professionals working with children and young people with profound and multiple learning disabilities.

If you are happy to participate please complete and return the form by email to heidi.nothard@postgrad.manchester.ac.uk

Please Initial Box

1. I confirm that I have read the attached information sheet on the above study and have had the opportunity to consider the information and ask questions and had these answered satisfactorily.

2. I understand that my participation in the study is voluntary and that I am free to withdraw at any time without giving a reason.

3. I understand that the interview will be audio-recorded

4. I agree to the use of anonymous quotes

5. I agree that any data collected may be published in anonymous form in academic books or journals.

I agree to take part in the above project

Name of participant: ___________________________ Date: ___________ Signature: ___________________________

Name of person taking consent: ___________________________ Date: ___________ Signature: ___________________________

206 | P a g e
Appendix H: Semi-structured interview schedule

Warm up:

Thank interviewee for consenting to be interviewed.

Recap on the information sheet regarding the purposes of the research and regarding confidentiality and anonymity and remind them of the right to withdraw.

Inform participant that there are four topic areas and that the interview will take between 30 and 45 minutes.

Inform the participant that the interviewer will take notes and record the interview.

Topic questions to be discussed with possible sub-topics:

In what ways is Routes for Learning used in this setting?
- In class.
- Which staff?
- Relate to what is taught.
- Target setting.
- Recording.
- Reporting.
- What other methods are used for assessment?

What is the rationale for using Routes for Learning in these ways?
- How does it compare to other assessment approaches?
- Nature of students with PMLD.
- Training.
- Management

What are the facilitators for implementing of Routes for Learning?
- Time?
- Training?
- Experience?
- Communication?
- Funding?
- Management support?

What are the barriers for implementing Routes for Learning?
- Time?
- Training?
- Experience?
- Communication?
- Funding?
- Management support?
Probes to allow respondents to clarify or give more detail:

Anything else?

Go on...

Can you tell me more about that?

Could you explain that again?

Finally, thank the participant for taking part in the interview.
### Appendix I: Observation notes and running record example (School A)

<table>
<thead>
<tr>
<th>Time</th>
<th>Observations</th>
<th>Thoughts and impressions</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:20</td>
<td>Register with pics on white board – each child receives pic &amp; says hello or signs &amp;/or presses a</td>
<td>seated in class, usually with PE and signs &amp;/or signs &amp; speech. Words &amp; signs in packet for Thursday.</td>
</tr>
<tr>
<td></td>
<td>disc which says “good morning”</td>
<td></td>
</tr>
</tbody>
</table>
| 9:25  | *Timetable (usual)*  
  A/B/C/D/E/F/G/H/I/J/K/L/M/N/O/P/Q/R/S/T/U/V/W/X/Y/Z  
  *Ind. pupil profiles*                                   | *IEP Targets untaken*  
  *RFL Progress*  
  4-8  
  NC                                               |
|       | Learning needs  
  - fine motor skills  
  - hearing  
  - mobility  
  - language  
  - social skills  
  - special needs  
  - visual  | IEP Targets untaken  
  *RFL Progress*  
  4-8  
  NC                                               |
| 9:30  | - groups/individual tasks  
  - 1 threading  
  - 1 colour pattern sequence  
  - 1 exercise (out of dress)  
  - 1 turn taking  
  - 1 with music toy  
  - 1 music & exercise  
  - 1 no exercise  
  - same in standing frame.  
  9:52  | Whiteboard, with animals animation, catwalk across.                                              |
|       | Break  
  10:25 | Story on white board. - drinks.                                                                   |                                                                                                             |

**Impressions:**

A lot of individual attention, care, eye contact, descriptive commenting. Very calm.

Each child has a box with their work/activities.

A broad range of abilities in this class.

- RFL  
  - p4-8 NC  
  - managing some complex medical needs, feeding  
  - use of specialist equipment, standing frames.
In class with L.
Pulls back in seat when waits  
Says, "What?"
Sprays water on head. 
Sprays forward a bit, rubs a little.
"Do you want sang?"
Tries to put in mouth.
"Do you want sang?"
Measures.
Soaked?
Dislikes it a lot.
Takes salt on hands.
For a few seconds, then looks to get something else.
Takes bell. "How do you feel?"
"Out of your mouth?"
Pulls away.
"Do you like her?"
"No, I don't like her."
Soaks it.
"Copies" good girl. "Shake it. Shake it."" 
Presented with light quills.
Gives bell a quick shake here picks up quill.
Finds an "O" button.
Tries to put in mouth. "When light off.
"Oh no."
"Changing colors.
"Pick up bells again." "Shake it."
Still holding head on call, bang (ish) on table.
Plays music (not known tune).
Bird, rabbit, cat, jenga, music.
2 hands movements, puts hands on "U"s.
Lots of eye contact.
Stop music. Vocals a little.
V - "stopped." "Do you want some face?"
Appendix J: Background information questionnaire

<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is your role?</td>
</tr>
<tr>
<td>How long have you worked in special education?</td>
</tr>
<tr>
<td>How long have you worked in this school?</td>
</tr>
<tr>
<td>How much experience have you had working with children with PMLD?</td>
</tr>
<tr>
<td>How long have you used Routes for Learning?</td>
</tr>
<tr>
<td>What kind of training have you had about Routes for Learning?</td>
</tr>
</tbody>
</table>
Appendix K: Example of an annotated transcript and codes (School B)

Interview lasted for 50 minutes, 4 seconds and was conducted in the small room allocated for carrying out RfL assessment work. Teacher B has been carrying out Routes for Learning assessments with children throughout the school at the same time as modelling to and advising teaching staff.

Researcher: ##R##

Teacher: ##TB##

##R##

Ok. What I’m basically doing is researching into Routes for Learning and how it’s being used and why it’s been used in those ways and what things are the barriers and facilitators or make it harder and easier. Originally I was asked to do as a – we have to do a systematic literature review at university which is a really fancy way of doing a review. We have to use specific searches and databases. I realised that nobody actually knew, nobody had published anything about it. So that’s why I’m doing it. Nobody’s done anything about it at all to see how it’s working in practice other than they’ve done a bit in Wales but that’s where it started isn’t it. So that’s my idea is to see how it’s being used and then people after me can think about well how effective is it and how well is it working. But until we know how it’s working we can’t do the next bit so that’s where I’m up to. It’s going to take about half an hour. Is that alright?

##TB##

That’s fine. Yeah, yeah.

##R##

Ok. So the first question which you’ve already started telling me about is in what ways is Routes for Learning used here. So how are you using it.

##TB##

Yeah, basically erm I bring students or children out in the mornings and we do specific Routes for Learning erm activities. Erm not necessarily the target that they’re working. It might be a target that we want them to achieve so they’re getting a sample of the things that I’m expecting them to do. Erm staff come from erm those classes as well so that it’s not just me, because obviously our children, the nature of our children they don’t generalise very easily particularly our PMLD children erms. I’m trying to teach the staff as well as the children and then they take it away and carry on in class. So or then in the afternoons or when they go back to their own class their sessions regardless of what it is, numeracy, literacy, history, geography, modern foreign language the core route that they’re working on runs right the way through. So erm we use it also as part of an lbp. Erm that then makes it easier for the staff and easier for the children. It also makes the staff
List of initial codes – School B with Practitioner B and Manager B

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Students are withdrawn from class to do RfL</td>
</tr>
<tr>
<td>2.</td>
<td>Pupils with PMLD don’t generalise easily</td>
</tr>
<tr>
<td>3.</td>
<td>RfL is used in class</td>
</tr>
<tr>
<td>4.</td>
<td>The RfL routes pupils are using run right through the curriculum</td>
</tr>
<tr>
<td>5.</td>
<td>Staff document what the children are doing, how they do it and what’s the next stage</td>
</tr>
<tr>
<td>6.</td>
<td>Class based staff discuss and agree RfL assessments with Practitioner B</td>
</tr>
<tr>
<td>7.</td>
<td>Assessment information is collated</td>
</tr>
<tr>
<td>8.</td>
<td>Class based staff take ownership of RfL in class</td>
</tr>
<tr>
<td>9.</td>
<td>Assessment recording is shared between staff</td>
</tr>
<tr>
<td>10.</td>
<td>Class based staff can ask for advice from Practitioner B</td>
</tr>
<tr>
<td>11.</td>
<td>Staff shouldn’t need to ask for help</td>
</tr>
<tr>
<td>12.</td>
<td>The nature of the route is beneficial for children</td>
</tr>
<tr>
<td>13.</td>
<td>RfL gets over barriers for learning</td>
</tr>
<tr>
<td>14.</td>
<td>RfL is useful for pupils who have got to a certain stage on B-Squared or Pivats and can’t go any further</td>
</tr>
<tr>
<td>15.</td>
<td>RfL is a precursor to other assessments</td>
</tr>
</tbody>
</table>
Appendix L: Example of thematic analysis, basic themes (School A)
Appendix M: Example of thematic analysis, organising themes

Parental involvement

SALT file

Staff working together

Management support

Expert practitioner

Barriers to implementing RFL

Disadvantages of current way

Attitudes to change

What is RFL?

Why RFL?

RFL joins it up
Appendix N: Example of cross-case analysis of synthesised basic and organising themes

‘Staff training and learning’ synthesised basic theme. Yellow: School B, Pink: School A.

‘Practical issues’ synthesised basic theme.
Synthesised organising themes

- Benefits of RFL
- Roles in implementation
- Staff training + learning
- organisational + systems
- RFL in practice
- recording progress
- Practical issues
Appendix O: Ethical consent

Ethics Approval Application - CONFIRMATION for Medium Risk Ethics Education
Sent: 08 May 2013 16:21
To: Heidi Nothard

Dear Heidi,

Ref: PRI-81939759-A1

I am pleased to confirm that your ethics application has been approved by the School Research Integrity Committee (RIC) against a pre-approved UREC template.

If anything untoward happens during your research then please ensure you make your supervisor aware who can then raise it with the RIC on your behalf.

Kind Regards,

Hannah Salt

Room B3.8 | School of Education | Ellen Wilkinson Building | The University of Manchester | Oxford Road | Manchester | M13 9PL