“All children are reachable”: an exploration of teachers’ differing inclusive attitudes, self-efficacy, and pedagogical approaches to supporting children with reading difficulties and/or dyslexia, and Lesson Study as a method of supporting mainstream primary school teachers.

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Acknowledgements

In this piece of work, I see not only a culmination of a doctorate in educational psychology, but also a significant milestone in the journey of my life spent learning, and teaching. My thesis represents both an ending and a beginning. It marks the start of my career as an educational psychologist.

Within the space afforded to me here, I wish to thank my family and friends for continually supporting me. To my mum and dad, your lifelong love, belief and everlasting friendship has guided me throughout my life. You have taught me to seek fulfilment through hard work and purpose. You have shown me unconditional patience and support to get to this point.

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Abstract

Background

A strong body of evidence demonstrates links between teachers' self-efficacy (TSE), their inclusive attitudes, and their ability to create supportive learning environments for children with Special Educational Needs and Disabilities (SEND). Further, there is continued debate between researchers over the appropriate instruction of reading. Concurrently, a significant proportion of UK pupils struggle to meet minimum reading standards (Ofsted, 2022). There is a need to better understand how teachers can be supported to create inclusive and appropriately adapted learning environments for children with reading difficulties and/or dyslexia.

Achieving a broad understanding of teachers' inclusive attitudes and self-efficacy when teaching children with reading difficulties and dyslexia, along with their knowledge of appropriate pedagogical approaches, may guide Educational Psychologists (EPs) to support in this area. Lesson Study (LS) is a model of teacher professional development originating in Japan (Norwich & Ylonen, 2015). In the UK, LS has been used as a form of dynamic assessment (DA) to understand child difficulty. It enters a tradition of group problem-solving, while also allowing EPs access to the classroom. Currently, there is a lack of research into EP-facilitated LS, supporting teachers of children with reading difficulties.

Methods

This research benefits from a mixed-methods approach across two interlinked phases. In phase one, primary school teachers (n=144) returned surveys exploring TSE, inclusive attitudes, and proposed pedagogies for fictional children with reading difficulties or dyslexia, described in vignettes. Teachers' attitudes were measured using attribution theory, as a theoretical framework. Quantitative measurements of TSE, attributions, ratings of pedagogy, and understanding of needs were triangulated with qualitative data in phase one.

In phase two, five LS groups were recruited including primary school teachers (n=10). Case studies were conducted to consider the impact of LS upon teachers' attitudes and approaches. Both phases were brought together to explore TSE, inclusive attitudes and proposed pedagogy when supporting children with reading difficulties and/or dyslexia. The

impact of the label of dyslexia upon teachers' attitudes and approaches was evaluated across both phases.

Findings

Phase one showed that teachers held relatively neutral attributions towards children with reading difficulties and dyslexia. Participants varied in the pedagogical approaches they considered to support children with reading difficulties and dyslexia. Teachers often advocated further external assessment to understand the children described in vignettes, alongside a range of small group or 1:1 interventions. Other participants appeared confident that they could meet needs themselves within the classroom, and through a range of adaptations to their own teaching.

Phase two showed that LS positively impacted measurements of TSE, inclusive attitudes, and brought changes to pedagogy. Teachers moved from focusing on word-level difficulties and specific cognitive difficulties, to a holistic understanding of child strengths, difficulties and how these could be supported within the classroom. The label of dyslexia was impactful across the study with a negative effect on attitudes in phase one; it was seen to bring confusion and carried low utility in explaining child needs in phase two. Overall, teachers felt that provision useful for children with dyslexia could be delivered within a well-planned and considered classroom provision.

Implications for EPs

This study provides a point of departure for EPs to consider using LS in supporting children who are struggling with reading, by working collaboratively with school staff. This research shows the possibility of EPs using consultation skills alongside knowledge of learning and reading acquisition, to contribute to collaborative planning and reviewing of classroom practice. This research shows the need for psychologists to work collaboratively with teachers to support their self-efficacy and build an internal locus of control for supporting learning difficulties in the classroom.

Contents

List of Tables

List of Figures

List of Abbreviations

ABBREVIATION	
ATT	Assessment Through Teaching
ADHD	Attention Deficit Hyperactivity Disorder
BDA	British Dyslexia Association
BERA	British Educational Research Association
BPS	British Psychological Society
DfE	Department for Education
DA	Dynamic Assessment
EEF	Education Endowment Foundation
EP	Educational Psychologist
GPC	Grapheme Phoneme Correspondence
LS	Lesson Study
MLD	Moderate Learning Difficulties
MTSS	Multi-tiered systems of support
RL	Research Lesson
RtI	Response to Intervention
SENCo	Special Educational Needs Coordinator
SEND	Special Educational Needs and Disabilities
SpLD	Specific Learning Difficulties
SSP	Systematic Synthetic Phonics
SPSS	Statistical Package for the Social Sciences
TA	Thematic Analysis
TEP	Trainee Educational Psychologist
UDL	Universal Design for Learning

Chapter One: Introduction

1.1 Chapter Overview

This study explores primary school teachers' inclusive attitudes, self-efficacy, and pedagogical approaches to supporting children with reading difficulties. Two phases were employed; I firstly consulted teachers at a national level through survey methods, before undertaking an in-depth investigation with teachers in the northwest of England, through case studies of Lesson Study (LS) interventions. I also explored the impact of a diagnosis of dyslexia upon teachers' inclusive attitudes, across both phases. In this chapter, I briefly introduce my own background as a researcher, pinpointing reasons for this project. I also introduce the key concepts for the thesis: inclusion, LS, and reading difficulties.

1.2 Researcher Background

I am a Trainee Educational Psychologist (TEP) undertaking the Doctorate in Educational, Child and Community Psychology at the University of Exeter. My interest in reading difficulties and dyslexia stems from my time as a secondary teacher and undertaking the Post Graduate Certificate in Education. Labelling children with Special Educational Needs and Disabilities (SEND) has long been debated (Algraigray & Boyle, 2017). My interest in this grew during my masters in the psychology of education in Manchester, where I focused on attribution theory and the Pygmalion effect in education (Rosenthal & Jacobsen, 1968).

In year one as a TEP, I developed an interest in dynamic assessment (DA). DA is based on the work of Feuerstein (1979) and Vygotsky, through their theories of cognitive development and learning potential (Green & Birch, 2019). During a teaching session led by Brahm Norwich (University of Exeter), I was introduced to LS as a method of collaborative support for teachers, and form of DA (Norwich et al., 2014). I explore the potential of LS in supporting teachers' inclusive attitudes, self-efficacy, and pedagogical approaches towards children with reading difficulties. Defining inclusion and teachers' attitudes towards this, is essential to understanding how teachers can be supported in the classroom.

1.3 Defining Inclusion

The concept of inclusive education has developed since the early 1990s, with the Salamanca Statement (UNESCO, 1994). The Salamanca Statement advocated inclusion of

all children in their local school. In the Code of Practice (2015), the UK department for education (DfE) outlines that children may have special educational needs and disability (SEND), if they experience learning difficulties requiring special educational provision (DfE & DoH, 2015). Despite policy aimed at ensuring the inclusion of children with SEND in mainstream schools, continuing challenges are reflected by the high levels of exclusions of these children (DfE, 2023a).

The concept of inclusion lacks a commonly agreed definition (Florian, 2014). Several authors argue that 'full inclusion' in mainstream education is unachievable (Hornby, 2015; Kauffman & Badar, 2018). Alternatively, Ainscow (2007; 2020) and Farrell (2004) argue that teaching and learning activities should be adapted to diversity, promoting participation for all pupils. Ways that this can be achieved will be considered below. Booth and Ainscow (2002) define inclusive education as 'increasing participation of students in, and reducing their exclusion from, the cultures, curricula and communities of mainstream schools'. As such, teachers undoubtedly assume much responsibility for implementing inclusion by promoting participation of pupils, wherever possible (Dimitrellou et al., 2020).

For Norwich (2014), inclusion should be considered at different levels, such as classes within a school, schools within local areas, and organisations within national structures. It is possible to be inclusive at one tier, but exclusive at another (Norwich, 2014). Norwich (2014) cites children in a separate class for behaviour difficulties within an ordinary school, as an example of exclusion, despite education in an ordinary setting. According to UNESCO (1994), inclusive education represents a commitment to responding to diversity through modifications to teaching and curricula, and mainstream schools should educate as many children as possible (Woodcock & Woolfson, 2019). Norwich (2014) and Ross (2017) advocate abandoning the medical model of disability, for inclusive education to be viable. I agree that inclusion represents promotion of a culture of teachers positively responding to all students' needs (Ainscow, 1999). This means analysing the learning environment, as advocated by a social model of disability (Hughes, 2009).

Thus, teachers require the skills to proactively adapt practice to ensure inclusion can take place within classrooms. Difficulties in learning should be viewed by teachers as professional challenges, irrespective of learners' abilities or disabilities (Norwich, 2014). This represents a dynamic view of inclusive education, where teachers become learners alongside children (Norwich, 2014). This represents the primary lens to understand inclusion throughout this research.

1.3.1 Teachers' Attitudes to Inclusion

Research consistently shows teachers are positive towards inclusion in principle (Norwich & Ylonen, 2012; Williams-Brown & Hodkinson, 2021). This phenomenon is of course subject to desirability bias, which must be considered methodologically (Mertens, 2019). Some studies aim to mitigate for this, and I explore an example of this below (Hornstra et al., 2010). In international studies, teachers' mean attitudes towards inclusion are often neutral or mildly positive (Dignath et al., 2022; Saloviita & Consegnati, 2019). Saloviita and Consegnati (2019) provide a study in the Italian context, where there exists a policy for full inclusion of all children, in mainstream classes. Teachers in this study felt all children should be taught in ordinary schools and outlined the importance of teacher training in enabling this (Saloviita & Consegnati, 2019). Several European countries hold inclusion high on policy agendas and there often exists a core assumption that children with SEND benefit most from education alongside typically developing peers (Norwich et al., 2021). This implies an important association between political agendas and teachers' attitudes.

At close inspection, UK evidence suggests teachers do not always favour total inclusion (Ylonen & Norwich, 2012; Williams-Brown & Hodkinson, 2021). Instead, teachers' attitudes may be strongly influenced by the severity of presenting needs, and less by their own capabilities (Avramidis & Norwich, 2002). Teachers' attitudes towards inclusion may become increasingly negative as their perception of need grows (Avramidis & Norwich, 2002). Teachers may struggle to see how all children can be included while also meeting government directed standards and objectives (Williams-Brown & Hodkinson 2019). As such, apprehension about inclusion is often linked to concerns about limited resources (Hind et al., 2019).

Furthermore, Hind et al. (2019) and MacFarlane and Woolfson (2013) find teachers' attitudes become less inclusive over time in the profession. Dignath et al. (2022) provide a large meta-analysis of teachers' attitudes towards inclusion. They conclude teachers' inclusive beliefs do not develop naturally; opportunities are required to gain experience in applied practice (Avramidis & Norwich, 2002; Dignath et al., 2022). Teachers' who experience success supporting children with additional needs may become more positive about inclusion (Guskey, 2021). This aligns with the need for dynamic and continuous support for teachers in understanding and supporting diverse needs.

1.3.2 Teachers' Self-Efficacy and Inclusive Practice

Bandura (1997) originally saw teachers' perceived efficacy as influencing inclusive environments, and their judgements about facilitating student learning. Bandura (1986) proposed self-efficacy stems from mastery experiences, vicarious experiences, verbal persuasion, and emotional states. Building on this, teacher self-efficacy (TSE) may relate in part to a teachers' judgement of skills required to teach children (Tschannen-Moran & Johnson 2011). These authors give the example of reading instruction; if children struggle to decode or comprehend, a teacher with higher TSE may be more likely to adapt their approach. MacFarlane and Woolfson (2013) also show teachers with higher TSE will more likely hold positive attitudes towards children described as having behaviour difficulties. By including the psychological concept of self-efficacy, alongside a measurement of attitudes, Brady and Woolfson (2008) and MacFarlane and Woolfson (2013) demonstrate cognitive resources that impact teachers' appraisals of inclusion. Overall, teachers with higher TSE may be more likely to recognise the importance of their own role in child outcomes, or attribute child successes or failures to external reasons, such as teaching or the curriculum (Woodcock et al., 2019). I review literature relating to the theorisation of links between these constructs in chapter two.

1.4 Child Reading Difficulties & Dyslexia

I now introduce the concepts of reading difficulties and dyslexia. Theories and models of reading difficulties are explored in more detail in chapter two. Children may struggle with reading for numerous reasons, including cognitive, social/emotional, and environmental factors (Harmey, 2021). Ofsted (2023) report some children with SEND may struggle to read fluently; they emphasise the importance of phonics approaches in supporting these learners. This implies a cognitive reason for difficulties reading. However, reading difficulties could also stem from the language environment of children's home experiences, such as exposure to a vocabulary adequate be successful in school (Hoff, 2013). The size of the English vocabulary requires children to learn many words independently; this emphasises the importance of children being motivated to read (Castles et al., 2018). However, international comparison of reading performances shows, UK pupils report decreasing levels of enjoyment for reading (DfE & GSR, 2023). Much disagreement continues over optimal instruction of reading, and this likely causes uncertainty for teachers (Castles et al., 2018).

In this study, the term reading difficulties will be used to widely encompass differing reasons for performance. However, according to the British Psychological Society (BPS, 2005), the term dyslexia may signify that associated reading difficulties exist at the 'word level'. In the UK, Specific Learning Difficulties (SpLD), encompasses a range of conditions such as dyslexia and dyscalculia (DfE & DoH, 2015). The Diagnostic and Statistical Manual of Mental Disorders defines SpLD as learning difficulties significantly below the individual's chronological age (American Psychological Association, 2022). In some research, and diagnostic frameworks, dyslexia as a term is included within this umbrella term (Woodcock & Moore, 2021). A teachers' understanding of the terms 'reading difficulties', or 'dyslexia', is likely to influence their perception of presenting needs (Gibbs & Elliot, 2015). However, the key defining factor of dyslexia existing at word-level, does not differentiate between dyslexia and other forms of literacy difficulty, leading some scholars to challenge the utility of the label (Gibbs & Elliot, 2008).

Researchers have examined the advantages and disadvantages of the term dyslexia. For example, Gibbs and Elliott (2015) argue the label can lower TSE; however, it may also help children to understand their difficulties or improve self-esteem (Gibby-Leversuch, 2018; Riddick, 2010; Ross, 2021). This finding is shown inconsistently across research and several studies also show the negative impact of dyslexia upon self-esteem (Gibby-Leversuch et al., 2019; Ross, 2021). Teachers are often shown to hold lower expectations of children with SpLD, including dyslexia, due to the complexity of need inferred by the label (Woodcock et al., 2022). Understanding teachers' attitudes towards labels of dyslexia and SpLD is important to supporting them, and for reflecting upon the helpfulness of these labels. This study focuses on how teachers can be assisted to build inclusive environments, fostering reading skills in all learners. One method of achieving this could be to use response to instruction (RtI) type approaches.

1.5 Response to Instruction

RtI frameworks can help schools to ensure interventions gradually increase in response to need, ensuring instruction meets needs (Fletcher & Miciak, 2017). RtI is now frequently referred to as multi-tiered systems of support (MTSS). Similarly to RtI, the use of MTSS integrates progressive use of resources, strategies, and evidence-based practices to address barriers to learning over time (Utley & Obiakor, 2015). MTSS and RtI approaches may require teachers to support their colleagues in understanding the needs of children with additional needs (Berkeley et al., 2020). Due to the prevalence of RtI research, this term is used in this thesis.

Gibbs and Elliot (2015) argue that RtI approaches should be used in identifying dyslexia, to avoid the 'wait to fail' model, currently seen when awaiting a referral for dyslexia assessments. The drawback of this current system is learners' needs may go unmet for long periods of time before identifying dyslexia (Gibbs & Elliot, 2015). RtI can mean that identification of needs comes from a child's response to the provision in place (Reynolds & Shaywitz, 2009). This would represent a summative use of RtI to identify learning difficulties requiring specific provision (Norwich et al., 2014). Through RtI, Elliot (2020) suggests dyslexia would be seen to affect a much smaller subgroup of children who have failed to respond to intervention (Elliot, 2020). Consistently using RtI or MTSS, may empower teachers to understand needs dynamically within their own classrooms.

Further, Norwich et al. (2014) suggest that RtI could also be used formatively to support teaching and learning; this could support teachers to accurately understand and respond to reading difficulties. LS is a technique aligning with RtI and Assessment Through Teaching (ATT) approaches, discussed further in chapter two. ATT is based on the work of Engleman (1997) and holds that the focus of assessment should be on the content of what is taught and how it is taught. If children fail to make progress, then teaching must be adjusted.

1.6 Universal Design for Learning

Similarly to RtI frameworks, Universal Design for Learning (UDL) is a useful model for supporting teachers' planning for diverse needs in inclusive classrooms (Capp, 2017). It is an educational strategy aimed at eliminating barriers, by accommodating all learners through the proactive design of activities (Hodge et al, 2012). UDL guides teachers' thinking about diverse needs within one classroom, by following principles such as representing knowledge in different ways, allowing students choice over how they demonstrate knowledge, and promoting engagement in diverse ways (Capp, 2017). Teachers subscribing to UDL would design learning activities that are suitable for all children in their class, reducing time needed to manage the class, and increasing learning (Haegele & Hodge, 2016).

UDL ensures the learning environment, instruction, and content of the lesson are designed to suit all. Student groupings can also be considered to facilitate all students' learning (Lidner & Schwab, 2020). As an example of pedagogical modifications, preteaching of key concepts could be considered, to ensure the whole class can access the lesson content (Capp, 2017). UDL would therefore emphasise the importance of teachers' pedagogy and practice, in ensuring inclusion of diverse needs (Capp, 2017). Thus, UDL may

reduce the impact of a label of disability or impairment, such as dyslexia, upon the learner, and upon the teacher (Haegele & Hodge, 2016). While specialist support may continue for certain levels of need, UDL emphasises pedagogical adjustments in class to ensure all pupils can access the lesson content (O'Brien, 2019). The limitations of UDL include whether teachers are confident to implement the principles, such as effectively differentiating learning content (Capp, 2020). Therefore, teachers' professional learning would need to be considered to support this (Capp, 2020). The importance of supporting teachers' confidence and professional learning will be explored throughout this research.

1.7 The Role of the EP

Moir (2019) outlines how EPs can assist teachers of children with reading difficulties. Firstly, the EP brings an understanding of psychological theories such as cognitive development, and learning theories, for example (Hempenstall, 2020; Moir, 2019). EPs may identify that children from diverse backgrounds interpret comprehension questions based on their own life-experiences; EPs could therefore advise specific interventions such as pre-reading activities to reduce these socio-learning gaps (Moir, 2019). Similarly, EPs may support teachers to become effective mediators of reading. Moir's (2019) recommendations align closely with the principles of RtI and DA advocated by Norwich et al. (2014). LS provides focus on pupils' specific learning needs, enabling a deep analysis of a pupil's response to the learning environment (Norwich et al., 2014). LS is not widely used by EPs in practice but may have potential as a method of assessment and interprofessional collaboration (Norwich et al., 2014).

1.8 Introduction to Lesson Study

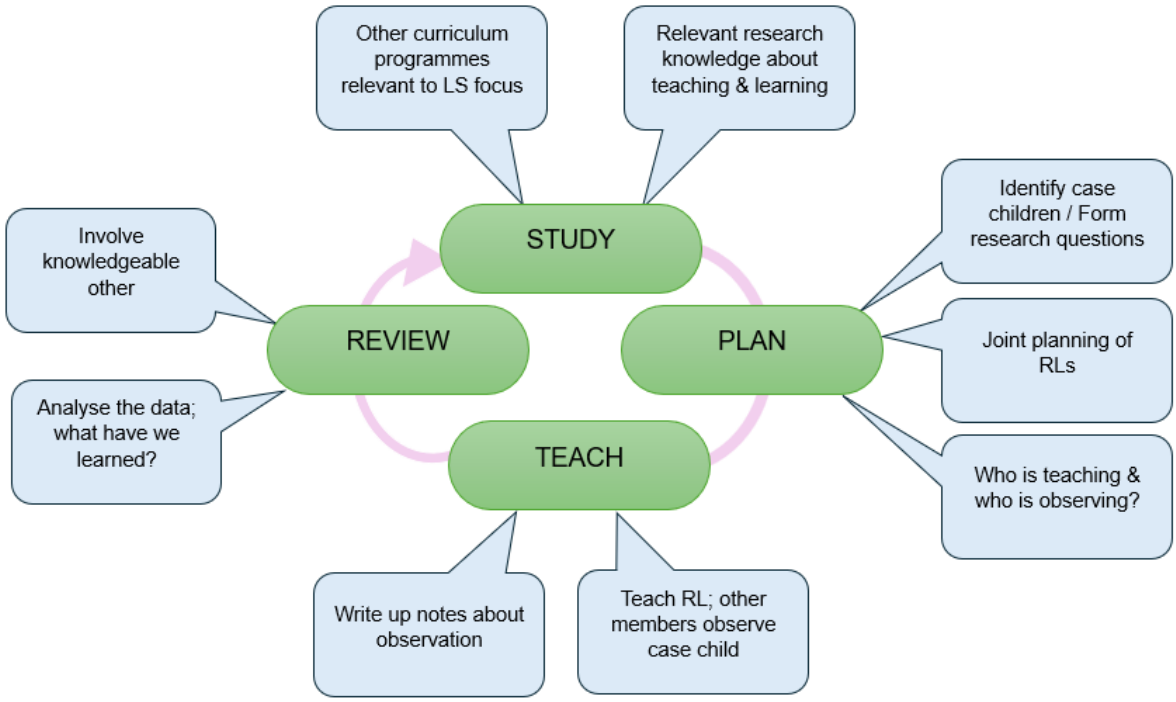
LS was first developed in Japan as a method of professional development (Takahashi & Yoshida, 2004; 2020). It is influenced by the idea of reflective practice and the work of Dewey (Makinae, 2010). LS can be a method of teacher-led inquiry, in which teachers work collaboratively to undertake plan, do, review activities aimed at improving pedagogy and understanding needs (Norwich et al., 2014). It has been coined as a method of DA (Norwich et al., 2013; 2014; Norwich & Ylonen, 2015; Ylonen & Norwich, 2012). LS would allow EPs to observe children alongside teachers.

In LS, teachers typically identify one or more case pupils and form a team of professionals, to plan, teach, and observe the child within their usual environment. This team

may include teachers, Special Educational Needs Coordinators (SENCos), teaching assistants, and outside 'experts' (Dudley, 2013; Norwich et al., 2018). Up to three research lessons (RLs) are taught during a LS intervention (Dudley, 2013; Norwich et al., 2016). Planning and evaluation meetings take place before and after each lesson, aimed at assessing and responding to pupils' needs. Figure 1 shows the process of planning sessions, lessons, and review meetings. RLs are planned to suit the whole class, while assessment focus is upon the case children. Similarly to UDL, LS ensures that changes are made to pedagogy to explore how all children can make progress, but with an assessment focus on the case children. In UDL, the purpose of assessment is to identify weaknesses in the learning context, rather than the learner (Rose et al., 2018). Figure 1 outlines the importance of LS practitioners recording observations and consulting relevant research when necessary, to improve their understanding of the situation or context surrounding the difficulty (Norwich et al., 2021).

Figure 1.

Stages of LS intervention (Norwich et al., 2021)



1.9 Chapter Summary & Research Aims

I have briefly introduced the concept of inclusion, teachers' attitudes towards this, and manifestations of reading difficulties. Research is needed to understand teachers' approaches to supporting children with reading difficulties and dyslexia, and the degree to

which they feel able to act inclusively in this regard. In the current study, I used two phases of research to understand teachers' differing inclusive attitudes, self-efficacy and pedagogical approaches when supporting children with reading difficulties and/or dyslexia. I have trialled the impact of TEP-facilitated LS cycles upon teachers' attitudes and approaches to supporting children with reading difficulties and dyslexia.

Chapter Two: Literature Review

2.1 Chapter Overview

Within this chapter, I consider literature about reading instruction, alongside debates surrounding reading difficulties and dyslexia; I include the polarising debates around phonics, and introduce the 'dyslexia debate' (Elliott & Grigorenko, 2015). As introduced in the previous chapter, teachers' attitudes towards children with SpLD can be adversely affected by the label (Woodcock et al., 2019). Reviewing this literature is necessary to understand the impact of labels upon teachers' attitudes towards children with reading difficulties and dyslexia. I further explore TSE as a cognitive resource, alongside attribution theory as a framework for understanding teachers' attitudes. Finally, I explore research about how EPs may support teachers. This leads me to review how LS has been used, and its potential as a method of collaborative support. I demonstrate a gap in the literature surrounding EP-facilitated LS to support teachers.

2.2 Literature Review Search Strategy

To build a search strategy for this literature review, I identified key themes such as 'attitudes to inclusion', 'reading instruction', 'reading difficulties', 'reading pedagogy', 'dyslexia', 'SpLD', 'supporting teachers' and 'LS', as examples.

For my search, I used Jstor, the University of Exeter Library, Education Resource Information Centre, and Google Scholar. Results were narrowed down by stipulating literature be published within five years and of UK context, where possible. This criteria was not applied strictly but ensured relevance. Consequently, some contextual research from beyond the UK has been included; for example, reading research conducted in English-speaking contexts. Older publications that remain important were also consulted when cited by authors in more recent research. Singular terms led to prohibitively large amounts of results for each search; thus, combinations of aforementioned terms were used to identify relevant literature. For example, searching the term 'Specific Learning Difficulties' in the last five years yields over 53 000 results, an overwhelming amount of research. When combining this term with 'teachers' attitudes', five results are returned, of which two met the criteria set. Combining terms 'teachers' and 'reading difficulties' led to 25 papers that were then reviewed. Appendix A is a Venn diagram demonstrating overlaps identified between topics when combining terms.

2.3 Reading Acquisition and Teaching

I begin this section by discussing existing debates of reading instruction and acquisition. I then consider models of reading difficulties. Amongst other skills, new readers must master translating graphemes into phonemes, sound out words, and match words to concepts stored in their oral lexicon (Braze et al., 2016; Castles et al., 2018). Children need to develop fluency, so they can read independently and maximise exposure to words (Willingham, 2017). Children must also develop comprehension skills, particularly in academic language (Hulme et al., 2020).

2.3.1 "The Reading Wars"

Debates over how reading is taught have been entrenched to the extent of being coined the 'Reading Wars' (Castles et al., 2018). Many commentators tend to agree that reading instruction through early phonics is the most effective approach to achieve the first stage of 'cracking the alphabetic code' (Brooks, 2016; Castles et al., 2018; Graham et al., 2020). This is the sub-lexical route to reading, focussing on spelling to sound conversion; it is also known as a bottom-up approach (Giofrè et al., 2019; Kumaş et al., 2021). Alternatively, learning to read may be achievable through a whole language approach, discovering meaning at a whole word level (Castles et al., 2018). This is the lexical route to reading acquisition, or a top-down approach (Giofrè et al., 2019; Kumaş et al., 2021).

Argument ensues over whether phonics should be taught through systematic synthetic phonics (SSP) or analytic phonics (Castles et al., 2018). SSP represents the bottom-up process of teaching individual sounds and graphemes (Castles et al., 2018). In SSP, synthetic means teaching Grapheme Phoneme Correspondences (GPCs) to then make words (Castles et al., 2018). Systematic means that all major GPCs are taught, and in a specific order (Rose, 2006). Analytic phonics involves breaking down words into smaller phonemes and graphemes. Using whole words within early reading instruction is also divisive in some camps (Ehri, 2020). However, Castles et al. (2018) argue there is no convincing evidence for the superiority of one method. Despite this, SSP programmes such as Read Write Inc are advocated by Ofsted (2017) and the DfE (2023c). One implication of SSPs, is books banded by phonetically accessible words (Castles et al., 2018; Solity, 2020). UK policy holds that using phonetically decodable books protects learners from encountering GPCs they have not explicitly learned. However, Castles et al. (2018) and Solity (2022) concur that evidence for using decodable books is sparse, limiting exposure to new vocabulary.

Several researchers argue insufficient evidence exists to suggest that SSPs, or phonics as a broad approach, are the only way to teach reading (O'Connor & Solity, 2020; Wyse & Bradbury et al., 2022). These authors could be described as critical of the UK governments' heavy advocacy of phonics approaches. Solity (2008) is a proponent of instructional psychology, which stems from rational analysis. Within instructional psychology, only information occurring most frequently in practice should be explicitly taught; careful attention is given to the learning environment, which in the case of reading, starts with real books (Solity, 2020). Rational analysis stipulates human memory prioritises retaining information considered important for the future. Less relevant information may be forgotten (Solity, 2008). Thus, GPCs should be limited to those required to read the majority of English words (O'Connor & Solity, 2020). This means children can be taught reading through delivering less information. Shapiro and Solity (2016) argue that teaching children phonically irregular words by sight can support readers with lower phonological awareness. Ehri (2020) challenges this view and argues that without learning GPCs, learners remain in a pre-alphabetic phase. Ehri (2020) reviews research using comparison groups, showing that children taught to segment and blend outperformed peers taught to read through whole-word instruction. However, this research is limited to word reading and fails to account for wider skills needed in reading. Wyse and Bradbury (2022) and Solity (2020) reject claims that sight word approaches interfere with simultaneous phonics acquisition.

Meanwhile, Castles et al. (2018) argue that critics of the phonics approach, often do so in isolation, and without reference to wider skills that must accompany phonics instruction. Ehri (2020) concurs that phonics instruction is often critically described as 'all skill and no drill', arguing that the methods of phonics instruction are mischaracterised as demotivating. Castles et al. (2018) hold that the scientific evidence behind phonics instruction is poorly shared with practitioners, translating into suboptimal practice and undoubtedly contributing to reading difficulties. However, the aforementioned critiques of phonics I have covered, are not about wider phonics instruction, but of the SSPs which dominate classroom practice in the UK. Commentators often mischaracterise criticism of some SSPs as claims that phonics instruction is ineffective. The debate has become polarised and could unfoundedly infer to teachers that damage can be done by using techniques not included within SSP schemes (Wyse & Bradbury, 2022). Supporters of one approach over the other, often fail to account for the individual differences in learning, and exposure to an adequate reading environment.

As such, Wyse and Bradbury (2022) argue whole language approaches to reading, such as those advocated by Solity and colleagues, do not have to come at the expense of

phonics approaches. These authors argue that the strong focus upon SSPs means a greater proportion of teaching time has been devoted to this form of instruction. These authors advocate teachers use their professional judgement when teaching reading; this may be impeded by schools' adherence to SSP packages. Promoting teacher autonomy to use professional judgement is of key interest to this study.

2.3.2 Reading Difficulties

There are several theoretical frameworks relevant to understanding why learners may struggle to read. Firstly, Gough and Tunmer's (1986) simple view of reading model has since been used with factor-analysis to classify struggling readers into three categories: poor decoders, poor comprehenders and a combination of the two (Rose, 2006). This theory has been retested and is supported by further research (Braze et al., 2016; Hjetland et al., 2019). Hjetland et al. (2019) found that children's reading comprehension was predicted by earlier decoding skills. This theory serves to highlight the impact of early phonological awareness upon later difficulties (Harmey, 2021). Similarly, phase theory of sight word reading, holds that struggling readers may lack full alphabetic knowledge, or confuse similarly spelled words (Ehri, 2005). The commonality between these two theories is their focus on the cognitive processes of processing written text (Harmey, 2021).

Framing reading difficulties within cognitive models may situate these as a within-child phenomenon. These frameworks fail to explore what lies beyond the individual learner or the affective experience of reading (Matthewson, 2004; Moir, 2019; Morgan et al., 2012). Matthewson's (2004) attitude influence model holds that the affective experience of reading impacts difficulties. Children are more likely to engage in reading if they perceive competence (Mol & Bus, 2011; Willingham, 2017). Exemplifying this, Kontovourki (2012) found that the notion of 'reading levels', applied to the readers in their study, had become internalised to the extent of limiting child confidence. This highlights further problems with SSPs, as shown above. This model begins to emphasise the impact of outside influences upon readers, rather than focusing on cognitive function alone.

Finally, in line with sociocultural theories of development, a socio-cognitive model of reading emphasises the links between learner and teacher (Ruddell & Unrau, 1994). Readers bring their own experiences to understanding texts; their comprehension and inferences will be influenced by these (Harmey, 2020). This model represents an appreciation of the interaction between cognitive factors, text, and teachers (Harmey, 2021). It emphasises the role of teachers in adapting their style through continual assessment or RtI

(Moir, 2019). Teachers are required to foster child motivation by focusing on the learning context, and through careful attention to child levels of self-direction and independence (Moir, 2019). In a cognitive understanding of reading difficulties, the purpose of assessment is to categorise skill levels, or identify deficits. Alternatively, a socio-cognitive model repositions assessment as a way of teachers adapting their teaching to the learner (Ellis et al., 2014; Moir, 2019). Within this model, teachers' professional development is crucial to supporting reading (Markussen-Brown et al., 2017). This is opposed to the notion of teachers seeking help from external professionals to assess children who struggle to read. These theories of reading difficulties can be reduced to considering where the locus of difficulty is located; this may be perceived to be within-child, environmental, or both combined (Harmey, 2020). Understanding teachers' attitudes towards learning difficulties will be crucial to understanding how they can be supported.

2.4 Teachers' Attitudes Towards Difficulties

As shown in chapter one, teachers show variable attitudes towards inclusion as a policy (Hind et al., 2019). In their seminal work, Avramidis and Norwich (2002) argued that teachers' attitudes become more negative as the severity of difficulty is perceived to increase. More recent evidence strengthens this notion that diagnoses can adversely impact teachers' attitudes towards pupils with additional needs (Brady & Woolfson, 2008; Clark & Artiles, 2000; Hornstra et al., 2010; Gibbs & Elliott, 2015; Lauchlan & Boyle, 2007; Shifrer, 2016; Woodcock et al., 2022; Woodcock & Moore, 2021). For example, Shifrer (2016) found that designations of learning disability led to teachers' negative expectations of these children. Labels of need such as dyslexia or attention deficit hyperactivity disorder (ADHD) can cause teachers to see children as low achievers (Algraigray & Boyle, 2017; Ho, 2004; Knight, 2021). Similarly, Gibbs and Elliot (2015) show that teachers perceived dyslexia as an immutable difficulty, when compared to their attitudes towards children described as having 'reading difficulties'. Alternatively, labels may contextualise behavioural difficulties for teachers; participants of one study rated the behaviours of children less negatively when these children were labelled with autism spectrum disorder (Nah & Tan, 2021). Together, these studies show that labels of need may lead to teachers making subconscious judgements about children. These judgements may become more negative, in line with the magnitude of perceived needs.

Importantly, Hornstra et al. (2010) isolate teachers' subconscious attitudes from those they may communicate explicitly. These authors deploy explicit and implicit measures of teachers' attitudes towards children with dyslexia. Teachers' explicit self-reported attitudes

towards children were positive; however, these did not relate to their ratings of pupil achievement. The implicit measure, using evaluative priming under timed conditions, did relate to teachers' judgements of these child outcomes. This may show a social desirability bias linked to the sensitive nature of this topic, when explicitly reporting attitudes. The timed element of evaluative priming relies on the assumption that associations between concepts are usually stored in human memory (Hornstra et al. 2010). Another way in which teachers' attitudes have been measured is through the lens of attribution theory.

2.4.1 Attribution Theory

In line with attribution theory, Weiner (1995) theorised that teachers cognitively appraise the behaviours of children along three dimensions of controllability, locus of causation, and stability. The theory is frequently used within research into teachers' attitudes towards children labelled with SpLD (Brady & Woolfson, 2008; Clark & Artiles, 2000; Woodcock et al., 2019; Woodcock & Moore, 2021). This threefold taxonomy conceptualises how teachers explain success and failure of students, and their own practice (Graham, 2020). Controllability stipulates the level of control that a person perceives over an outcome, and is linked to responsibility (Clark & Artiles, 2000). Stability explains the likelihood that a situation may change; finally, locus of causation situates the cause of an outcome as either internal to the person, or residing in their environment (Chodkiewicz & Boyle, 2014). Importantly, attribution theory offers insight into teachers' responses towards child difficulties in the classroom (Woodcock et al., 2019).

In seminal work by Clark (1997), teachers read vignettes about children described as having 'learning difficulties', and responded with higher levels of reward, alongside lower punishment, and anger, when compared to children not described with difficulties. The teachers' perceived responsibility towards a child outcome is related to the controllability of the cause; thus factors such as the child's wider attainment and defining factors could be influential upon attitudes (Clark & Artiles, 2000). Teachers could provide negative feedback to a pupil if they deem a student's low achievement be due to a controllable cause such as effort (Weiner, 1986).

The study by Clark (1997) has been built on by later research. In vignette studies, Woodcock and Vialle (2016), Woodcock and Hitches (2017) and Woodcock and Moore (2021) found that teachers responded to children labelled with SpLD with increased sympathy and lower frustration; these measures were used to infer teachers' attributions of difficulties, as beyond the learners' control. Also using vignettes, Brady and Woolfson (2008) and Woolfson et al. (2008) used an attribution scale focusing directly on the constructs of controllability, locus of causation and stability. Woolfson et al. (2008) also found that mainstream teachers rated children with identified needs, as having lower control over their outcomes. Overall, evidence suggests that teachers can harbour negative attitudes towards pupils with SpLD or additional needs, compared to peers without a label (Brady & Woolfson, 2008; Clark & Artiles, 2000; Gibbs & Elliot, 2015; Hornstra et al., 2010; Woodcock et al., 2022; Woodcock & Moore, 2021). Directly measuring attributions, in turn allows researchers to consider whether teachers attribute difficulties as existing internally or externally to the child. Thus, lower attributions across the taxonomy of controllability, locus of causation, and stability can be used as representative of lower inclusive attitudes.

The aforementioned studies carry implications for this current study; approaching the measurement of attitudes through attribution theory allows me as a researcher to consider the degree to which teachers attribute difficulties to their own teaching, or to child factors. It also allows me to consider the optimism that teachers hold over possible change for the child. There remains a risk of social desirability bias; however, the use of vignettes allows the teachers to consider children they do not teach, which may avoid any feelings of guilt or responsibility linked to the children.

2.5 Teachers' Understanding of Dyslexia

2.5.1 Defining Dyslexia

Although 'dyslexia' is firmly established in public discourse surrounding reading difficulties, there lacks an absolute consensus over diagnostic criteria in the UK (Adlof & Hogan, 2018; Elliott, 2020; Ross, 2017). Most authors now concur that dyslexia occurs across the intellectual spectrum (BDA, 2010; Gibbs & Elliot, 2020). The previously accepted theory that dyslexia occurs only in children who are otherwise cognitively able, is rejected (Fletcher et al., 2019; Gresham & Vellutino, 2010). Nevertheless, dyslexia continues to be used to describe children for whom specific reading difficulties appear unexpected (Gibbs & Elliot, 2020). For example, Catts and Petscher (2022) argue that a good indicator of the presence of dyslexia is an unexpected word level reading difficulty, despite otherwise good instruction.

The BPS (2005) states that dyslexia is 'evident when accurate and fluent word reading and/or spelling develops incompletely or with great difficulty'. Similarly, Rose (2009) defines dyslexia as a learning difficulty affecting the skills involved in accurate and fluent word reading and spelling; the features of dyslexia being difficulties in phonological awareness, verbal memory, and verbal processing speed (Rose, 2009). Therefore, there is a key focus across definitions, on the cognitive functions that may be underdeveloped in dyslexia. As such, Macdonald (2019) argues that research in the field of dyslexia is dominated by psychological and cognitive sciences, arguably overlooking socio-economic and cultural impactors on reading difficulties. Macdonald (2019) holds that research and policy has meant dyslexia has often been conceptualised as a disability. Alternatively, a biopsychosocial model of dyslexia would acknowledge neurological dysfunction upon reading difficulties, while also holding importance by psychological processing of these difficulties, and the importance of social factors (Macdonald, 2019). I agree it is essential to consider the importance of the teaching and learning environment when considering why children struggle to read. It is insufficient to explain reading difficulties through the lens of cognitive factors. Gibbs and Elliot (2015) argue that pinpointing particular cognitive profiles and the degree of intervention a child should receive before diagnosis becomes appropriate, has proven continually elusive. This leads into a debate over the utility of the label of dyslexia (Elliot & Grigorenko, 2014).

2.5.2 The Dyslexia Debate

Perhaps due to the lack of consensus as to the manifestation of dyslexia and the lack of specific interventions associated with it, the discourse has become polarised (Kirby, 2020; Henshaw, 2018). Elliot (2014) is a prominent contributor to the 'dyslexia debate'. Elliot and Grigorenko (2014) advocate replacing the term dyslexia with 'reading disability'. Gibbs and Elliot (2015) hold that focusing uniquely on the presence of phonological awareness deficits results in many poor readers being overlooked. Elliot and his colleagues, point to the existence of these same cognitive difficulties associated with dyslexia in many other struggling readers; these include short-term memory, attention, and visual perception difficulties (Elliot & Grigorenko, 2014; Gibbs & Elliott, 2015). However, Cameron (2024) argues that this debate suffers from a prioritisation of cognitive explanations of dyslexia. For Cameron (2024), these children may also benefit from a label due to the legitimisation of difficulties they experience. This means highlighting the constructed nature of SEND within education, and acknowledging the struggles of certain groups. Cameron (2024) argues that the criteria for a diagnosis for dyslexia should be loosened, encompassing all those who persistently experience reading difficulties despite good instruction and engagement, reducing focus on the cognitive criteria. A drawback of this approach could be further confusion for teachers, as to what is meant by dyslexia as a label of difficulty. Further, the broad diagnostic criteria for dyslexia has led to it being poorly understood by many practitioners (Lopes, 2012). I explore the implications of this below in section 2.5.3.

Gibbs and Elliot (2015) argue that the model of intelligence discrepancy, or that difficulties are unexpected, excludes pupils with reading difficulties who do not present in this way, such as socially disadvantaged children, or those lacking appropriate instruction (Gibbs & Elliott, 2015). Arguably, what Elliot and his colleagues describe is primarily a question of equitable access to support. The label of dyslexia may inadvertently cater to more advantaged socio-economic groups and can be discriminatory (Gibby-Leversuch et al., 2018; Holmqvist, 2020). However, this debate often lacks the voice of children who receive diagnoses, and the experiences of those with dyslexia (Cameron, 2016; Gibby-Leversuch et al., 2021). Cameron (2016) also argues for legitimatisation of the experience of those with SpLD and dyslexia, as being constructed as outsiders by the discourses of literacy, learning, and disability. Cameron (2016) argues for seeing beyond dyslexia simply as a measurement of cognitive deficits. As such, some researchers point to the label bringing a sense of agency to a child or parent (Gibby-Leversuch, 2018; Ross, 2017; Riddick, 2010). Cameron (2024) argues that a dyslexia diagnosis can act as a form of moral currency, legitimising a person's struggles to read and allowing them access to support. This is an interesting point and

counters the ‘dyslexia debate’ by highlighting that those who struggle to read may perceive reduced self-value in a society holding high importance by literacy (Cameron, 2024). However, the focus of this research is upon the impact of dyslexia upon teachers’ approaches to support. In this domain, research consistently shows the detrimental impact of the label of SpLD upon teachers’ attitudes towards supporting these children which could translate to real impacts upon practice (Woodcock et al., 2022). This debate is emotive and there is no clear resolution in sight.

Overall, the diagnosis of dyslexia can tend to omit environmental factors from the process of understanding difficulties; this implies difficulties remaining a within-child phenomenon. It also represents a medical model of disability, running counter to inclusive practice (Norwich, 2014; Ross, 2017). Fletcher et al. (2019) argue the key to understanding the origins of reading difficulties remains a focus on how neurobiological and environmental factors act jointly, to create a complex cognitive skill like reading.

2.5.3 Implications for Teachers

The implications of the afore-described debate upon teachers’ pedagogy are significant. A lack of clear definition and diagnostic criteria is likely to cause confusion for educators, or decreased confidence (Knight, 2018). Further, teachers often harbour misconceptions around the nature of dyslexia (Bell et al., 2011; Hellawell, 2022, Knight, 2018, Washburn et al., 2014; 2017). For example, dyslexia has long been thought to be a visual processing difficulty (Washburn et al., 2014). Washburn et al. (2017) found teachers’ pedagogical misconceptions linked to dyslexia, included the benefit of coloured overlays and that these difficulties are caused by visual perception deficits. This study employed surveys that questioned teachers about their knowledge of how to support children with reading difficulties and dyslexia. Questionnaires in this format allow a lot of data to be gained from participants, to broadly understand teachers’ approaches. It may be necessary to also gain further depth as to the contextual influences upon teachers’ choice of pedagogy.

Children with dyslexia are often withdrawn from class to receive literacy interventions (Anderson, 2009). In one study by Molyneaux and O’Brien (2023), teachers felt that short withdrawals from class for children with dyslexia would be necessary to provide targeted support. Molyneaux and O’Brien (2023) point to the work of Riddick (2010) which outlines possible negative impacts of class withdrawal upon a child’s developing sense of self. I feel this outlines the potential drawbacks of a label of dyslexia, especially from the perspective of children, who could be provided with provision that is less inclusive than their peers.

Overall, this section has shown that the term dyslexia may be overly focused upon cognitive explanations of difficulties and can cause misconceptions for teachers. Further, labels of SpLD and dyslexia can cause decreased confidence for teachers or indicate that specific interventions are necessary. Implications of the dyslexia debate have been outlined, including the notion of equitable access to support. Literature shows that labels such as these can lead to within-child understanding of children. It is possible that teachers will consider themselves more capable of supporting children with reading difficulties when a label is not present, or following detailed assessment through RtI informed approaches. I now explore how EPs may support teachers in the classroom.

2.6 EP Support for Teachers Reading Difficulties and Dyslexia

EPs have a role to play in supporting teachers of children with reading difficulties; however, this remains an under-researched area and suggestions from researchers often remain tentative. EPs are often asked to identify individual deficits through direct assessment (Hempenstall, 2020; Moir, 2019). However, in a study consulting EPs about their knowledge of dyslexia, Stothard et al. (2018) argue that EPs may themselves experience uncertainty leading them to often avoid using the label. Their study is of small-scale but shows that EPs are frequently more interested in action around supporting children with reading difficulties, rather than focusing on the definition of a diagnosis, with teachers. Thus, EPs may support teachers through consultation and in their capacity as problem-solvers (Bennett & Monsen, 2002; Monsen et al., 1998). Further, EPs may have a role in facilitating the training of school staff (BPS, 2022; Farrell et al., 2006). As such, Moir (2021) argues that EPs can disseminate models of reading comprehension which incorporate models of psychological theory and evidence-based approaches (Moir, 2019).

2.6.1 Direct Instruction

In one article, Hempenstall (2020) advocates EPs supporting teachers by helping them to develop interventions based on direct instruction. Direct instruction adheres to teaching essential information, and reducing the error-rate of learners (Hempenstall, 2020). Teaching would also focus on skills where only one interpretation is possible, to avoid confusion (Ward et al., 2012). It is a package of what to teach and how to teach it. For example, in reading, applying direct instruction may mean paying close attention to GPCs taught, as advocated by Solity (2020). While Hempenstall (2020) advocates that EPs

support teachers through direct instruction, wider evidence lacks as the success of this. Further, the strong directives that teachers receive from policy makers in the teaching of reading represents a barrier to this.

2.6.2 Assessment Through Teaching

Solity (2020) further argues that ATT can provide an instructional explanation for reading difficulties by addressing the teaching environment. ATT can be used widely by teachers and is not exclusive to the practice of EPs. It is described as a non-labelling approach to teaching and learning (Ward et al., 2012). As shown in chapter one, ATT is a model that emphasises the importance of reevaluating teaching approaches when children struggle to make progress (Ward et al., 2012). ATT requires teachers to assess what children have already learned (Solity, 2020). For example, teachers may evaluate the number of GPCs that learners have mastered (Ward et al., 2012).

Within an ATT approach, identifying reading difficulties should be based on pupils' response to intervention rather than focusing on underlying child difficulties (Solity, 2020). In their study, Ward et al. (2012) found that through ATT, EPs helped to facilitate support by drawing focus away from the individual child, and towards analysis of learning environments. This ATT approach was directly applicable to literacy difficulties (Ward et al., 2012). This study supports the views of Moir (2019), who advocates EPs supporting teachers by facilitating analysis of the reader within the learning environment. O'Connor and Solity (2020) argue that EPs have a role in promoting an ATT approach within schools to help assess children's difficulties in learning to read.

2.6.3 Group Consultation & Group Problem-Solving

Thus far, I have shown several interventions that authors have proposed EPs use to support teachers of children struggling to read. However, evidence is lacking into EP specific interventions in supporting teachers to support children with reading difficulties. While ATT and Direct Instruction shown above are not exclusive to EPs, I now cover the potential for group problem-solving methods, which have a broader evidence base for EP intervention, but are more typically used for emotional difficulties.

Hanko (1985) and Gill and Monsen (1996) developed one of the first models of EP consultation to support teachers in schools (Farouk, 2004). This model was developed by

Farouk (2004) and involves differing stages of problem-solving including description, reflection, theory and strategy generating, for example. In this paper, Farouk shows how group consultation can harness systemic thinking and psychodynamic approaches to support teachers in their practice. The process can have a strong influence on schools, with teachers becoming increasingly experienced in helping each other. Most importantly, the process of group consultation is said to give teachers the time and space to reflect on their practice (Farouk, 2004). For example, Davison and Duffy (2017) show that EP led group-consultation influenced a shift in nurture group teachers' causal attributions, from within-child to the teaching environment.

Similarly, the Staff Sharing Scheme was developed as a response to teachers commissioning EP work as outside experts, to support with problems perceived to be within-child (Gill & Monsen 1996; Jones et al., 2013). The Staff Sharing Scheme also follows similar models to those of Hanko (1985) and Farouk (2004) whereby teachers move through stages of problem-solving, beginning with presentation and finishing with collaboratively generated strategies. The success of this intervention is shown by evidence of it shifting staff attributions for behaviours away from the child, and onto teaching (Jones et al., 2013). The process aligns with a pragmatic approach to problem-solving, which differs from the psychodynamic underpinnings of Hanko's (1985) work (Jones et al., 2013).

Further problem-solving approaches used by EPs to support teachers in their practice include Solution Circles and the Circle of Adults (Grahamslaw & Henson, 2015; Norwich et al., 2018). These approaches are similar, and all involve clearly structured models of problem-solving, facilitated by an EP. The Circle of Adults involves a visual representation of the problem and aims to ensure the group reflect collectively about complex situations (Turner & Gulliford, 2020). It allows teachers to share knowledge, experience, and skills with each other (Muchenje & Kelly, 2021). In one study examining its use, staff reported feeling increased empathy towards pupils alongside increased awareness of needs (Turner & Gulliford, 2020). Further, there is a tradition of EPs supporting teachers in the form of teacher coaching (Bennett & Monsen, 2011). All of the above approaches involve an external facilitator who may contribute to the problem-solving process (Norwich et al., 2018).

Overall, these examples show that building inclusive practice in schools is a continual, reflexive, and collaborative process, and outline a role for EPs in facilitating this. EPs may be able to facilitate group opportunities for teachers to share and reflect on their practice. Teachers' increased knowledge achieved through collaboration may be one key

mechanism to increasing inclusive attitudes which in turn affect their practice. Literature suggests that EP-consultation supports teachers through problem-solving skills, professional insight, and expertise they bring (Davison & Duffy, 2017). The role of the EP in facilitating such interventions could be to help shift the focus of teachers away from the child, and onto the learning environment (Jones et al., 2013).

2.7 Lesson Study

I have introduced the format and purpose of LS as an intervention in section 1.7. I now review literature to show how LS has been used in practice. I finish this chapter by demonstrating the potential of LS to be used by EPs in collaboration with teachers, as shown by a small amount of literature. The importance of LS to supporting teachers of children with reading difficulties is clearly outlined by its relevance in supporting curriculum-based problems. Norwich et al. (2021) have published a review into the use of LS across different contexts and formats. They narrow down LS related literature to review 14 papers that explore this intervention in relation to the development of teachers' skills, knowledge of SEND needs, and inclusivity, as core themes. I include these papers in this review. When reviewing LS literature, a gap exists in how this method can be used by EPs and supporting children with reading difficulties. Thus far, only one paper has focussed upon EP-facilitated LS (Norwich et al., 2018). No studies have yet focused upon LS as an EP-facilitated method of supporting children with reading difficulties and dyslexia.

2.7.1 Professional Development

A prominent use of LS has traditionally been in teacher training or professional development (Dudley, 2013; Holmqvist, 2020). For example, Leifler (2020), Plantin Ewe (2020) and Sjunnesson (2020) have conducted research into LS focusing on teachers' professional learning. Leifler (2020) points out that practical professional development opportunities aimed at developing teacher knowledge of SEND are rarely offered to mainstream teachers; LS provides an opportunity for this.

Further, Plantin Ewe (2020) found that teachers' knowledge of relational competence increased following LS; in their study, participants showed increased ability to interpret nonverbal communication between teachers and pupils when reviewing video-recorded lessons. This aligns with the view that LS can reposition teachers as learners themselves; this reiterates an important element of inclusive practice that I outlined in section 1.3 (Hurd &

Licciardo, 2005). Importantly, Holmqvist (2020) has advocated extending the boundaries as to what constitutes LS. Its use can be multifaceted, from collaboration, to knowledge development, for example. It has potential to continue developing as a tool for interprofessional collaboration, or assessment (Norwich et al., 2016; Norwich & Ylonen, 2015).

2.7.2 Interprofessional Collaboration

LS brings teachers into contact with each other, who may otherwise work in isolation; this is a difficulty of the teaching profession (Dudley, 2013). Dudley (2013) argues that when working alone, teachers' ability to problem solve can be impeded by their own personal constructions of child difficulty. The social function of group work, encouraging exploratory talk to develop discussion and different viewpoints, leads to barriers to solution-focussed work being overcome (Dudley, 2013). Alternatively, LS can bring professionals together with different expertise. For example, Norwich et al., (2016) showed that LS provided an opportunity for psychologists, teachers, and neuroscientists to facilitate an improved understanding of the science of teaching. Similarly, Mutch-Jones et al. (2012) found that when science teachers engaged in LS alongside teachers of children with SEND, they were able to make increasing adaptations for their students with learning difficulties. Norwich et al (2016) found that participating psychologists reported their input often related to addressing the cognitive development of the pupils. Further, the inclusion of mathematics lecturers, allowed knowledge of maths concepts to be bridged between psychologists and teachers within the teams. Interestingly, the psychologists involved in this study reported that neuropsychology did not prove relevant to the lesson planning stage of LS (Norwich et al., 2016). They reported a greater need to draw on developmental and educational psychology literature, such as Vygotskian theory. Theory such as this may have allowed greater translation of knowledge from psychology to teaching (Norwich et al., 2016). This shows that EPs will need to apply knowledge that teachers find directly useful for their practice. Overall, the studies reviewed here show LS aligns with group problem-solving traditions.

2.7.3 LS for Assessment

Norwich et al. (2014), Norwich and Ylonen (2015) and Ylonen and Norwich (2012) have shown that LS can be used to assess children with learning difficulties. Through collaborative and cyclical planning, LS allows teachers to observe case pupils' response to differing provision and adjust this accordingly (Ylonen & Norwich, 2015). LS allows teachers

to assess children in class, as opposed to through withdrawal, and dynamically, as opposed to statically (Ylonen & Norwich, 2015). Norwich et al. (2014) draw parallels between the principles of LS, DA and ATT, as methods of assessment. Norwich et al. (2014) argue that LS, is a flexible curriculum-based approach to formative assessment that uses qualitative data.

LS has been shown to enhance teachers' pedagogy and their attitudes towards diverse needs of case pupils (Norwich & Ylonen, 2015; Norwich et al., 2014). For example, LS has been shown to be an effective way of supporting teachers of children with specific needs such as Moderate Learning Difficulties (MLD) (Ylonen & Norwich, 2012; 2013). In their study, Ylonen and Norwich (2012) found that LS helped teachers to modify their focus away from the label of MLD, and towards the specific individual needs of children. Teachers in the study identified that provision applicable for children with MLD was in fact applicable to the rest of the class. This intervention was effective in enhancing the teaching environment for children. This has direct implications for the potential of using LS to support teachers of children with dyslexia.

2.7.4 Teacher Self-Efficacy and Expectations

LS has been shown to be effective at building TSE and confidence (Klefbeck, 2020; Schipper et al., 2017, 2018). For example, Schipper et al. (2018) sought to test whether LS influences teachers' beliefs about their classroom practice. They found a significant increase of teachers' self-reported competence to include all children. This correlated with teachers' reported ability to adapt their teaching. The impact of LS upon teachers' perceptions of their own practice is of added importance, due to the body of wider research linking TSE to inclusive attitudes, demonstrated in section 1.3.2 (Brady & Woolfson, 2008; Woodcock et al., 2019).

Further, Klefbeck (2020) found that teachers' positive expectations of pupils increased following LS. Through LS, Norwich and Ylonen (2015) found teachers shifted their point of focus away from pupils' difficulties and towards increased identification of enabling factors; the largest change across the evaluation of their study was a decrease in teachers' reference to pupils' difficulties. These studies provide key links to reading difficulties literature reviewed in 2.3.3, whereby teachers may require support to identify environmental influences upon difficulties, rather than within-child explanations. Overall, LS allows teachers to develop their professional skills and understanding of learning difficulties through collaborative practice; it provides an opportunity to assess children dynamically within the

classroom and adjust pedagogy accordingly. Finally, through repositioning teachers as learners and its potential to improve TSE, LS contributes to positively promoting teachers' inclusive practice.

2.7.5 EP use of LS

There remains little research into the potential for EP use of LS as a method of support for teachers. One study thus far has explored the impact of their involvement (Norwich et al., 2018). Norwich et al. (2018) evaluated how EPs perceived their role in supporting teachers following a LS intervention aimed at supporting teachers' knowledge of working memory. The study made use of audio recordings of each planning and review meeting, alongside interviews with EPs. Further, LS members returned questionnaires to explore implementation of the process. This shows the large amount of data that a LS-cycle is likely to produce, alongside the benefit of using this data in studying the area focused upon by the intervention (Norwich et al., 2018). Norwich et al. (2018) concluded that LS allowed EPs to use consultation and problem-solving skills alongside psychological knowledge, to support teachers in the classroom. One EP in the study cited drawing 'working memory' from his 'pool of knowledge' to focus on in wider consultation with teachers. Further, in this study the EP role was to provide insight on theoretical underpinnings of practice (Norwich et al., 2018). However, EPs also reported doubts about their contribution of knowledge, due to SENCo's strong understanding of learning needs, and class teachers' knowledge of maths instruction (Norwich et al., 2018). Norwich et al. (2018) concluded that EPs can deploy their psychological knowledge and their consultation skills to promote reflective practice amongst the LS team. This shows that LS operates as a collaborative approach to supporting teachers rather than an 'expert-led' intervention.

2.7.6 Literacy Instruction

Finally, one paper was located reporting how LS has been used to support teachers with their literacy instruction. Benedict et al. (2013) used LS to support teachers to adapt literacy instruction for children with reading difficulties. The aim of this study was to reduce the misalignment between universal and targeted interventions, for struggling readers and students with learning disabilities. The authors report that creating collaboratively planned lessons became easier for the teachers. This aligns with wider research citing that teachers need support to work collaboratively due to this being rare in the profession (Dudley, 2013). LS led to students' instructional needs being better met within each tier of intervention

(Benedict et al., 2013). Thus, LS may provide teachers an opportunity to increase their accuracy in understanding reading difficulties in the classroom.

2.8 Chapter Summary

Through this chapter, I have presented literature showing the complexities teachers face in understanding reading acquisition; I have discussed literature behind differing models of reading difficulties, and how these may inform interventions. I have reviewed studies that show the likelihood of teachers' attitudes and self-efficacy being influenced by information inferred by labels or diagnoses. Teachers are likely to be influenced by the complex, and at times contradictory information conceptualising dyslexia. I have identified a gap in the literature around teachers' perceptions of appropriate pedagogical approaches when supporting these learners. There is a need for teachers to receive support when teaching children with reading difficulties, including with conditions such as dyslexia. This support is required to help teachers maintain a positive approach and see themselves as capable of meeting all needs within the classroom. I have reviewed literature exploring the ways that EPs do this already; research lacks into how LS may support teachers of children with reading difficulties in the classroom. I propose taking a mixed-methods approach to broadly understanding teachers' inclusive attitudes, self-efficacy and pedagogical approaches, followed by an in-depth evaluation of the impact of TEP-facilitated LS upon teachers' practices in the classroom.

3.1 Chapter Overview & Research Aims

In this chapter, I outline the design of my study and subsequent methodology. Firstly, I present the research aims and questions developed out of the literature, outlined in tables 1 and 2. I then explore the epistemology and ontology guiding my research. This underpins the mixed-methods design I have chosen. I show how I will bring the findings for each phase together. Finally, I outline ethical considerations for the research. The methods and findings for each phase will then be considered in more depth in chapters four and five.

This study aims to explore teachers' inclusive attitudes, self-efficacy, and pedagogical approaches, when supporting children with reading difficulties and/or dyslexia. A key focus of this study is to explore teachers' responses in relation to inclusive practice. Phase one aims to provide a broad understanding of these constructs through vignettes; four vignettes are used, with children described as having dyslexia in two of these. I explore the impact of dyslexia as a label, upon TSE, attributions, and pedagogy. In phase two, individual case studies are deployed to gain greater depth of understanding in evaluating the potential impact of a LS intervention with teachers, when supporting children with reading difficulties, and/or a diagnosis of dyslexia.

Table 1.

Research Aims

Overarching Aims:	1. To explore primary teachers' self-efficacy, inclusive attitudes, and pedagogical approaches to supporting children with reading difficulties and/or dyslexia. 2. To evaluate the impact of a dyslexia diagnosis upon TSE, inclusive attitudes, and proposed pedagogical approaches.
Phase One Aims:	1. To gain an understanding of teachers' inclusive attitudes when supporting children with reading difficulties and/or dyslexia. 2. To measure the potential association between TSE, and teachers' attitudes towards children with reading difficulties and/or dyslexia. 3. To gain an understanding of pedagogical approaches teachers would implement, when teaching children with reading difficulties and/or dyslexia.
Phase Two Aims:	1. To evaluate how LS impacts TSE and inclusive attitudes, following use of the intervention to support children with reading difficulties and/or dyslexia. 2. To explore ways in which LS impacts teachers' understanding of the individual needs of case children and associated pedagogical approaches. 3. To consider the impact of diagnoses of dyslexia upon TSE, inclusive attitudes, and pedagogical approaches during the LS intervention.

Table 2.

Guiding Research Questions.

Phase One

Research Question 1

What are teachers' attitudes towards children with reading difficulties; do these differ when children are labelled with reading difficulties and/or dyslexia?

Hypothesis 1

Teachers will demonstrate more negative attributions towards children when labelled with dyslexia, compared to reading difficulties.

Research Question 2

To what extent does TSE predict teachers' attributions towards children with reading difficulties and/or dyslexia?

Hypothesis 2

Teachers with higher TSE will attribute more positively towards children with reading difficulties and/or dyslexia.

Research Question 3

What pedagogical approaches do teachers propose using to support vignette children with reading difficulties and/or dyslexia?

Phase Two

Research Question 4

In what ways does LS impact TSE and inclusive attitudes towards children with reading difficulties and/or dyslexia?

Research Question 5

In what ways does LS impact teachers' understanding of case children, and pedagogy they adopt?

Research Question 6

In what ways does a diagnosis of dyslexia impact teachers throughout LS?

3.2 Philosophical Assumptions

The philosophical assumptions underpinning research should be communicated at the outset, as they inform decisions made throughout (Mertens, 2019). Ontology represents what we believe can be known; in turn, a researcher's epistemological view relates to how this can be researched (Cohen et al., 2018). Epistemological beliefs shape the choice of design and tools for research, which in the case of this study, will be mixed-methods (Plano Clark, 2019).

3.2.1 Various Philosophical and Epistemological Positions

Norwich (2020) outlines differing philosophical standpoints that have typically underpinned educational research. These are the positivist position, alongside those of interpretivist and constructivist. The positivist position is one assuming a single reality exists (Norwich, 2020). Constructivist and interpretivist positions assume the existence of multiple perceived realities, underlining the interdependent nature of what is known, and the knower (Cohen et al., 2018). Further, pragmatism is often seen as a theoretical approach occupying middle ground between these positions; I present it below as the framework for this study (King, 2022).

Scientific fields such as medicine undoubtedly require positivistic research methods. Within educational research however, a more subtle hierarchy of preferred methods exists (Christensen, 2022). Evidence-based practice is nevertheless favoured within education policy; however, methods typically associated with this may fail to account for teachers' experiences and contexts (Christensen, 2022; Cohen et al., 2018). Christensen et al. (2022) advocate that teachers remain reflexive and critical of any 'scientifically derived' perspectives in practice. Undoubtedly, the human experience is of the highest importance within education.

While I agree with the afore-described notion that knowledge is constructed, I find myself aligned with the pluralist ontological assumption that a real-world exists, but all individuals have a different interpretation of it (Morgan, 2007). Similarly, Luhman (1995) talks of the existence of real facts, but that these are not observable in their entirety.

3.2.2 Pragmatism

Arguably, the problems of interest to educational researchers fall between the afore-described positions; a pragmatic approach situates research at this confluence between constructivism and positivism (Morgan, 2014). Pragmatism is often seen as a methodology rather than a philosophical position in its own right (Houser, 2010). Nevertheless, pragmatism pays close attention to the philosophy of knowledge (Morgan, 2007). Within pragmatism, the term 'enquiry' is preferred to 'knowledge', due to a higher value set by human experience; pragmatic enquiry seeks to establish actionable worth to influence real-world problems (King, 2022). Thus, adopting pragmatism underpins an assumption that knowledge acquired through this research will be of use to teachers and psychologists; the associated methods are chosen to facilitate this within the complex real world of education. Pragmatism allows this research to provide actionable evidence at the macro level, a national sample of teachers, while also providing in-depth insight from individual teachers through case studies (Kaushik & Walsh, 2019).

3.3 Mix-Methods Design

The research design of this two-phase study is now outlined; detail of each phase is given in chapters four and five. Mixed-methods research is aligned with the fact that the world cannot be explored in uniquely quantitative or qualitative ways (Cohen et al., 2018). Within this study, phase one aims to gain an understanding of TSE, inclusive attitudes and pedagogy, when supporting children with reading difficulties and/or dyslexia. While I identify with the socio-cultural applicability of constructivism to the subjectivity of attitudes, directly asking teachers about something as complex and socially desirable as attitudes towards inclusion may not capture broader contextual trends influencing them (Braun & Clarke, 2022; Mertens, 2019). Therefore, phase one employed survey methods to capture the broad psycho-social trends impacting teachers; however, these are insufficient to fully capture the complex phenomena of teachers' attitudes, and pedagogical approaches. Thus, qualitative analysis of open text-box responses about teachers' pedagogy partially addressed this concern in phase one. I also addressed this flaw of quantitative methodology further by using qualitative approaches to explore the same concepts in phase two.

Phase two aims to evaluate how LS impacts TSE, inclusive attitudes, and teachers' understanding of the individual needs of case children and associated pedagogical approaches. In phase two, case studies were embedded into the larger mixed-methods design, spanning both phases, as demonstrated in figure 2. For each case study, semi-

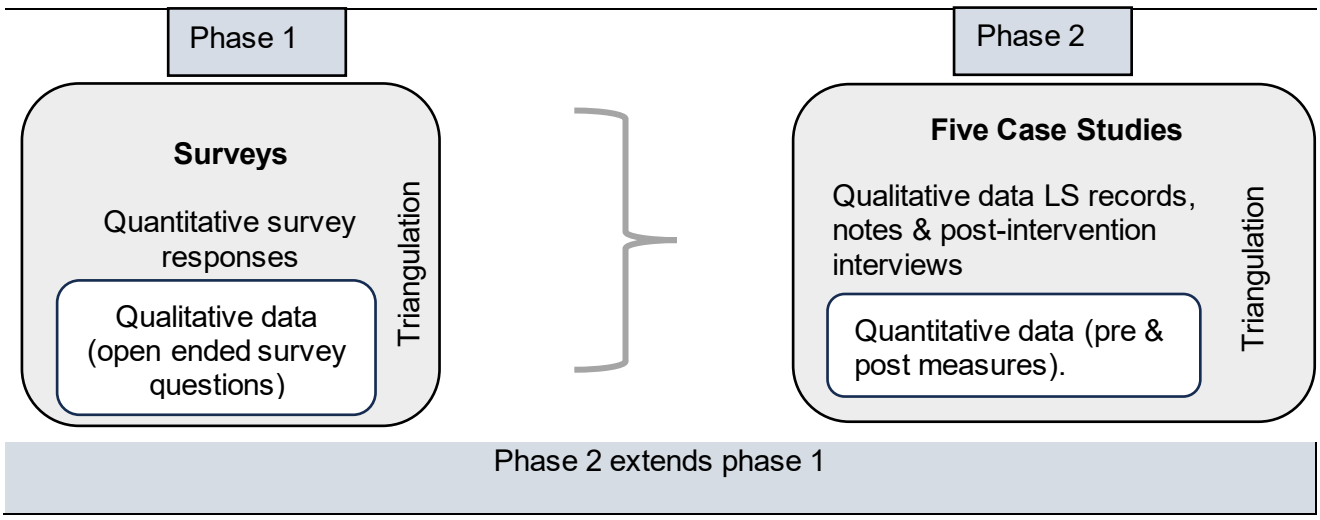
structured interviews provided access to a deeper, qualitative understanding of the complexities of teachers' attitudes and pedagogies for reading difficulties (Palinkas et al., 2015). These methods ensure broad findings of phase one could be extended, following a LS intervention, with in-depth real-world perspectives (Yin, 2018). Phase two case studies also benefited from quantitative surveys. Within each phase, I triangulated qualitative and quantitative data, adding credibility to findings across the study (Cohen et al., 2018; Robson, 2015).

3.3.1 Positionality in the Research

As researcher, I also engaged in the research through my role as TEP facilitator of each LS. This was a key decision made in the research planning process. Within case study methodology, the researcher is integrated within the research process and their personal attributes or personality can be significantly influential (Riessman, 2008). As such, there is no claim that I am a neutral actor in this research process and replicability is not a goal. Through continued reflection upon my interactions with participants I continually considered the meaning participants take from LS, and their interaction with me as facilitator; all LS meetings with participant were recorded and entered into the data set. This facilitated a deeper level of analysis of the process of collaboration, at the centre of LS. Through documenting procedures and acknowledging co-existing assumptions and viewpoints through enhanced reflexive processes, I lay out a transparent account of the research and ensure case study design and procedures are explicit (Yin, 2018). A sample of a reflexive journal of my research journey is shown in appendix B. A timeline of my research journey is included in appendix C.

Figure 2.

Overall Study Design



3.3.2 Phase One Design

Survey methods were selected as an effective way of reaching a large sample (Robson, 2015). These methods are suitable to capture a broad understanding of primary school teachers' inclusive attitudes, self-efficacy, and pedagogical approaches. The survey was formed of two parts and can be consulted in appendix D.

- Part one captured TSE for general inclusive practice, alongside TSE for literacy instruction (TSELI).

- Part two sought to establish teachers' responses to four fictional vignettes about child reading performance. The vignettes included two children described with reading difficulties and two with dyslexia, to isolate this variable. Thus, the dyslexia variable can be described as (yes/no), across the vignettes. Attribution scales followed these vignettes to establish a score relating to teachers' attitudes. Teachers were asked to scale types of pedagogy they would use to support children. An open textbox was also included to allow detailed responses to be contributed. Quantitative results were triangulated against qualitive findings from textboxes (Cohen et al., 2018).

3.3.3 Phase Two Design

In phase two, LS interventions were conducted in collaboration with teachers. Case studies are formed around each LS intervention, to explore TSE, inclusive attitudes,

understanding of child need, and pedagogical approaches, before and after delivery (Yin, 2018). A case study design is most useful when the research questions are aimed at establishing the 'how' or 'why' (Grauer, 2008). When designing phase two, it was important to ensure case studies of the intervention could facilitate exploration of the impact of diagnoses of dyslexia upon teachers' approaches; for contrast, it was also important to include case studies of LS interventions where diagnoses of dyslexia were not present. This requirement led to five case studies taking place; each is analysed individually and followed by a wider cross-case analysis (Yin, 2018). This design is further justified in chapter five.

A multiple-case study design represents the continuous delivery and evaluation of each LS (Yin, 2018). Qualitative data is drawn from LS records and semi-structured interviews with teachers. Equally, LS team members undertook short interviews with case children, to guide the progression of the intervention; this data was also included in overall LS records. Quantitative data is taken from LS surveys, aiming to measure teachers' attitudes, self-efficacy and understanding of child difficulty, before and after LS. These quantitative methods allow for qualitative findings to be triangulated (Cohen et al., 2018).

3.4 Ethical Considerations

In this section I cover ethical considerations made prior to the project and throughout. My ethics application and approval are shown in appendices E-F. EPs work within the ethical guidelines set out by the BPS (2021) and the health and care professions council (HCPC, 2016). I also demonstrate my close attention to the ethical considerations necessary to include child participants.

3.4.1 Informed Consent

Table 3 demonstrates how consent was gained for both research phases, before engaging in any work with professionals, or children (HCPC, 2016). For phase one, all participants were informed about the nature of the survey through information sheets, presented on the survey landing page (appendix G). For phase two, teachers were emailed copies of information sheets and asked to give these to parents, thus protecting parents' identity. Information sheets were read to child participants by their teachers (Appendices H-I). In these sheets, I provided teachers with a clear overview of LS, including clarity over the significant time requirements. Parents were offered a similar overview of the project. LS was

not commenced if any teachers, parents, or children did not consent/assent to participate. Consent and assent forms are appendices I, K and L.

Table 3.

Method of gaining consent in research

Phase of Research	Method of Consent
1. Anonymous Teacher Surveys	Information about the study included on page one; participants asked to click that they understood information and agreed to participate.
2. Lesson Study (Adult)	Consent forms signed by senior leaders to work with the school. Consent forms signed by teachers (n=10) taking part in LS.
2. Lesson Study (Child)	Consent forms completed by parent of child selected by teachers for case study. Child read information sheet about the project by teacher and shown assent form.

3.4.2 Anonymity

In phase one, all participants responses were anonymous from the point of survey submission. In phase two, teachers were asked to gain consent from parents before discussing children or disclosing any information about them. These considerations meet requirements of research as set out by British Educational Research Association (BERA, 2018). All participants were known by a pseudonym when analysis began. All data for this research, including Statistical Package for Social Sciences (SPSS) files, LS meeting records, observation notes, and interview transcripts was kept on my secure university share-point account. Therefore data identifying participants was only accessible by me.

3.4.3 Reducing Potential of Harm to Participants.

For phase two, LS case studies imposed complex and dynamic organisational demands on the research process. Grauer (2008) cites the requirement for flexibility when dealing with changing schedules; this is the case when organising LS. In line with ethical

requirements of social research, participants were told they could inform me of any desire to cease the intervention without justification (BERA, 2018).

Further, it was essential to consider the implications of power dynamics throughout research; teachers may have felt influenced by my involvement as a psychologist. I used my communications with staff to address this, regularly reiterating that LS is collaborative and not about directing practice (Norwich et al., 2018). Taking this approach with participants helped me emphasise that my knowledge of reading is not superior to theirs; I did not present myself as a reading expert. Similarly, there was a risk of children feeling singled out if they perceive themselves as subject to increased attention. For these reasons, I emphasised the importance of seeking child assent at every opportunity, mitigating against the risk of teachers speaking on their behalf. I made sure participating children were fully aware of their ability to end their participation at any point and spoke to them regularly throughout LS.

3.4.4 Ethical Standards

Finally, the highest ethical expectations are held of EPs. Practitioners are expected to be honest and trustworthy (HCPC, 2016). As such, I ensured I communicated well with participants and provided clear descriptions of the LS process. EPs must demonstrate competence, while recognising their own limitations (BPS, 2021). Therefore, I ensured I stayed up to date with reading research and completed training to enhance my knowledge of reading difficulties prior to LS commencing. This training course was entitled: Literacy: A Path for All by Dr Joanna Stanbridge (Edpsyched, nd).

3.5 Chapter Summary

This chapter has outlined the detailed aims and research questions of this thesis. I have presented the philosophical and theoretical assumptions that guide the research and presented an overview of the overall design. I have shown how methods are triangulated to ensure credibility of the data. I have discussed the ethical considerations I took during the research process. Chapter four will now present the methods and findings of phase one of this research in detail.

4.1 Chapter Overview

Phase one centres on the deployment of a national survey to primary school teachers. In this chapter, I present the aims, methods and results of this phase. I show findings relating to self-efficacy, inclusive attitudes towards children with reading difficulties and dyslexia, and consider teachers' pedagogy. A reminder of phase one aims is below.

4.2 Phase One Aims

1. To gain an understanding of teachers' inclusive attitudes when supporting children with reading difficulties and/or dyslexia.

2. To measure the potential association between TSE and their attitudes towards children with reading difficulties and/or dyslexia.

3. To gain an understanding of the types of pedagogical approaches teachers would implement when teaching children with reading difficulties and/or dyslexia.

4.3 Phase One Method

I aimed to answer research questions with survey responses from a large group of primary teachers. The survey was designed to capture TSE for general inclusive practice; a separate TSELI scale was also used to represent reading specific approaches. Teachers rated themselves on these two scales and answered questions about attitudes towards fictional children, described across four vignettes. These four vignettes varied in their descriptions of children as having reading difficulties or dyslexia (yes/no), and of wider attainment (high/low). Teachers also responded to scales about pedagogical approaches to support. An open textbox was included, allowing more detail to be contributed if desired.

4.3.1 Materials

I now describe how the phase one survey was developed. It was deployed using Qualtrics software. Data was then transferred into SPSS for analysis.

Teacher Self-Efficacy. A TSE scale was created using themes from the literature and using questions from scales published by Tschannen-Moran and Woolfolk-Hoy (2001) and Sharma et al. (2012). A TSELI scale was also developed, adapted from that published by Tschannen-Moran and Johnson (2011).

For both TSE and TSELI, themes were identified within the literature, such as providing whole class support, motivating children, collaborating with staff and parents, assessment, and deploying targetted support. These themes then formed the foundations of concept maps that facilitated questions to be chosen. Concept maps were used to create two, eight question scales for TSE and TSELI. The final concept map can be seen in appendix M; the final surveys are included in appendix D. These scales were taken to research supervision before being piloted with participants. 7-point Likert scales were used to provide sufficient sensitivity to scoring, ranging from Strongly Disagree (0) to Strongly Agree (6). The scales were scored out of 48 with higher scores relating to higher self-efficacy. The internal reliability of these scales were calculated using Cronbach Alpha; for TSE, Cronbach Alpha was found to be *a*=.84; meanwhile, for TSELI, *a*=.85. Therefore, both scales were found to have good internal reliability (Cohen et al., 2018).

Vignettes. Vignettes were adapted from Clark and Artiles (2000), who investigated teachers' attributions to children with learning disabilities. Vignettes included four short descriptions of nine-year-old children described as struggling with reading in class; two of these four vignettes specified that the child has dyslexia. Nine-years old was chosen due to the possibility of dyslexia being diagnosed by this age (Williams, 2022; March 14). The remaining two vignettes used the term 'reading difficulties', rather than 'dyslexia'. The child's attainment in other subjects was also referred to. This was described as either 'doing well' or 'struggling'. Therefore, the key variables were the status of dyslexia (yes/no) and attainment in other subjects (high/low). Attainment was included as a variable to explore how teachers would perceive wider causal explanations of the reading difficulties seen. As shown in chapter two, teachers may base future expectations on current levels of attainment (Woodcock et al., 2019). Four vignettes were necessary to include each combination of the two variables, with two conditions.

The gender of children was considered during research supervision and during the pilot stage (see below). It was suggested during piloting that gender neutral names could be employed to remove potential assumptions linked to gender. Other participants felt that this course of action may lead to assumptions of gender, which is equally unhelpful. Therefore, gender was held constant; all pupils were introduced as male. Further, manipulating gender

would result in a much larger amount of vignettes than is feasible for this study. Vignettes and scales are shown in appendix D, and summarised in table 4. The order of the vignettes was changed at regular intervals during survey deployment, ensuring the order in which participants read them is counter-balanced.

Table 4.

Summary of Vignette Children

Adam	Described as having reading difficulties and performing well in his other subjects, such as maths.
Tom	Described as having reading difficulties; struggling in his other subjects, such as maths.
Kian	Described as having dyslexia; performing well in his other subjects, such as maths.
Charlie	Described as having dyslexia; struggling in his other subjects, such as maths.

Attribution Scales. Teachers rated each child on attribution scales. As shown in chapter 2, Woolfson et al. (2007) have developed attribution scales following Weiner's (1995) taxonomy of controllability, stability, and locus of causation. I employ these scales to measure teachers' attributions with wording changed to reflect the skill of reading; the words 'reading performance' replaced the term 'test performance' from Brady and Woolfson's (2008) study. Thus, three attribution scales were used, each corresponding to one of controllability, stability, or locus of causation. Each was measured on a seven-point Likert scale, asking participants the degree to which they agreed or disagreed with statements (Appendix D). Studies have in the past found good reliability for these scales (Brady & Woolfson, 2008; Woolfson et al., 2007). For example, Brady and Woolfson (2008) report scales reliabilities of *a*=.86 (locus of causation), *a*=.87 (stability), and *a*=.91 (controllability), for these attribution scales.

For controllability and locus of causation, lower scores represent attributions that children are not in control of their outcomes, and reasons for difficulty as within-child (Brady & Woolfson, 2008). Stability attributions were reversed; therefore, lower scores indicate a negative view that outcomes are unlikely to change. A collated score allows for measurement of teachers' attitudes towards these children.

4.3.2 Piloting

I piloted the survey by conducting cognitive interviews with two small focus groups of primary school teachers (Mertens, 2019). I encouraged pilot participants to think aloud while completing the survey, commenting on their engagement with the questions (Beatty & Willis, 2007). For example, this involved asking participants to comment on what different terms meant for them as professionals (Beatty & Willis, 2007). The primary aim of this was to ensure vignettes and scales represented teachers' experiences (Mertens, 2019). The participants completed surveys with minimal input from myself. I then asked broad questions about their reflections, and whether the children described were representative of their experience. Minimal changes were proposed.

4.3.3 Sampling

For phase one, convenience sampling was used as I used the channels open to me to recruit teachers (Cohen et al., 2018). Thus, surveys were distributed on social media, including Twitter (X), Facebook and LinkedIn. The survey link was provided within groups only accessible to teachers, ensuring it was teachers responding. I also used professional networks of teachers from schools I had connections with. Teachers could consent to participate and complete the survey online. In total, 144 participants responded from around the UK. The demographics of respondents can be found in section 4.4.

4.3.4 Analysis

Research questions one and two were accompanied by hypotheses; analytical strategies suitable to answer each hypothesis are presented here.

Research Question One. For research question one, I investigated teachers' attitudes towards children with reading difficulties and/or dyslexia and sought to establish whether attitudes differed due to the presence of the label. It was predicted that teachers would attribute more negatively towards children labelled with dyslexia, compared to those described without the label. More specifically, the dyslexia label was expected to have the largest impact upon teachers' attributions when measured alongside attainment (Clark & Artiles, 2000). As shown, attainment was included due the importance of this as an explanative factor for future academic performance (Woodcock et al., 2019). All participants answered the same questions and therefore, data fitted a repeated measures design. This design contained one independent variable, which was the pupil condition, combining

dyslexia status (yes/no), with the child's attainment (high/low). The dependent variable consisted of teachers' attributions for each vignette. To investigate these combined effects of dyslexia and attainment upon teacher attributions, a 2x2 repeated measures ANOVA was considered (Field, 2018).

Research Question Two. For research question two, I investigated the extent to which TSE predicts attributions across all vignettes, including the dyslexia variable, and when this was not included. **I**t was predicted that TSE and TSELI would positively impact teachers' attributions towards the children. A test of simple linear regression was considered (Dancey & Reidy, 2014). As shown in section 4.4.2, the conditions of normal distribution and linearity were considered met.

Research Question Three. Finally, I sought to understand teachers' proposed pedagogies towards vignette children. To quantitatively analyse the types of pedagogy that teachers rated as most appropriate for each child vignette condition, descriptive data was used. Descriptive data was considered sufficient to demonstrate pedagogies more likely to be used for each child. An optional textbox was also presented to teachers, allowing them to further describe pedagogies they would propose.

Thematic Analysis. NVivo was used as software to collate and organise all qualitative textbox data generated from phase one. Braun and Clarke's (2022) thematic analysis (TA) was used to analyse this. I began with an inductive approach to analysis; this ensured pedagogy and thoughts departing from dominant discourses within the literature could be considered, allowing teachers' perspectives to be captured (Braun & Clarke, 2022). However, this approach resulted in many codes not relevant to research questions. I refined my approach to include a deductive analysis using semantic codes: *phonics; sight-reading; adult support; motivational texts; phonetically accessible texts.* These topics of provision appeared frequently across the literature review and across participant data. This hybrid approach, shifting between inductive and deductive coding throughout analysis, allowed for broader pedagogies to be captured alongside in-depth justifications for teachers' approaches. Latent coding was used to analyse teachers' attitudes, where their answers inferred subconscious feelings towards child difficulties (Braun & Clark, 2022). Appendix N includes a sample of coding for TA. Table 5 outlines the six-stage framework used to arrive at the final themes (Braun & Clarke, 2022). Appendix O shows TA by stage.

Table 5

Six Stages of TA for Phase One

Stages	Steps taken per stage
Stage One	• Text-box responses collated and organised in NVivo. • Familiarisation and immersion in the data.
Stage Two	• Initial codes given to teachers' responses.
Stage Three	• Codes organised into initial themes. These themes were initially overly broad and required narrowing down. • There were overlaps in the meaning of these themes.
Stage Four	• At this stage some themes were discarded or collapsed. I narrowed themes down to five overall themes at this stage. However, I felt the themes remained too broad and not always linked to research question three.
Stage Five	• Final themes were narrowed down following a reread of the data and consideration of theme boundaries. For a final thematic map, see Appendix O.
Stage Six	• I began writing the report; several iterations and supervision took place to finalise.

4.4 Phase One Results and Findings

I now present phase one findings. Phase one aims were to examine teachers' inclusive attitudes when supporting children with reading difficulties and/or dyslexia. I explored the potential association between TSE and teachers' inclusive attitudes. Finally, I examined the types of proposed pedagogical approaches to support these children. 154 teachers responded to the survey; of these, 10 responses were deleted due to incompleteness. Incomplete surveys most often lacked responses to vignettes meaning analysis was not possible. 144 teacher responses were entered into the data set. Teachers' experience is displayed in table 6, showing that a representative range of experience was captured within this sample.

Table 6.

Teachers' Levels of Experience

Experience	Percentage
Less than a year	5
1-5 years	22
6-10 years	22
11-20 years	29
21-30 years	17
Over 30 years	5

4.4.1 Research Question One:

Attributions. Attribution scores were collated from teachers' scores for controllability, locus of causation and stability. Thus, each vignette attribution scale was scored out of 18. The overall attitude towards children with dyslexia, and those with reading difficulties was scored out of 36. Higher scores represented more positive attributions; for example a positive attribution may denote teachers saw children as in control of their own outcomes, with positive change likely, and/or that difficulties could be attributed to reasons outside of the child, such as teaching. These attitude scores are displayed in table 7.

Overall, the four attribution values for Adam, Tom, Kian, and Charlie, show attitudes towards the four children were reasonably neutral on average, and close to the midpoint of scales. However, mean scores for children with reading difficulties (Adam: 9.31; Tom, 9.34) were more positive than those labelled with dyslexia (Kian, 8.88; Charlie 8.69). Overall attributions towards the two children with reading difficulties (18.55) and with dyslexia (17.58) were summed to support analysis. Teachers' mean ratings for children on scales of stability, controllability and locus of causation are displayed in table 8.

Table 7

Descriptive Data: Teachers Attribution Mean Scores

Teachers' Attributions Towards Vignette Children	Mean	Std Dev
Adam: Reading Difficulties & High Attainment	9.31	2.01
Tom: Reading Difficulties & Low Attainment	9.24	2.14
Kian: Dyslexia & High Attainment	8.88	2.28
Charlie: Dyslexia & Low Attainment	8.69	2.77
Overall Attitude Towards Reading Difficulties	18.55	3.58

Table 8

Descriptive Data.: Teachers' Threefold Attributions

Children and Vignette Conditions	Stability Mean	Controllability Mean	Locus of Causation Mean
Adam: Reading Difficulties & High Attainment	3.78	1.87	3.65
Tom: Reading Difficulties & Low attainment	3.67	1.76	3.82
Kian: Dyslexia & High Attainment	3.69	1.58	3.62
Charlie: Dyslexia & Low Attainment	3.51	1.58	3.59

Assumptions. As shown, attributions were used as a measure of teachers' attitudes. To measure the effect of the dyslexia/reading difficulties only condition and attainment upon teachers' attributions/attitudes, a 2x2 repeated measures ANOVA was used. The data met the relevant assumptions for this. Across the four vignette children outlined above in table 7, there were two conditions, each with two levels. These conditions included the presence of a diagnosis of dyslexia (yes/no), and attainment in subjects other than reading (high/or low). Teachers' attributions towards each of the children represents a measure of their attitude towards children under each of these conditions. The assumption of sphericity was met due to only two levels of repeated measures existing for each condition (Field, 2018). As shown by histograms in Appendix P, assumptions of normal distribution for each attribution score, were also considered met for all four children (Field, 2018). The data for attitudes was considered parametric.

Results. A 2x2 repeated measures model was used to test the impact of the conditions of dyslexia and attainment upon teachers' overall attributions/attitudes. ANOVA showed a significant main effect of the dyslexia condition, upon teachers' attitudes, F(1.143)=9.95, p<.01. Therefore, the term used within vignettes (dyslexia/reading difficulties) significantly influenced teachers' attitudes. A follow up within-subjects t-test indicated teachers' mean attitudes towards children described as having reading difficulties, (*M* = 18.55; SE =.3) were more positive than when the dyslexia label was used (*M* = 17.57; SE = .37), *t*(143) = -3.15, p<.01). However, main effects for attainment (F=.91, p=.342) and the interaction between dyslexia and attainment (F=.247, p=.62) were non-significant. Overall, this shows that the label of dyslexia had a significantly negative impact upon teachers' attitudes.

To break this finding down further, the 2x2 repeated measures model was repeated for each attribution of controllability, stability and locus of causation. For attributions of controllability, there was a significant main effect of the dyslexia (yes/no) condition upon these attributions, F(1.143)=7.8, p<.01. Once again, no significant main effects were found for attainment (F=.6, p=.44) or for the interaction between dyslexia and attainment (F=.64, p=.43). Equally, there was no main effect of the dyslexia (yes/no) condition or attainment upon the attributions of stability and locus of causation, made by teachers.

Therefore, the hypothesis that teachers will demonstrate lower attributions towards children when children were labelled with dyslexia, was upheld. Specifically, teachers demonstrated lower attributions of controllability for children with dyslexia. The teachers within this phase of the study, saw vignette children with dyslexia as in less control of their outcomes than undiagnosed children.

4.4.2 Research Question Two

For research question two, the relationships between TSE, TSELI, and attributions as collated from the three scales of controllability, stability and locus of causation, were measured.

TSE & TSELI. These scales were scored from 0-48. Attribution scores are shown in table 7. To examine the relationship between TSE, TSELI, and attributions, an analysis of linear regression was used. TSE, TSELI, and attributions were on different scales and therefore scores were standardised. Mean scores for teacher's TSE and TSELI are from

scales adapted for the purpose of this study. For this reason, they are not directly compared to wider studies.

Table 9.

Descriptive Data: TSE & TSELI

	Mean	Std Dev.
TSE	40.9	4.67
TSELI	39.92	4.52

As shown by histograms in Appendix Q, TSE, TSELI and teachers' attribution scores, were considered normally distributed. Pearsons' *r* was appropriate to test bivariate correlation between TSE, TSELI, and attitudes towards each child condition (Field, 2018). TSE and TSELI were strongly correlated (r=.681, p<.01). There was no multicollinearity due to one predictor variable being present (Field, 2018). There was no autocorrelation as residuals were uncorrelated. Therefore, requirements of homoscedasticity were met (Field, 2018).

A significant negative correlation existed between TSE and teachers' attributions towards Charlie (r=-.246, p<.01). There were also small negative correlations between TSELI and attitudes towards Charlie (r=-.184, p<.01), and between TSELI and Kian (r=-.165, p<.01). Both children were described as having dyslexia. Therefore, a linear relationship exists between TSE and attributions towards Charlie. A linear relationship exists between TSEL and attributions towards Chalie and Kian. This relationship was not found for children with 'reading difficulties'. Assumptions of linear regression were considered met (Dancey & Reidy, 2014). Due to the existence of a linear relationship between TSE, TSELI and attitudes towards the children with dyslexia, the relationships between TSE, TSELI and collated attitudes towards children with dyslexia were tested with linear regression.

Results. ***TSE and Attitudes Towards Dyslexia.*** Results of linear regression indicated that TSE negatively predicted teachers' attributions towards children with dyslexia (β= -197, t=-2.4, p<.01). The slope was β= -.197, thus for every increase of 1 standardised unit of TSE, attitudes towards children with dyslexia decreased by .197 standardised scale point. Thus, as TSE increased, teachers were more likely to report negative attitudes towards children with dyslexia.

TSELI and Attitudes Towards Dyslexia. Results of linear regression indicated that TSELI also negatively predicted teachers' attitudes towards children with dyslexia (β= -.201, t=-2.5, p<.05). Thus, for every increase of 1 standardised unit of TSE, attitudes towards children with dyslexia decreased by .201 on the standardised attribution scale. The relationship was slightly stronger for TSELI than for TSE. Thus, as TSELI increased, teachers were more likely to report negative attitudes towards children with dyslexia.

Therefore, the hypothesis that higher TSE and TSELI would predict more positive attitudes towards children with reading difficulties and dyslexia was rejected. Conversely, teachers with higher TSE and TSELI, in fact held lower attributions towards children with dyslexia. This wasn't the case when children did not have the label. In summary, there is a link between TSE, TSELI and attributions; however, more experienced, and confident teachers may feel that dyslexia is difficult to understand and requires additional support. This will be discussed in section 6.2.2.

4.4.3 Research Question Three

Teachers' ratings of pedagogies proposed for each child are firstly examined. Each approach was rated on a 7-point Likert scale. Each vignette was followed by statements of pedagogy in the following format:

1. Adam requires support from a TA, 1-1 or in small groups.
2. Direct phonics instruction will be an effective method of support for Adam.
3. Focusing on high frequency sight words with Adam will be effective.
4. Adam would benefit from highly motivational and varied literature.
5. Adam should follow texts that are phonetically accessible; Adam should read texts that include words that are phonetically accessible.

Further, participants were offered open-ended texts boxes to answer questions about pedagogy. Responses were analysed through TA. Research question three benefits from triangulation of quantitative and qualitative responses.

Quantitative Results. Mean data for teachers' rating of pedagogical approaches for each vignette child is shown in table 10. Overall, these descriptive findings suggest that teachers were most likely to recommend 1-1 support for the two children described as having dyslexia. They were also more likely to recommend focusing on high frequency sight

words when children had dyslexia. Conversely, teachers were less likely to recommend using phonetically accessible texts and direct phonics interventions for vignettes including the diagnosis. Teachers were least likely to recommend using motivational texts when children were described as having dyslexia.

Table 10
Descriptive Data: Teachers' Ratings of Pedagogies

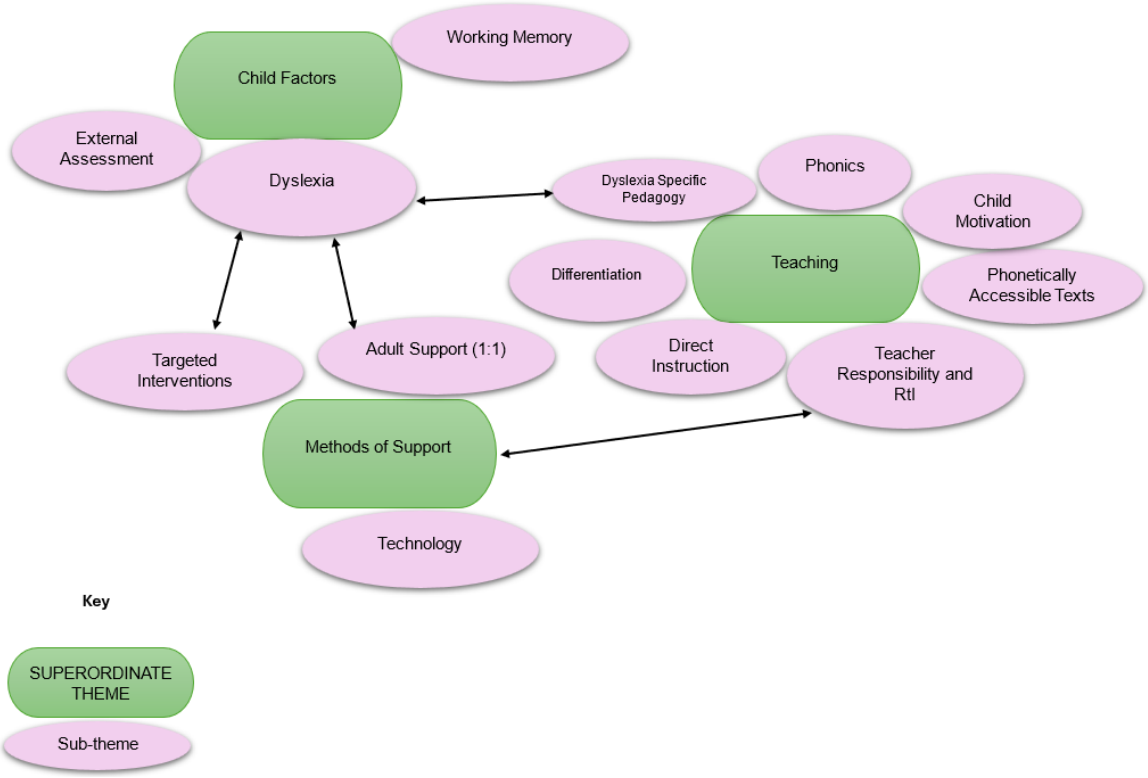
	Adam RD/HA*	**Tom RD/LA**	**Kian Dys/HA**	**Charlie Dys/LA**
1. Support from Teaching Assistants	5.1	5.26	5.4	5.5
2. Direct Phonics instruction	5.0	5.09	4.97	4.95
3. High frequency sight words	5.35	5.35	5.45	5.4
4. Motivational and varied literature	6.00	5.9	5.96	5.84
5. Phonetically accessible texts	5.25	5.46	5.23	5.16

*RD: Reading Difficulties; HA: High Attainment; LA: Low Attainment; Dys: Dyslexia

Qualitative Findings. In addition to the quantitative results above, 86 participants also responded to the optional text box question about pedagogy. The three main themes discussed below are *child factors*, *teaching practice* and *mechanisms of support*. Themes and subthemes are displayed in figure 3. Child factors refers to instances in which participants referred to the child, for example, regarding their individual difficulties or profile. Teachers often referred to the sort of practice or pedagogy they would use in class, and this is represented by theme two. Finally, theme three relates to participants' references to wider methods of support such as interventions and 1:1 support. Figure 3 represents a final thematic map, showing organisation of themes and the relationships between them, guiding my interpretation (Nowell et al., 2017).

Figure 3

Phase One: Map of Final Superordinate Themes and Subthemes



Theme One: Child Factors. Teachers often sought more knowledge about the children; they suggested assessing child factors such as self-esteem, attention, and for SpLD.

External Assessment. Several participants stated that they would seek further investigation for children's needs; they referenced EPs, advisory and SpLD teachers. Some teachers felt these professionals could provide a diagnosis and strategies associated with this. Some participants stated professionals could "test", or "refer for" dyslexia. For example, participant 28 felt "strategies suggested by the dyslexia service" were necessary, while participant 34 advocated "advice from the EP and applying for an EHCP". The notion of teachers seeking a label to understand vignette children will be discussed.

Several participants cited they would refer children within their own school, for example to the SENCo; they wished to know more about working memory, phonics knowledge, receptive and expressive language, and vocabulary. Identifying gaps in phonics knowledge was frequently referred to; for example, participant 36 asked: "are there any gaps in his phonics knowledge". This subtheme begins to overlap with that of *phonics*, presented below. Participants often focused on the importance of phonics in learning to read and often

referenced this within their proposed provision. These findings can be discussed in the light of quantitative findings that when the children were labelled with dyslexia, teachers were least likely to pursue the teaching of phonics.

Dyslexia as a Child Factor. Dyslexia could be considered a within-child factor that is not related to teaching. Specific support that teachers associated with dyslexia is covered in theme two. Some participants referenced visual aspects of dyslexia; for example, participants 35 and 66 felt that visual difficulties may lead to children struggling to recognise phonemes in complex words; visual stress can be supported with coloured overlays, according to several responses.

Three participants referenced the notion that if dyslexia is diagnosed then the difficulty is beyond the control of the child. This strengthens the notion that dyslexia is potentially impactful upon attitudes; this finding is discussed below. I applied the latent code 'fixed difficulty' to several statements including: **"**If he is dyslexic, it is beyond his control unless the correct provisions are in place" (Participant 36). This showed participants held attributions of low controllability for the children labelled with dyslexia, in line with quantitative results.

Working Memory. A further within-child factor was working memory, referred to several times. For example, participants 52 and 15 advocated a "working memory assessment" while participant 35 stated that poor working memory would mean "children find it hard to recognise each phoneme". One participant cited that working memory is a difficulty found in those with dyslexia.

In summary, this theme shows teachers understandably focused on factors relating to the children described in the vignettes when asked to consider pedagogy. There was a frequently occurring notion that further assessment was necessary. Many participants advocated waiting for strategies to be suggested by other professionals. Other child factors included children's level of phonics knowledge, and potential difficulties with working memory.

Theme Two: Teaching. The next theme considers references to the role of the teacher and changes to classroom pedagogy that participants proposed. Several responses focused on changes to pedagogy to support reading difficulties in the classroom. Teachers focused on how children learn, and suggested pedagogy such as 'interleaving' or 'dual coding', for example. Some participants also discussed their intention to pre-teach skills or vocabulary.

Phonics. Teachers within the study shared a variety of opinions about the use of phonics with these children. Several participants advocated using daily phonics interventions. Specific phonics programmes such as "monster phonics" were regularly quoted. Participants often argued that the input for phonics catch up should be frequent.

Phonetically Accessible Texts. Four participants claimed texts given to children should remain phonetically accessible These participants stated books should be phonetically levelled. This extends quantitative findings that the participants rated phonics instruction and phonetically accessible texts as least useful when children had dyslexia. The reasons teachers focus on banded texts and the potential impact for children will be discussed.

Child Motivation. Participants referred to providing children with motivational literature in a variety of ways, including paired-reading and guided reading in mixed ability groups. One participant referred to using a reward system linked to reading to encourage the children to read. Several others referred to fostering motivation, for example: "share high quality texts to develop a love for reading" (Participant 12). Quantitative findings suggested that teachers felt motivational texts were important; however, they rated this as least useful when the child had dyslexia.

Differentiation. Several participants offered responses such as "adapted learning", "differentiate in class", "use differentiated texts" and "adapted resources". Participants 23 and 79 advised breaking all tasks down into manageable chunks for children. Three teachers referred to using different methods of delivering reading such as using: "multi-sensory methods" (Participant 3), and "engaging in a wide range of texts in a multimedia way" (Participant 84). This final quote also refers to the importance of promoting access to varied texts. This is perhaps opposed to using banded and phonetically accessible texts.

Overall, this subtheme shows the range of responses teachers gave when considering provision that they foresaw implementing themselves. This theme begins to

illustrate instances whereby teachers considered approaches they could deploy in the classroom, as opposed to intervention outside of it.

Direct Instruction. Direct Instruction is presented and defined in chapter two. Two participants referenced Direct Instruction in their responses. Participant 3 suggested that teachers should use this to focus on high frequency words. Participant 51 recommended "precision teaching and a direct instruction tailored curriculum".

Teacher Responsibility and Response to Instruction. This subtheme reflects references to the importance of class teachers in supporting children's needs. Some teachers focused on identifying needs through observing responses to interventions. These responses show that some teachers were focusing on the role of teachers, rather than on interventions and TA support. For example, participant 35 felt that "Charlie should be taught by the most qualified staff, while participant 39 emphasised the importance of "whole class reading, alongside targeted intervention". Several participants considered the implications of their practice upon the notion of inclusion; for example: "raise awareness of differences with the whole class and foster inclusion and a lack of judgement of labels of SEND" (Participant 3). These examples suggest that several participants were considering the impact of their own practice upon children.

Teachers referenced spending time trying different approaches with children, for example, participant 25 advocated making sure "you find the appropriate provision because every child is different [...] it's important to work carefully to find what works best". This subtheme denotes that certain teachers would feel confident and positive towards children, demonstrating confidence in their ability to find the right strategy. This subtheme could be interpreted as demonstrating examples of external attributions of child outcomes, with teachers focusing on their own practice as influential (Chodkiewicz & Boyle, 2014).

Dyslexia Specific Pedagogy. Participants linked certain pedagogies to the dyslexia diagnosis, such as coloured overlays; seven participants considered this an effective approach. Others recommended using alternative ways of recording and moving away from phonics, recommending the use of high frequency words to aid fluency. This can be discussed in the light of quantitative findings that participants rated sight word instruction as most useful for the children with dyslexia. Meanwhile, some teachers recommended the use of "dyslexia specific interventions", but without including additional details as to what these were.

In summary, teachers were divided over the importance of teaching through phonics. Some teachers felt that they should teach reading phonetically or through phonetically decodable texts. This variability will be discussed below. Several participants displayed they considered themselves capable of identifying appropriate strategies through RtI at whole class and individual levels. These types of responses emphasised the importance of the class teacher in meeting need. A broad range of "dyslexia specific interventions" were proposed but at times, these lacked clarity from participants.

Theme Three: Methods of Support. The final theme is that of the wider support mechanisms that teachers identified.

Targeted Interventions. This subtheme reflects teachers' references to interventions such as Toe by Toe and daily phonics catch up. Often, participants' descriptions of targeted support for the four children were vague, for example: "additional provision to support" (Participant 70). More specific interventions focused on skills and methods of intervention that participants considered to be supportive of reading, such as: "interleaving", "shared reading", "paired reading", "precision teaching" and "reciprocal teaching". Precision teaching was referred to by 10 participants in total. It was clear that many of these recommendations would require additional adult support to deliver this outside of class time.

Adult Support (1:1). This subtheme is delineated from the previous due to the focus of many participants on these children receiving 1:1 adult support. Participants saw 1:1 support as necessary for children "to be read to in lessons", to receive "intensive intervention", and "to scribe for writing". 1:1 support was also mentioned by participants to provide the children with interventions, including those shown above. For example, children may receive "specific 1:1 SpLD work" (Participant 13) or "intensive interventions with a 1:1 over a period of time".

Within this subtheme, participants referred to the training of teaching assistants. Several teachers referred to the need for children who need the most help to be taught by teachers, and not teaching assistants. Example reasons given for this include: "teaching assistants do not always have the specialist training for this work" (Participant 52). Several responses indicated that using teaching assistants to deliver classroom support or targeted interventions may not be a good way to support children. This subtheme provides a contrast and further context to the above notion that some teachers saw themselves as capable of meeting these needs within class.

Technology. A final subtheme within support methods was technology. Participants referred to using laptops and reading pens for example. There was also frequent reference to using audio books; for example, “audio books to allow Charlie to listen and read [...] and understand what he’s reading (Participant 59)”. Assistive technology was the most frequently referenced pedagogy given to support the children. For example: “touch typing to support reading his own work” (Participant 5), “immersive reader for complex texts” (Participant 16), and “access to a laptop” (Participant 79). This shows that participants felt that technology would be highly supportive of children with reading difficulties or dyslexia.

Overall, participants saw adult support as important for children with reading difficulties; however, there was a mixture of opinion over whether this should come from teachers or teaching assistants. There was a strong notion that the children require specific targeted interventions to support them. Some participants advocated supporting children themselves, rather than through 1:1 support; this suggests these teachers would feel more in control of child outcomes and attribute more responsibility to themselves in supporting reading.

4.5 Chapter Summary

Findings in this phase of the research demonstrates that teachers held more negative attitudes towards vignette children when these were described as having dyslexia. Qualitative findings suggested that teachers often wished for further assessment to take place and to provide further diagnoses where necessary. The teachers in this study demonstrated variability in their perceived ability to support children themselves. Some felt that external support or assessment was necessary, while many suggested 1:1 support and intensive interventions are of high importance to supporting children with reading difficulties and dyslexia. Conversely, many teachers were more confident in their ability to make within class changes that could help. More efficacious teachers were likely to hold less positive attitudes towards children with dyslexia. This may imply teachers’ beliefs in their self-efficacy can persist even when seeing children with dyslexia as beyond their own expertise. This surprising finding will be discussed in detail. Several teachers considered themselves capable of identifying and supporting need through trying different approaches; this could be described as teachers assessing through RtI. I discuss these findings in detail in chapter six.

Chapter Five: Phase Two

5.1 Chapter Overview

Phase two is centred around five LS cycles taking place across five different schools. LS is a method of teacher enquiry, through which small groups of professionals collaborate to undertake a “plan-do-review” activities, aiming to improve understanding and provision for case children (Norwich et al., 2014). I facilitated LS cycles, alongside my role as researcher. Phase two extends phase one with the use of an intervention targeting the constructs of TSE, inclusive attitudes, and pedagogy.

In chapter 5, I present methods corresponding to the delivery and analysis of LSs, through a case study design. I present findings from case studies through five within-case analyses, each in in their own section (Hitchcock & Hughes, 1995). This analysis is followed by cross-case analysis, primarily using TA (Braun & Clarke, 2022; Yin, 2018). I use this chapter to present the design, structure, analysis and findings of case studies. The aims of this phase are recapped below.

5.2 Phase Two Aims

1. To evaluate how LS impacts TSE and inclusive attitudes, following use of the intervention to support children with reading difficulties and/or dyslexia.

2. To explore the ways in which LS impacts teachers’ understanding of the individual needs of case children and associated pedagogical approaches.

3. To consider the impact of diagnoses of dyslexia upon teachers’ attitudes, self-efficacy and pedagogical approaches during the LS intervention.

5.3 Phase Two Method

5.3.1 Case Study Selection

As described in chapter three, it was important to achieve a design whereby case studies of LSs including children with a diagnosis of dyslexia, could be contrasted against LSs where a diagnosis was not present. Recruitment for LS was challenging, and participant withdrawal was likely due to the time demands of LS. Therefore, I began recruitment by offering LS to more schools than would be needed, ensuring the original design could be achieved. My aim was to recruit two schools where no formal diagnosis of dyslexia existed, and two where case pupils had dyslexia. This was important to ensure that the differing impacts of dyslexia upon teachers could be compared, to LSs without this factor. Case studies were chosen to ensure that sufficient differences in school context could be achieved; these differences included staff participating, such as school leaders, SENCos, and TA availability during LS. Two case studies for each condition allowed for wider variations in staff experience and knowledge levels to be achieved.

Where the LS group and context was sufficiently unique in comparison to the others, I deemed it worthwhile to include as a case study for the purpose of this research. With this criteria in mind, I achieved an eventual sample of five LS groups across five case studies. The fifth case study (case E) was recruited as it was sufficiently different to all other case studies. For case E, the LS group only included myself and the teacher; this had interesting implications such as the impact of having no available teaching assistants. Therefore, due to important differences to the other four case studies, I decided to keep this case in my overall design. I further discuss this decision below.

The overall achieved sample allowed sufficient breadth and differences between case studies, ensuring the research questions could be answered. A reduced amount of case studies would have allowed more of the LS process to be discussed within a limited word count. However, it was essential to achieve a large enough sample of case studies to allow for the impact of the dyslexia label to be adequately explored within the overall design.

5.3.2 Recruitment & Participants

Convenience sampling was used to seek interested schools to receive LS. I approached SENCos within the northwest local authority where I work as a TEP, via email. I recruited LS groups following their initial expression of interest; recruitment continued until at

least two groups including children with diagnoses of dyslexia, could be included in the sample, alongside children without the label. Two schools expressed initial interest in LS before withdrawing this when the time requirements of the intervention were clear to them. Other schools asked to take part after I had closed the recruitment stage.

Schools and Teachers. In total, five different northwest primary schools signed up to receive the intervention between October 2023 and February 2024. See Appendix C for the timeline of my research. School SENCos were asked to approach teachers. Teachers were then asked to seek parental consent alongside child assent. Overall, 10 teachers took part in LSs; all teachers took part in interviews and seven returned surveys. Three teachers did not return surveys, perhaps due to high workload and additional requirements of LS.

The final LS groups formed across the study are demonstrated in table 11. In total, three class teachers, three SENCos, two deputy heads and two literacy lead teachers took part in LS and were interviewed. None of these participants had participated in phase one. All LS groups included at least two teachers to form the LS group alongside myself; case E is an exception where only one teacher could participate. I chose to continue with case E to consider what pedagogical changes could be made in a classroom with limited adult support. With no other school participants able to participate in observation, the LS group was formed out of myself and the class teacher. This design for case E could arguably bring LS closer to teacher coaching. Instead I continued to follow the processes of encouraging reflection about child learning. The implications of this smaller LS group for case E will be discussed. Crucially the teacher coaching process of observers providing teachers with feedback about the lesson was not present in the case E LS (Kraft et al., 2018).

Children. LS study was offered to school years' three to six, ensuring all children would be at least seven-years-old, the minimum age for a dyslexia diagnosis (Williams, 2022; March 14). Four schools chose two children, with one school choosing a singular child. Three schools chose to focus LS upon case children from year five, with two focussing on year four. Overall, nine children were involved in LS. Five of these children took part in short interviews with myself or teachers; the data from these were included in overall LS records. All children are presented in table 11. Three children across three case studies held a diagnosis of dyslexia.

Anonymisation. All participant names were anonymised using pseudonyms. Allen and Wiles (2016) discuss the meaning that can be held within a name. They advocate that

researchers offer participants to choose pseudonyms. Therefore, all teachers chose a pseudonym. I allocated pseudonyms for children.

Table 11.

Phase Two Participants Per Case

Case	Teachers			Case Children	
A	**Charlotte** Class Teacher & Deputy Head	**Rebecca** Class Teacher		**Ellie** Year five; diagnosed with dyslexia.	**Chris** Year five
B	**Lizzi** Class Teacher & SENCo	**Annie** Class Teacher & Deputy Head		**Eve** Year four	**Sam** Year four
C	**Lily** Class Teacher	**Carolyn** Teacher & Literacy Lead	**Roy** SENCo	**Tommy** Year five	**Molly** Year five
D	**Kerry** Literacy Lead	**John** Class Teacher		**Megan** Year four	**Hannah** Year four; diagnosed with dyslexia.
E	**Katie** Class Teacher & SENCo			**Peter** Year four; diagnosed with dyslexia.	

5.3.3 Procedure

In this study, I collaborated with participants for a two-lesson cycle of LS, per school. With LS, lessons are referred to as research lessons (RL). The two-lesson cycle is depicted by figure 4. LS cycles include meetings orientated around the planning, observation and reviewing of two RLs. Planning and review meetings were aimed at gathering data about child needs at baseline, before developing and answering assessment questions about children over time. Each planning and review meeting lasted approximately 45 minutes respectively.

5.3.4 LS Templates

A series of LS templates, originally developed by Dudley (2014) and adapted here, were followed to guide each meeting. Completed templates for Case A are included as Appendix R for reference. An overview of each template and its purpose is covered below in table 12. As researcher and TEP, I facilitated meeting discussions and made notes about content using templates. All completed templates became data and were included in the overall qualitative data entered into NVivo.

Templates were adapted to ensure that only factors related to literacy and reading were retained. I chose to omit template 6, gathering parental views into child difficulties; this was to ensure data management remained feasible for one researcher.

Figure 4

LS Cycle Procedure

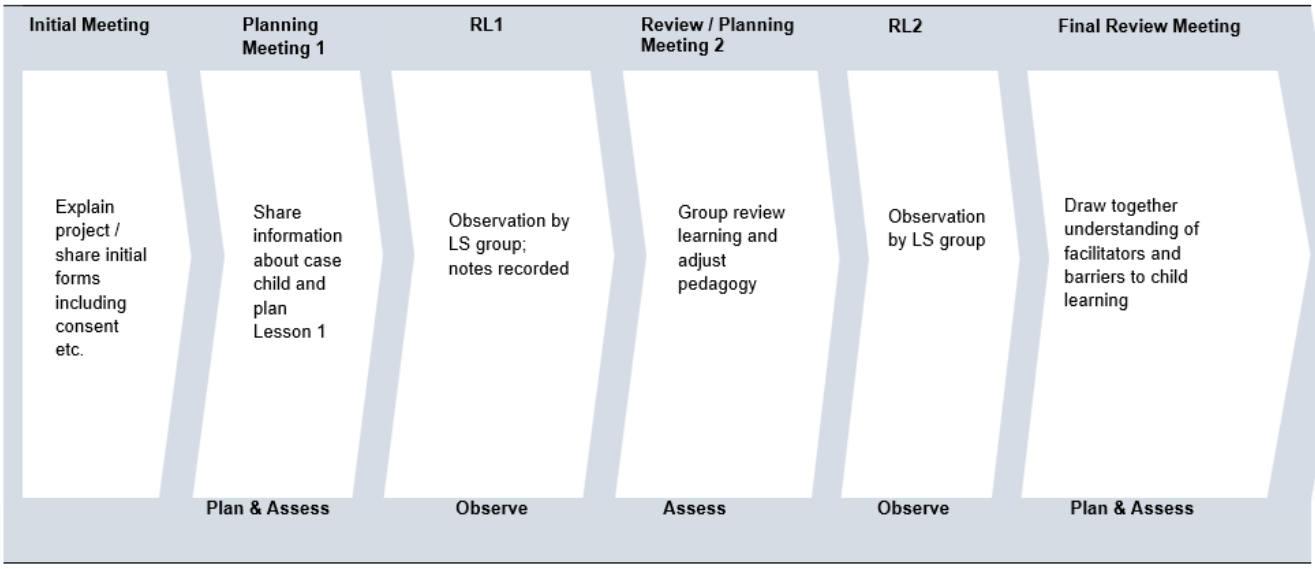


Table 12.

Lesson Study Templates (Dudley, 2014)

Template	Stage	Focus
Template 1	Planning meeting 1	Identify case children and justify inclusion in intervention
Template 2	Planning meeting 1	Initial assessment of child need; focusing on all that is already known.
Template 4	Planning meeting 1	Child views; gathered by class teachers
Template 5 A	Planning meeting 1	Identify targets and assessment questions for each child
Template 5B	Planning meeting 1 & 2	A lesson plan for Lesson 1
Template 5C	RL1 & 2	Observation form
Template 6	RL2	Child views after Lesson 2
Template 7	Review meeting 1	Progress against targets and answers to assessment questions for each child
Template 8	Review meeting 2	Final outline of child needs & ongoing pedagogy to be trialled

5.3.5 My Position Within Phase Two LS

Within LS, an external 'more-knowledgeable other' may support the LS group with their understanding of the subject matter (Takahashi & McDougal, 2016). Conceivably, an EP/TEP could adopt the role of the 'more-knowledgeable other' within LS; alternatively SENCos or specialist teachers' also bring knowledge (Norwich et al., 2018; Takahashi & McDougal, 2016). In this study, SENCos and senior school leaders adopted the optional role of more-knowledgeable other. Through the collaboration of these professionals, including myself, LS here remained distinct from the traditional concept of teacher coaching (Bennett & Monsen, 2011). In teacher coaching, teachers will often receive feedback from observers to help them improve (Kraft et al., 2018). This is not the case in the present use of LS as meetings that followed observations revolved around collaborative reflection about the lesson, and discussion of what we had learned about the case children. My role as TEP was to use solution-focused questioning and consultation skills to facilitate problem-solving. As a TEP, I bring knowledge of psychology and of reading acquisition. However, I made it clear to participants that I am not an expert in this domain. EPs also bring knowledge of problem-

solving approaches and inter-professional collaboration (Norwich et al., 2018). This represents my main contribution to LS.

To facilitate LS meetings, I followed each template designed by Dudley (2014) and used these to structure the meetings. In planning meetings for example, I asked questions about the case children, such as their approaches to learning, strengths and difficulties, and their home engagement with reading. For a full list of topics, see appendix R. I also regularly drew the conversation to what we wanted to learn about each child and helped other LS group participants to design the assessment questions to follow during lesson observations. In review meetings, I would encourage participants to feedback their observations and link these to potential changes to the learning environment that we wished to focus on next.

While it is important to consider the possibility of researcher bias in the qualitative elements of this study, a pragmatic design enabled me to remain reflexive, while recording my informed decisions during the process and learning from LS as I progressed (Mohajan, 2017). For example, I reflected on the impact of any LS decisions upon participants throughout.

5.3.6 Data Collection & Materials

I collected data for case studies from each step of the LS process, pre and post LS questionnaires, and interviews. Child interview data was included within LS templates entered into NVivo. I present the structure of each case study with relation to data collection in table 13. Within case studies, it was essential that clear and accurate records (LS templates) be kept throughout (Grauer, 2008). This was the case here, and I include appendices demonstrating transparency of every step of data collection and analysis. All meeting and observation notes from LS were shared routinely with the participating teachers to ensure trustworthiness of this data (Lincoln & Guba, 1985; Yin, 2009).

LS Questionnaire. A short pre and post questionnaire was developed to provide a descriptive understanding of the impact of LS upon participants (See appendix S). Participants completed the same questionnaire, before the intervention and three weeks after the intervention ended. The questionnaire aimed to capture teachers' understanding of child need, appropriate pedagogy, alongside TSE, and attributions. A summary of subscales within the questionnaire is below. 7-point Likert scales were used for each question. As shown, three teachers did not complete this questionnaire, likely due to time requirements.

***Meeting Child Need*.** The first part of the questionnaire focused on two Likert scales relating to teachers' self-rated understanding of child needs and required pedagogy. The answers to these questions were summed out of 14.

Attributions. The second section of the questionnaire measured teachers' inclusive attitudes towards children, represented by their attributions. These attribution scales were identical to those used in phase one.

TSE. Finally, a measure of TSE formed the final part of the questionnaire. TSE and TSELI scales from phase one were amalgamated. For this section of the study, scales were reduced in length to include only those questions considered most relevant to the research questions, for example regarding classroom pedagogy. Questions about engaging parents were removed. This scale included 12 questions and was scored out of 84.

Child Interviews. Where possible, children were asked by teachers or myself about their views of the lessons. These interviews were short and took the format laid out in template 4. Only three case studies included child interviews due to the time limitations upon teachers collecting these.

Semi-Structured Interviews*.* Semi-structured interviews allowed in-depth investigation of a priori determined themes relating to research questions. The literature review was used to identify themes of interest to explore with participants. Table 14 shows a series of topics that underpinned semi-structured questions, then included in my interview schedule.

The first question asks teachers to reflect back upon growth and changes in their understanding and attitudes throughout LS; I asked about professional changes and impacts upon confidence. The next focus, was upon types of pedagogy that teachers considered necessary for the case children, following LS. The final focus of interviews was to seek any specific knowledge or pedagogy that teachers had identified that is specific to supporting dyslexia. The final interview schedule is included as appendix T.

Interviews were conducted online, recorded and transcribed. I then checked transcripts that I created with participants. This was done to ensure trustworthiness of data recorded (Yin, 2009). A sample of a transcript for Charlotte is included as Appendix U, for reference.

Table 13.

Case Study Structure.

- Contextual information for each LS
- Planning of RL1
- Analysis of RL1
- Planning of RL2
- Analysis of RL2
- RL aims and assessment questions for each LS cycle
- Survey responses
- Child interviews
- Teacher interviews
  - Summary of teachers' attitudes and TSE, before and after LS
  - Summary of teachers' understanding of child need before and after LS
  - Summary of teachers' knowledge of appropriate pedagogy after LS

Table 14

Interview Themes and Associated Questions.

Research aims	Themes	Questions
1. To explore the ways in which LS impacts teachers' understanding of case children with reading difficulties and/or dyslexia.	Understanding of strengths and needs.	How did you feel about your ability to support the case children before the intervention? What was your experience of the LS approach that has taken place? What have you learned about the children that we focused on?
2. To evaluate how LS impacts TSE and inclusive attitudes towards the case children.	Impact upon teachers' classroom confidence/self-efficacy when supporting case children following LS.	What was your experience of the LS approach that has taken place? Has it brought any changes to you and your classroom? How do you feel now about your ability to meet the needs of case children?
3. To evaluate how LS impacts teachers' pedagogy.	Pedagogies thought to be useful for children following LS.	To what extent has LS impacted the types of provision or pedagogy you would implement? Are there any approaches you would use now that you did not consider before?
4. To explore what participants learned about the teaching and learning needs of children with dyslexia and reading difficulties, after LS.	Impact of 'dyslexia' upon teachers understanding of child's needs following LS. Differences visible across the intervention between children with/without diagnosis.	In our project, one child is diagnosed with dyslexia; to what extent has LS influenced your understanding of reading difficulties/dyslexia? Do you feel that LS has highlighted changes/pedagogy that is specific to children with reading difficulties/dyslexia?

5.3.7 Analysis

Case descriptions can be used when a large amount of data exists (Yin, 2018). As will be shown, within-case analyses followed a descriptive procedure. Following this, I applied TA to the cross-case analysis and triangulated findings with quantitative data.

Within-Case Analyses. These began with case descriptions of LS as they took place. For each LS, all meeting records were organised in NVivo. I then followed four stages of analysis to organise and communicate the data gathered within each case study. This followed a narrative style approach (Cohen et al., 2018). Four stages were used to move from immersion in the data, organising codes and themes, to a readable representation of each case study, within a limited word limit. To demonstrate my analytic process further, I include in-depth coding and analysis of Cases A and B in appendices U and V, for reference.

Step One. Step one involved familiarisation and immersion with all notes made throughout each LS, and post-LS transcripts. I immersed myself in several read throughs of all meeting notes and interview transcripts. I focused acutely on meaning made by the participants throughout each LS, as well as identifying the procedural outcomes of LS such as teachers' choice of pedagogies cited in meetings.

Step Two. Step two involved coding of data relating to research questions. Coding was applied to data recorded in LS templates in the first instance. Abductive reasoning represents a fluidity between inductive and deductive approaches, within a pragmatic approach (Morgan, 2007). During step two, coding was initially inductive; to consider meaning that participants gave to the process of LS (Kim, 2015). Within my analysis, I have described how each code summarises an aspect of group discussions during LS with reference to my own input where necessary (See Appendices U/V). Certain a-priori determined deductive coding was later applied to the data, ensuring that within-case analyses remained closely guided by the research questions (Miles et al., 2019). Codes applied to data included: *teachers' understanding of need*, *proposed pedagogy, self-efficacy,* and *attitudes*, as per the research questions.

Step Three. Step three of analysis involved me recording analytic memos linking any codes, to patterns and recognisable themes (Saldana, 2021). These were used to summarise the primary discussion points in each LS meeting and communicate the most salient points from the intervention. Themes often referred to types of provision used by

teachers, changes in attitude, and/or self-efficacy for example. At this stage I used analytic memos to describe how quantitative data extended the qualitative finding from templates and interview data. For example, I commented on the degree to which changes in TSE from survey data, may correspond with individual teachers' interviews.

Step Four. Step four equated to distilling this large data set into a cohesive and readable whole (Polkinghorn, 1995; Yin, 2009). The goal of this was to ensure the reader has access to a representative account of each case study.

Cross-Case Analysis. *Thematic Analysis.* As within phase one, I used TA as the primary method to undertake a cross-case analysis. TA followed the six stages outlined by Braun and Clark (2022) and shown in table 15. I immersed myself in all data, including interview transcripts, LS meetings and child responses. I initially analysed the data inductively to capture the meaning made by participants throughout LS. I also used deductive coding to explore the phenomena of interest to the research question: self-efficacy, attributions, and pedagogical approaches. Over time, themes were developed that aligned broadly with phase two research questions. For example, themes one and two aligned with the answering of research question four.

Surveys and Triangulation. Cross case analysis also allowed triangulation of all relevant qualitative findings with broad quantitative results from LS surveys described above. Multiple sources of evidence relating to the key themes within this study supports the credibility and trustworthiness of reporting these phenomena (Cohen et al., 2018). As I analyse findings that transcend individual case studies, I was also able to begin linking phase two findings to those presented in phase one.

Table 15

Phase Two: Stages of TA for Phase 2

Stages	Steps taken per stage
Stage One	• All data recorded during LS meetings and observations was checked with participants throughout LS. • LS meeting and observation records were entered into NVIVO. Semi-Structured interviews were transcribed and entered into NVIVO. • Familiarisation and immersion in the data with multiple read throughs.
Stage Two	• Initial coding of data across all interviews and meetings records. Priority was given to interview data at this stage. Sample coding can be seen in Appendix X.
Stage Three	• Codes were organised into several initial themes. These themes can also be seen in Appendix X. There was a lot of overlaps between early themes, and I returned to the data to clarify boundaries between themes.
Stage Four	• At this stage some themes were discarded or collapsed. I narrowed the themes down to four overall themes. I needed to capture the element of change from pre-LS to post LS within each theme. I had initially considered using themes for data relating to pre & post LS.
Stage Five	• Final themes were narrowed down following a reread of the data and consideration of the boundaries of each theme. A final thematic map following Phase Five can be found in section 5.6.
Stage Six	• Following Phase 5 I began writing the report.

5.4 Phase Two Findings

5.4.1 Case A

Contextual Information. The two case children were in year five and 10 years old. Alongside myself, the LS team consisted of Charlotte, deputy head and teacher of year five and Rebecca, co-teacher of year five. Charlotte taught the RLs. The case children's needs were outlined by Rebecca and Charlotte in planning meeting one; this meeting is summarised in table 16. Further details are shown in appendix V, alongside wider analysis for reference.

Table 16.

Case A Child Participants Discussed in Planning Meeting 1

Case Children	
Chris	Ellie
• Receiving 1:1 support in class • Reportedly struggles to segment and blend • Often loses the meaning of a sentence due to these difficulties	• Diagnosis of dyslexia • Struggling with phonological awareness • Has received intensive phonics input

RL1. RL1 was based on a poem about Victorian Britain. The teachers considered that the high difficulty of this lesson might impact the children; they wished to know if the difficulty was too much. Within the planning meeting, the teachers reported feeling uncertain about strategies to support Chris and Ellie. Both teachers described having delivered phonics catch up without noticeable impact.

Following RL1, the LS team discussed child engagement, cognitive functions, and self-esteem. For example, teachers felt that Chris had demonstrated difficulties with task initiation. Both children struggled to decode and lost some comprehension due to time spent at word level reading, leading to disengagement. The team considered ways to support motivation and comprehension of complex words in the text in RL2.

RL2. The primary focus of the second planning meeting was to support motivation and comprehension while reading. We considered using visuals to support memory and delivered a pre-read session, focussing on vocabulary.

Following the lesson, the use of visuals was identified as effectively supporting children with key vocabulary. The pre-reading of the text before the lesson seemingly helped children to access the text through sight reading. The team perceived the case children as more confident. Rebecca later stated in her interview that the text difficulty was not a barrier as she had anticipated; she felt that LS had shown the children could access these texts with adequate support.

Child Interviews. Teachers took time to ask children about their experiences of the lessons; see appendix R for an example of this. Both children reported feeling more motivated and able to follow the text due to pre-reading. Ellie stated that she had found it difficult to track the text when the class was reading aloud together. The teachers have now changed this pedagogy, with the difficulty echoed by the wider class.

Teacher Interviews. I divided the teacher interview responses across the key themes of self-efficacy, understanding of child need and pedagogical approaches. As this proved effective, I will follow this format for each case study analysis.

Self-Efficacy. Prior to LS, Charlotte and Rebecca said they had not felt confident in their ability to support the case children. Charlotte described having used trial-and-error of general strategies without “being sure which ones were going to be best”. She was concerned about her ability to meet the literacy needs of these children, prior to LS. Overall, both teachers described increased confidence following LS. Rebecca felt that LS had helped her become “more reflective [...] of how I'm meeting the children's needs.”

Understanding of Child Need. Charlotte described an improved understanding of supporting the case children’s motivation to read. When asked about Ellie’s dyslexia diagnosis, Rebecca felt that this meant she might feel less confident in understanding her needs. She felt unsure how much she should focus on specific difficulties, or whether to work around them.

Pedagogical Approaches. Charlotte felt that LS had led to strategies already in place, to be refined. She felt some strategies she had used before, were “refreshed”. She described not necessarily learning new strategies through LS, but applying those already

known more effectively. Charlotte felt able to make strategies increasingly bespoke to each child. Both teachers discussed using a paired-reading intervention to better motivate children. They also discussed the importance of highly motivational texts and using them as alternatives to phonetically accessible texts. Charlotte felt that none of the provision discussed in the LS was specific to dyslexia. She felt that LS had not raised awareness of any dyslexia specific difficulties or pedagogy, but the approaches the team had put in place would be effective for all children

Survey Responses. Only Charlotte returned this survey; table 17 shows an increase in her understanding, attributions, and self-efficacy, following the LS intervention.

Table 17.

Case A Pre & Post LS Survey Results

	Understanding of Child Need & Pedagogy		**Attributions**		**Teacher Self-Efficacy**	
	Pre-LS	Post-LS	Pre-LS	Post-LS	Pre-LS	Post-LS
Charlotte	6	10	6	14	64	69

Summary of Case A. Overall, teachers felt that they had gained an added understanding of the learning needs of the two case children following LS; for example, both children responded well to pre-teaching, seemingly impacting their motivation. Both children struggled to decode and blend; the teachers felt justified in using alternatives to phonics, when teaching certain skills with these children. For Charlotte, these qualitative findings are supported by survey results, showing an increase in self-rated understanding, attributions, and self-efficacy.

The two teachers decided to expand LS within their school to use it whenever children are struggling with the curriculum. The two teachers within this case study will support wider staff members to do this. We delivered a presentation to the wider school staff, on the impact of LS upon teachers involved in LS and their understanding of case children. The PowerPoint developed by Charlotte, can be found in Appendix Y.

5.4.2 Case B

Contextual Information. The two lessons observed were guided-reading lessons following a non-fiction book about volcanoes. In addition to myself, the LS team consisted of Lizzi, SENCo, and Annie, class teacher and deputy head teacher. Annie delivered the RLs.

The teachers identified two year four case children, Eve and Sam, nine years old; their needs are presented in table 18.

Table 18.

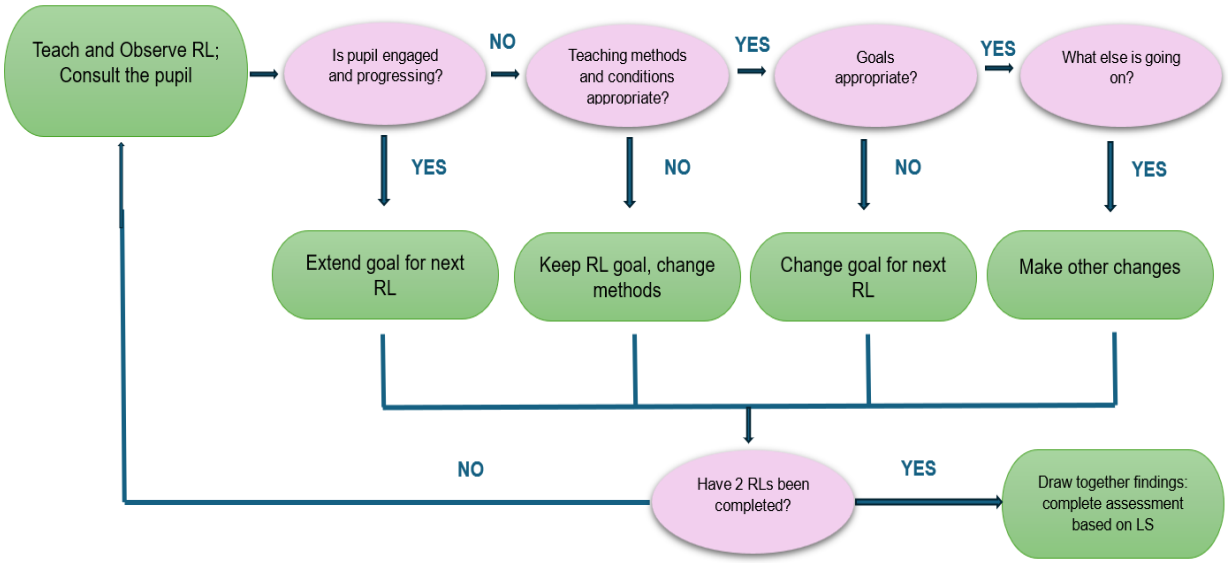
Case B. Case Child Participants Discussed in Planning Meeting 1

Case Children	
Eve	Sam
• Making below expected progress • Low processing speed • Didn't pass the phonics screener • Difficulties tracking when reading	• Has mild epilepsy • Doesn't read at home • Lower motivation and self-esteem

RL1. A key focus of the first meeting was the children's motivation. The group focussed on how to support Eve and Sam with vocabulary difficulties. The teachers decided to implement a pre-teach of key vocabulary ahead of RL1. A key question was the effect of this input upon motivation. When reviewing RL1, it was felt by the LS team that both children were motivated during the lesson, displaying good knowledge of vocabulary. Overall, both children were thought to have met both RL aims; therefore, it was felt that the targets of RL2 should be extended. Figure 5 is a flow chart developed by Norwich (2015) displaying this decision making. This was shown to participants when they were unsure if pedagogy should stay the same.

Figure 5.

LS Decision Making Flow Chart



RL2. As shown, the team wished to extend expectations of the case children to explore more about children's decoding, tracking and retrieval. Teaching methods were kept the same. During the final review meeting, the team felt that the use of visuals to support vocabulary had been helpful for both children. The teachers had put pre-teaching of vocabulary in place before both lessons and this built familiarity for the children. Sam had struggled to scan the text for comprehension and visibly struggled with this skill. It was felt that when comprehension of vocabulary was supported through pre-teaching, both children were able to display improved engagement than previously seen. Pre-teach did facilitate word reading for Eve.

Child Interviews. Eve cited that she appreciated the visuals to represent key vocabulary. Sam told Annie that there was "a lot going on" in his head when he is reading. Both teachers found this useful feedback and began focusing on reducing his cognitive load.

Teacher Interviews. ***Teacher Self-Efficacy.*** Annie discussed feeling more confident and better able to assess needs accurately following LS; she felt she had realised "that every child is reachable." This statement shows Annie felt better able to understand and support reading difficulties in her classroom. This can later be related to the effect of LS upon teachers' inclusive attitudes. Lizzi also felt that LS had influenced her confidence in meeting literacy needs. Prior to LS she had felt unable to "pinpoint" explanations for children's difficulties.

Understanding of Child Need. Lizzi and Annie felt that LS had shifted their focus away from teaching and onto learning. Following LS, Lizzi and Annie felt their understanding of both children had improved; Annie felt able to identify needs: "a bit more carefully [...] rather than lumping them together with perhaps low ability children." This shows that Annie felt she had previously understood needs at a broad level, without reaching an individual focus. Lizzi felt able to "hone-in" on difficulties, through observation. LS had drawn Lizzi's focus to wider environmental influences upon reading acquisition for these children, such as home life. The first observation showed her that Sam's difficulties "hinged on motivation".

Pedagogical Approaches. Both teachers felt that pre-teaching had supported child motivation. The use of visuals to underpin key vocabulary was also cited.

Survey Responses. Table 19 shows that Lizzi and Annie increased in their self-reported understanding, attributions, and self-efficacy, following the LS intervention. This corresponds with qualitative responses that described a shift in confidence in understanding

and meeting needs. Annie only made a small positive increase in her attributions towards the case children, and this is discussed in section 6.5.2.

Table 19.

Case B Pre & Post LS Survey Results

	Understanding of Child Need & Pedagogy		Attributions		Teacher Self-Efficacy	
	Pre-LS	Post-LS	Pre-LS	Post-LS	Pre-LS	Post-LS
Lizzi	7	12	6	13	62	74
Annie	9	12	5	6	66	79

Summary of Case B. Overall, teachers within case B felt that they had gained a better ability to pinpoint individual needs of children struggling with reading. For Annie, she reflected on her prior understanding of children with additional needs within broad categories. Here, she felt able to pinpoint individual strengths and difficulties of case children. An overall theme of case B was teachers' focus on the effects of their provision, upon the case children's motivation. Both teachers focussed on the importance of supporting children to become familiar with new vocabulary, through pre-teaching. This had helped both children to experience success and be motivated during the RLs.

5.4.3 Case C

Contextual Information. School C is a two-form primary school. Two case children, Tommy, and Molly, 10-years-old, were chosen from one year five group. Their needs were described by teaching staff during planning meeting one; these are shown in table 20. In addition to myself, the LS team consisted of Lily, class teacher of year five, and Carolyn, reading lead for the school. Lily delivered the lessons while Carolyn observed and contributed to planning and review meetings. We observed two 30-minute guided-reading lessons of fiction texts. Roy, SENCo for the school, also joined the group for planning and review meetings but did not observe. Roy's knowledge of reading and SEND was supportive for the LS group.

Table 20.

Case C Child Participants Discussed in Planning Meeting 1

Case Children	
Molly	Tommy
• Answers questions by directly citing text • Developing fluency is a challenge • She is reading small books; and she can do the quizzes linked to them	• Difficulties with reading speed • He is relying on his phonics but struggling here • He doesn't enjoy reading very much

RL1. A key theme of the first planning meeting was the LS group's focus upon factors supporting the case children's retention of information and reading fluency. Unfortunately, Molly was absent from school for RL1. The team felt Tommy responded well to questions referring to previous lessons linked to the same book, remembering events and characters. This clearly impacted his motivation and Lily was pleased to observe this while she taught. Tommy struggled with decoding and blending.

RL2. During the second planning meeting, we considered the potential effectiveness of visuals, and promoting prediction about the story, to support memory for key words. To support motivation, I also introduced a paired-reading intervention with the primary focus being child motivation.

During RL2**,** both children appeared more motivated and engaged. Lily and Carolyn felt this was an improvement from earlier in the year. Lily introduced prediction, through the use of book covers, as a way of supporting engagement and memory for the story. The group felt the children were engaged throughout the lesson and made useful predictions about the story; this supported their inference skills. As previously, Tommy relied on reading words he knew by sight; he appeared increasingly supported to do this. Molly was able to scan the text for comprehension and provide answers and complete sentences. Lily felt this represented progress that was supported by the scaffolding she had implemented.

Teacher Interviews. *Self-Efficacy.* Roy and Lily both referred to teachers' increased confidence to try new things. Lily felt LS helped her identify child strengths. Carolyn felt that improved confidence from LS, has led staff to use an increasing variety of techniques to

support children who are of “low ability”. Roy described a shift in culture towards meeting need within the classroom, instead of through interventions outside of it:

> (Before LS) We'll support their reading through intervention outside of the lessons and then provide [...] reading support, but not necessarily look at unpicking elements of it within the lesson as well. [...] I think there's definitely been a sort of culture shift since. (Roy).

Understanding of Child Need. All three teachers described improved understanding of the case children. Following LS, teachers discussed the importance of understanding what motivates children. For example, Lily **“**didn't realise how good (Tommy) was at predicting the stories and [...] the effect on his motivation.”

The teachers all described fine grain understanding of child need. Similarly to case B, Roy and Carolyn discussed moving beyond the categorisation of children with reading difficulties, and towards understanding the strengths and difficulties of individual learners. Lily discussed supporting her TA to understand the individual differences of children through the process of LS.

Pedagogical Approaches. Lily and Carolyn cited the use of visuals to scaffold new vocabulary, as supportive of memory. Lily focused on the importance of using prediction to support motivation; she had found this useful. All teachers described the success of using a paired-reading intervention focusing on motivation for reading.

Survey Responses. Only Lily returned the survey; this showed increases in Lily’s reported understanding of needs and pedagogy, attributions, and self-efficacy. This corresponded with Lily describing an increased appreciation of differences between the case children, and knowledge of their strengths. These responses are displayed in table 21.

Table 21.

Case C Pre & Post LS Survey Results

	Understanding of Child Need & Pedagogy		Attributions		Teacher Self-Efficacy	
	Pre-LS	Post-LS	Pre-LS	Post-LS	Pre-LS	Post-LS
Lily	8	12	10	14	59	75

Summary of Case C. Overall, the teachers within Case C identified individual differences between struggling readers, following LS. The teachers recognised several strengths of case children and interviews centred heavily on motivation. In line with this, implementing more visuals and prediction, was useful in supporting Tommy's motivation. The senior leaders in this case study described how LS increased teachers' perceived ability to support children within the class, rather than through external intervention.

5.4.4 Case D

Contextual Information. School D is a small one-form entry primary school. Two case children were chosen from the year four group. RLs focused on 30-minute guided-reading of fiction texts. In addition to myself, the LS team consisted of John, class teacher, and Kerry, reading lead for the school. John delivered RLs. The child participants, Hannah, and Megan, were nine and were described by teaching staff during planning meeting one, as summarised in table 22. .

Table 22.

Case D Child Participants Discussed in Planning Meeting 1

Case Children	
Hannah	Megan
• Hannah lacks motivation to read at home. However, she participates in theatre and likes reading scripts • She is confident to speak aloud in class • Hannah struggles more with comprehension • Hannah requires a logical reason to do something	• Megan has a diagnosis of dyslexia • Her retention of phonics is a barrier • She enjoys reading • The pace she reads at can be a barrier • She often uses technology to assist her in lessons

RL1. A key theme of the first planning meeting was key differences between the two children. The team discussed Hannah's comprehension difficulties and explored why this might be. Conversely, the team felt that word-level decoding difficulties were likely explaining Megan's reading performance.

The LS team implemented a pre-read of the text for the case children and found this supported both children's confidence during the lesson. Megan commented during the lesson that she knew this text well now. Kerry noticed that Megan required prompting to justify her answers. The LS team also felt colour coding the text had been successful in chunking reading into manageable sections.

RL2. The priority of RL2 was to find out more about what supported the children's engagement. Both children had successfully met the learning targets in the previous lesson and the team wished to extend these, to explore inference skills when answering comprehension questions; see figure 5 above, for this decision-making process. It was decided that the same pedagogy would be used to support the children.

Once again, both children retained information from the pre-read and appeared confident during the lesson. Megan rushed to answer questions and perhaps didn't attend to the text in detail during the lesson. As expected, Hannah struggled at the word level; however, the teachers commented that she was more confident and participated more than usual. They felt this was due to familiarity with the text. Both teachers commented that the children were struggling to infer information and needed support with this skill; both children needed to find answers that could not be directly lifted from the text.

Teacher Interviews. ***Self-Efficacy.*** Kerry described a high level of self-efficacy at the outset of LS; she: "felt quite confident" in her understanding of literacy difficulties through her role as literacy lead. This is supported by quantitative findings in which Kerry reported relatively positive attributions towards the children, at the outset of LS; see table 23. Following LS, John described increased confidence in meeting a wider range of reading needs, within the classroom as opposed to through intervention.

Understanding Child Need. Prior to LS, Kerry felt that she understood the case children's needs. However, initially Kelly thought that Hannah struggled with fluency; following LS however, she felt Hannah's confidence underpinned her engagement. Kerry felt that time and space to observe had helped her notice this. John stated that he understood

Hannah's difficulties prior to LS, as these were linked to dyslexia: "I'm fully aware of her needs and her dyslexia". John felt LS led to an improved understanding of how he could support these needs within the classroom, rather than through 1:1 intervention. Further, he felt he was able to learn more about Megan who was not diagnosed with dyslexia, stating that LS had helped him identify ways to support her self-esteem, and self-belief.

Pedagogical Approaches. Both teachers described the pedagogy that they had implemented as "fairly simple" and just needing to "tweak slightly" approaches they were already using. This perhaps supported teachers' self-efficacy as they were able to see that their practice was effective. LS led to improved understanding of need which facilitated these small adjustments to practice. Both teachers felt pre-reading the text with these children was effective at supporting child confidence in the classroom. Kerry described this as "a simple solution that would help more than one child with different needs".

Survey Responses. The survey showed John's self-rated understanding of case children, attributions, and self-efficacy, had improved. Kerry began with higher baseline attributions towards the children, and these remained the same following LS. However, Kerry's perceived self-efficacy and understanding of the children increased similarly to John. Kerry's increases were less pronounced, and this could be linked to her role as reading lead for the school. These responses are displayed in table 23.

Table 23.

Case D Pre & Post LS Survey Results

	Understanding of Child Need & Pedagogy		**Attributions**		**Teacher Self-Efficacy**	
	Pre-LS	Post-LS	Pre-LS	Post-LS	Pre-LS	Post-LS
John	10	13	10	13	64	74
Kerry	11	12	15	15	67	72

Summary of Case D. In summary, LS within Case D led to fine-grain changes to pedagogy for John. Kerry already felt confident in supporting reading difficulties but described slight changes in her understanding. This case study included a child with dyslexia and John referred to needs linked with dyslexia within his interview. John felt that LS had helped his ability to support this child within a whole class context, as opposed to through 1:1 intervention. This notion is supported by quantitative findings showing John's overall attributions had become increasingly positive. In conjunction with increases in self-efficacy,

this is suggestive of John feeling more able to meet needs himself and attributing a higher level of control over child outcomes to his teaching.

5.4.5 Case E

Contextual Information. School E is a small one-form entry primary school. For this case study, one year four child was chosen. Peter was nine-years old and held a diagnosis of dyslexia. For this LS, the LS team could only consist of class teacher Katie, and myself. The classroom in question did not have any available teaching assistants and all adjustments to teaching was required to be possible without additional adults supporting. As will be discussed, I felt it was worth continuing LS in this format to consider the changes that could be made within-class with limited resources available. The two lessons observed were 30-minute guided-reading lessons focusing on the same volcano book seen in case B.

Peter. Peter was described as having dyslexia and needing a lot of support in the classroom. Katie felt he was displaying low self-esteem. Katie wished to find ways to help him experience greater levels of success.

RL1. The key focus of RL1 was to ascertain the depth of Peter's comprehension. Katie considered different ways of scaffolding texts for him to support with this, such as highlighting different parts of the text she wished him to focus on. Katie modelled predictions about what the class would read; this was engaging for Peter and supported his memory for key facts in the text. It was felt he required even greater support to focus on the appropriate sections of text when searching for answers. Katie therefore decided to cut out different strips of text in RL2.

RL2. During RL2, Katie decided to experiment with reducing the amount of text given to Peter. Peter was prompted to read the whole section before answering a question. Differing approaches were trialled to support Peter's engagement such as use of images, modelling prediction, and Peter drawing pictures of key vocabulary to support his memory. Following the lesson, I commented to Katie that her strong relationship with Peter was also supportive of his engagement in the lesson.

Child Interview. When asked about the two lessons, Peter told us the thing that helped him most was having small amounts of text to read for each answer. Peter felt he had done well in the lessons.

Teacher Interview. ***Self-Efficacy.*** Katie felt that LS reassured her that her approaches were effective; LS had served to "reaffirm" that she was supporting Peter in the classroom. This corresponded with survey results, that showed an increase in TSE.

Understanding of Child Need. Katie felt she had "some understanding" of how to support Peter before LS. She wasn't sure if his difficulties were with reading at the word level or comprehension specifically. Katie stated that she had learned that there was often "too much text on the page" for Peter and "LS had helped to [..] unpick the needs he has". Following LS, Katie described "having a better understanding of what (she was) putting into place and whether it supports" Peter. She also described an increased appreciation of how positive relationships can foster engagement with learning, and what motivates Peter in the classroom. Peter had a diagnosis of dyslexia and Katie felt this label did not affect her understanding of Peter. She felt that dyslexia can mean a variety of things and is unhelpful as a label of need.

Pedagogical Approaches. Katie wished all discussions of pedagogy to focus on what could be done by her, without a need for additional adult support or individual interventions. This was due to her perception of limited resources in the school. Katie trialled a range of pedagogies and found that a high level of scaffolding, using visuals, and reducing the amount of text was helpful for Peter.

Survey Results. The survey showed increases in Katie's self-reported understanding of needs and pedagogy, and self-efficacy. However, her self-reported attributions remained the same. This suggests that Katie had similar views about Peter's potential to improve, as before LS. Katie's self-efficacy increased, and this corresponded with her stating that she felt LS had reaffirmed what she was doing was effective.

Table 24.

Case E Pre & Post LS Survey Results

	Understanding of Child Need & Pedagogy		**Attributions**		**Teacher Self-Efficacy**	
	Pre-LS	Post-LS	Pre-LS	Post-LS	Pre-LS	Post-LS
Katie	6	12	9	9	56	63

Summary of Case E. Case E was the only case with a LS team of two. Katie reported a perception of limited resources within the school. Katie focused on changes to

pedagogy she could manage within the classroom. Overall, LS led to Katie feeling confident that what she was already doing, supported Peter. She felt she had learned more about Peter's need for significant levels of scaffolding. Katie's views of Peter's learning were achieved through reflection about the plan-do-review approaches she had trialled through LS, rather than due to particular feedback from myself as an observer. This ensured that the model of LS preserved a key difference from teacher coaching (Kraft et al., 2018). Katie did not feel that LS had highlighted any specific understanding about dyslexia, but it had helped her to ensure Peter could access the class activities effectively.

5.5.6 Cross Case-Analysis

Five case studies have been presented above, exploring TSE, inclusive attitudes, and pedagogical approaches for children with reading difficulties, over the course of a LS intervention. A descriptive analysis of cross-case survey results is used, to consider the impact of LS upon all teachers. As described above, TA was chosen to analyse qualitative data across the five cases (Braun & Clarke, 2022). Quantitative results are triangulated with qualitative findings where these inform themes. I begin with a focus on quantitative results before reporting TA of qualitative findings.

Survey Results. Measurements of teachers' understanding of child need, attributions, and TSE, before and after LS offers tentative evidence that the intervention was influential upon these constructs. Teachers' understanding of child need and TSE both increased for every participant. While attributions also became more positive, the increase was small for most participants and two teachers reported the same score at follow up.

The survey results for each teacher are displayed in table 25; the mean scores for each construct are also presented, showing increases for each construct. Table 26 shows mean scores for each question in the survey. This allowed me to further investigate the beliefs that teachers held about their practice. Examining the mean change between pre and post measures allows some understanding of where LS had the most impact. From eight possible responses, teachers' beliefs about their practice increased the most for questions three, eight and nine, following LS. This shows that teachers reported notable increases between pre and post measures when asked about their ability to:

- Differentiate the learning to all learners (Question three)
- Adjust reading materials to the appropriate level for individual students (Question eight)
- Meet the needs of all struggling readers (Question nine)

The smallest increase in teachers' beliefs was found for question one; this question related to teachers' perceived ability to collaborate with teaching assistants. The full survey is available in appendix S. These factors relate to changes in the classroom.

Table 25.

Cross-Case Pre & Post Survey Results

	Understanding of Child Need & Pedagogy		**Attributions**		**Teacher Self-Efficacy**	
	Pre-LS	Post-LS	Pre-LS	Post-LS	Pre-LS	Post-LS
Lizzi	7	12	6	13	62	74
Annie	9	12	5	6	66	79
Lily	8	12	10	14	59	75
Charlotte	6	10	6	14	64	69
John	10	13	10	13	64	74
Kerry	11	12	15	15	67	72
Katie	6	12	9	9	56	63
Mean	8.14	11.85	8.71	12	62.57	72.28

Table 26.

TSE Pre & Post Survey Results Per Question

	Q1	**Q2**	**Q3**	**Q4**	**Q5**	**Q6**	**Q7**	**Q8**	**Q9**	**Q10**	**Q11**	**Q12**
Mean Pre	5.7	6.11	4.7	5.1	5.9	5.0	5.4	5	4.3	5.1	4.4	5.4
Mean Post	6	6.7	6	5.9	6.5	5.7	6.3	6.3	5.9	5.7	5.3	5.9
Mean Change	.3	.59	1.3*	.8	.6	.7	.9	1.3*	1.6*	.6	.7	.5

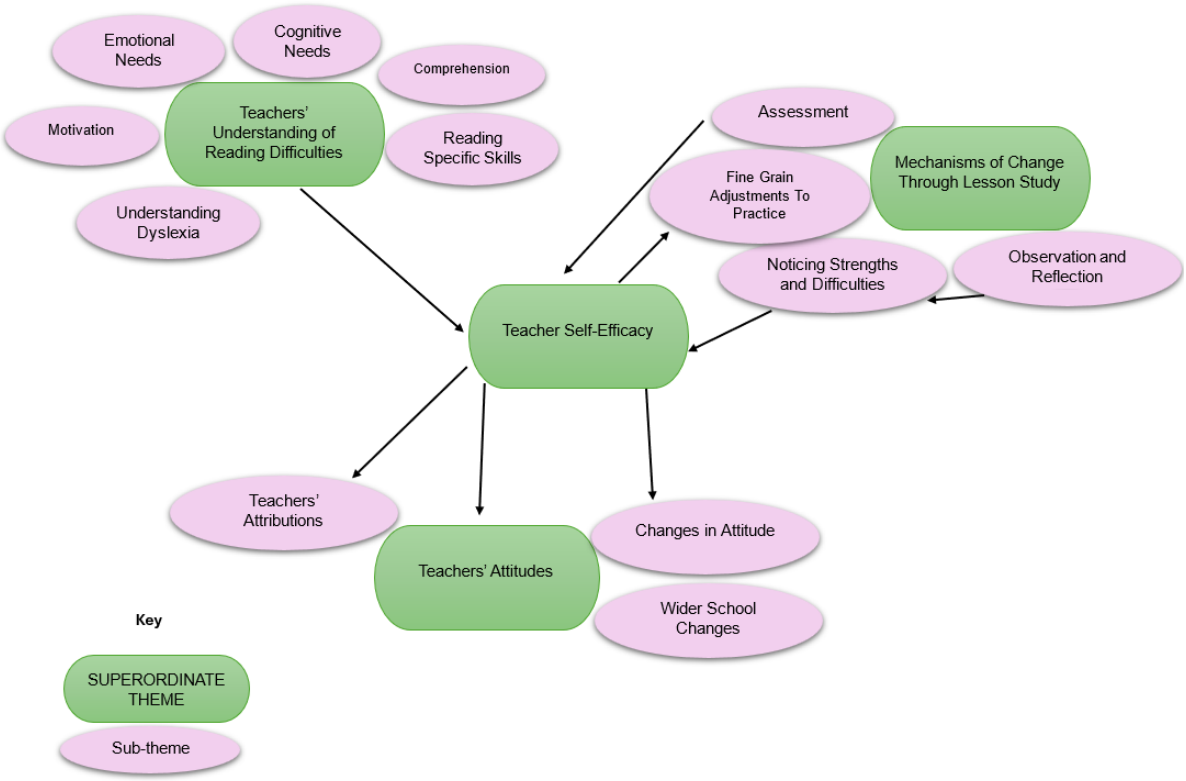
*Changes commented on to support cross case analysis.

Thematic Analysis. TA resulted in four superordinate themes with associated sub-themes (Braun & Clarke, 2022). Figure 6 represents a final thematic map, showing organisation of themes and the relationships between them, guiding my interpretation

(Nowell et al., 2017). Themes one and two, *teachers' attitudes* and *self-efficacy*, directly address research question four. Theme three, relating to how LS affects change for teachers, informs several research questions. Theme four, teacher's understanding of reading difficulties, addresses research question four. When presenting findings here, teachers' names will include reference to their school in brackets.

Figure 6.

Phase Two: Map of Final Superordinate Themes and Subthemes



Theme One: Teachers' Attitudes. *Teachers' Attributions*. Teachers were often concerned about the time case children required to catch up with their peers in the curriculum. They were concerned about children not making progress at the pace required by the curriculum or having made little progress in reading, prior to LS. Rebecca described a preoccupation with her choice of intervention to support spelling; she felt that if she avoided addressing poor spelling to protect self-esteem, this may imply: "they're never going to be able to spell". This can be interpreted as Rebecca considering the impact of her attributions upon case children. According to Weiner's (1995) theory, this statement could imply a stable attribution, with little change anticipated. Similarly, Roy described LS as helping him to "see beyond: they struggle to read", as a causal explanation.

On three occasions, teachers stated that children had a dyslexia diagnosis, or had "dyslexic traits", during planning meetings. John said he understood needs linked to dyslexia but struggled to see how he could support these within a large group, prior to LS. This could be interpreted as an internal locus of causation. Within school C, Roy felt that when children work below age-expected outcomes, they can become "pigeonholed [...] as not good at this; so they must be this." I feel this response pertinently describes these participants' concern that readers can become labelled, leading to decreased expectations. This corresponds with phase one findings that teachers held lower attitudes for vignette children when these were described as having dyslexia.

Changes in Teachers' Attitudes. This subtheme shows that teachers' attitudes towards case children changed over the course of LS. This corresponds with the small increases seen in teachers' attributions in quantitative findings. The detail in which they were able to observe facilitated better understanding, and increased optimism that difficulties can be overcome. Annie described her attribution that can be described here as increasingly optimistic: "I learned to look at (the case children) [...] as individuals rather than lumping them together with [...] low ability children. Roy also described his colleagues' "culture shift", stating a move towards "adapting things more readily, based on the needs of the children".

Teachers demonstrated increased focus on meeting needs inside the classroom, rather than through teaching assistant deployment. This finding corresponded with quantitative findings showing that teachers felt increasingly able to make changes themselves and focused less on teaching assistant deployment. Annie felt that "traditionally in schools, you've always put your lowest children with the teaching assistants"; she juxtaposed this against her belief that "it has to be the class teacher [...] available to those children". For John, pre-reading the text with case children, highlighted his ability to adjust

pedagogy and meet higher levels of need, within the classroom. Roy described the attitudes of his colleagues as changing in this way, from the start of LS to its conclusion:

> I think the staff were sort of looking at an element of: we'll support their reading through intervention outside of the lessons and then providing [...] reading support, but not necessarily unpicking elements of it within the lesson as well (Roy).

Wider School Changes. Several teachers across schools A-C described a desire to share the use LS with their colleagues. In school A, one result of LS in school A was for Charlotte and Rebecca to hold a staff meeting, describing the outcomes of LS for Chris and Ellie, and ways staff members could use the intervention more widely (see Appendix Y). Other schools cited similar intentions to encourage the use of LS. Annie cited pre-teaching of vocabulary as having “become like classroom practice now” across school, resulting from LS.

In summary, this theme shows teachers widely saw themselves as increasingly able to achieve a stronger understanding of difficulties. This can tentatively be described as an increase in positive attributions towards children with reading difficulties. This finding is extended by the fact that quantitative findings also show small increases in the five teachers’ attributions measured through pre and post interventions. LS appears to have increased teachers’ perceived ability to support children with reading difficulties in the classroom, rather than using targeted interventions.

Theme Two: Self-Efficacy. This theme relates to apparent changes to teacher confidence, or TSE, as shown within qualitative data gathered throughout LS and subsequent interviews. This corresponds with quantitative results that shows all teachers showed an increase in their reported TSE, across their two responses to the survey. Due to the subjective nature of this construct, tentative conclusions may be drawn from these findings. Before LS, some teachers described low confidence when questioned about their ability to meet the needs of learners. Most in some way described lacking confidence in supporting the reading needs prior to LS.

Interestingly, Roy describes this lack of confidence as perhaps inhibiting teachers’ perceived ability to “try something that is different”, as this would require them to “change the planning structure”. Overall, all teachers’ responses displayed an increase in confidence following LS. Some teachers cited new strategies as leading to this. Others felt they had noticed more about children; meanwhile, Katie described LS as validating the strategies she

already uses. These changes are supported by quantitative findings showing that TSE and understanding of case children increased for each participant post-LS, particularly in relation to “meeting the needs of all learners” and “adjusting reading materials”. Therefore, triangulation of qualitative findings and quantitative results shows that teachers were feeling increasingly confident in making changes in the classroom to support the readers.

Lizzi described feeling more “confident in (her) role supporting staff with reading difficulties. It is possible that LS offered an opportunity for collaboration and reflection, improving confidence. Alternatively, LS may have led to new strategies shared by myself or other LS team members, to be trialled in the classroom. These differing perspectives are depicted by the following quotes:

> I mean I’m an experienced teacher, but gosh, you know, it was almost like, well, why didn't I think of that? **Annie (B)**

> (I have) more confidence in being able to look in more detail at a child and think about what their barriers might be to read in and how we can then use their strengths to help them. **Lily (C)**

In instances where children were diagnosed with dyslexia, this appeared to invoke decreased confidence in one teacher. Another suggested that dyslexia is hard to understand. Other teachers did not feel the label affected their approach. This opposition may show that for some teachers, the label of dyslexia can signify a more complex need, requiring more significant support, while others feel able to support in the same way they support all children:

> We're supporting children with dyslexia. **Charlotte (A)**

> I still wouldn't say I'm really confident knowing what to do to support dyslexia. **Rebecca (A)**

In summary, this theme shows shifts in teachers’ attitudes, and the construct of TSE. This corresponds with quantitative results showing increases in TSE for all teachers who returned surveys. For some teachers, increased confidence to find strategies was facilitated by improved knowledge of the children; equally, LS enhanced confidence to try different strategies that could work.

Theme Three: Mechanisms of Change. This next theme reflects how LS may influence change, as discussed by teachers during interviews.

Noticing Strengths and Difficulties. Several teachers felt that LS helped them notice unique needs and strengths of children experiencing reading difficulties; for example, Carolyn (C) felt that "although they've both got needs, these were very different". LS facilitated several teachers to notice strengths for children who they had initially brought to the process with concerns. Lily (C) "started to notice strengths for both [...] children"; she described using these strengths, to "help with barriers to reading". Lizzi (B) "quickly" noticed that "whole word reading [..] was a bit more successful" for Molly. Similarly, during the final review meeting for school D, teachers noted that Hannah's reading fluency was much better than they had previously thought. These findings relate to research question four, considering changes in teachers' attitudes towards case children. Noticing strengths could also be linked to increasingly positive attributions, observed in quantitative results.

Observation and Reflection. LS may have enabled teachers to observe and reflect in a way that is perhaps rarely possible for teachers within the fast-paced nature of teaching. Kerry (D) and Katie (E) described a rare opportunity to watch children more closely. Teachers described stepping away from practice that had become routine and trying different approaches. This is best shown by Lizzi (B) whose quote here describes becoming stuck in routines and becoming "a bit bogged down". A space for reflection allowed Lizzi (B) to identify additional provision that could be tried. Similarly, Kerry (D) described observation as allowing children to surprise you through what they can do, in relation to prior expectations.

Assessment. This subtheme shows that participants often described the result of LS as pinpointing a particular strength or need for children, which could then be used to support. John (D) felt that the time given to discuss children was beneficial because it allowed him to "identify each of the child's needs". Similarly, Katie (E) found the assessment questions developed in planning, helped her "hone-in [...] and consider what the barrier is". Carolyn (C) found the process of LS focused on a "reading for pleasure ethos" and yielded more useful information than that from standardised measures. She described moving away from "second guessing or going through data". Charlotte similarly felt that LS allowed her to avoid simply "trying things out and having to learn over time what worked". For Lizzi, the benefit of using LS for assessment was juxtaposed against her prior experiences of observation as SENCo, where she felt the focus is on teaching, rather than child learning.

Fine Grain Adjustments. LS often led to small adjustments to provision considered. For example, Carolyn (C) felt that LS showed her: “what we're doing is fine, we don't need to reinvent everything.” Charlotte echoed this: “we're not using anything that I hadn't encountered before. We've been able to refine it”. In opposition to this, several teachers such as Annie, cited new approaches as unexpectedly successful. This finding could be triangulated against the quantitative finding that participants felt increasingly able to make changes in the classroom.

Overall, this theme shows that teachers saw LS as an opportunity to observe and reflect on practice; they could then more readily identify the strengths and difficulties of case children. Teachers described making fine grain changes to classroom practice and observed the results of this.

Theme Four: Teachers' Understanding of Case Children. Theme four pertains to teachers' references to their understanding of reading difficulties and dyslexia, throughout LS. Several changes to pedagogy came of this shifting understanding.

Cognitive Needs. Cognitive load, executive function, memory, and attention were discussed across the case studies. For example, LS teams in schools A, B and E, focussed on attention and organisation, when considering the resources they would use. For example, Chris (A) was supported with task lists in RL2, to support his task initiation and completion. Schools A, B, D and E all sought to use images alongside new vocabulary to support memory for new concepts. In school D, John and Kerry described using games such as “echo-read” to support attention. Following LS, Rebecca (A) stated that she had become more conscious of the cognitive demands upon Ellie, during RLs. Katie (E) also felt she had realised she needed to reduce the amount of text Peter should focus on at one time during guided-reading.

Understanding Reading Specific Skills. Planning meetings often centred on children's difficulties with vocabulary, fluency, comprehension, phonological awareness, or decoding, for example. Teachers from Schools A, C, and School E raised concerns about children who were not making progress with phonics, despite intervention. In these cases, LS became partially focused on providing support through pre-reading the text or pre-teaching of more complex words, to facilitate whole word reading. This finding can be triangulated against the quantitative result, that participants felt increasingly able to adapt reading materials for the case children. Overall, cross-case analysis shows a preoccupation with the importance of phonics across schools and a search for workable alternatives. Charlotte (A) and Rebecca

(A) both initially felt that children's difficulties came from decoding and blending. Charlotte felt that "pre-reading made them (case children) more confident." Rebecca described a growing conviction that using alternative approaches such as sight word approaches, could support Chris.

Comprehension. Child reading comprehension was considered across cases. Katie (E) felt that LS had helped identify that Peter was struggling with comprehension when too much text was used. Several participants identified inference skills as a higher-level comprehension skill that case children struggled with. Katie (E), John (D) and Kerry (D) all identified that case children could retrieve information directly from the text but struggled to extrapolate wider understanding through inference. This informed their understanding of the types of scaffolding they would use in future. In school A, the teachers questioned whether the year five curriculum was too hard for the case children, but concluded following LS that the associated texts could be comprehended with careful scaffolding. Similarly, some participants felt books banded by reading-age were a barrier to children developing comprehension skills over time, due to limited exposure to vocabulary.

Motivation. This subtheme shows that LS teams focused in detail on supporting motivation to read, and the potential positive impact when it is achieved. Roy (C) and Charlotte (A) cited a lack of motivation as explanatory of child difficulties in reading. Three participants described pre-reading the text as successful at supporting the case children with their motivation and engagement in the RLs. Annie (B) felt that pre-teaching of key vocabulary had also supported the motivation of children as they felt more secure within the lesson. This was echoed by case child Sam (C), who stated he "felt like an expert" following pre-teaching. Alternatively, in school C and E, teachers focused on facilitating children to make predictions about what they would read; Lily stated she didn't "realise how good (Tommy) was at making predictions [...] and the effect on his motivation."

In line with self-determination theory, some teachers considered the sense of control, relatedness, and competence that children require to feel intrinsically motivated to read. I offered explanations of this theory within planning meetings when teachers wished this. Roy cited the "massive impact [...] of the choice of text upon individuals." He discussed the impact upon child reading performance that motivating texts had during LS. Similarly, at school B, teachers cited banded books as leading to disengagement for Molly due to their content. A sense of competence was seemingly promoted using pre-reads of texts ahead of RLs, and visuals. For John, giving Megan prior access to the text had helped her feel that she "was a step ahead".

Relationships. Positive relationships between case children and teachers were discussed during meetings at schools A, D and E. Strong relationships with staff was undoubtedly key to supporting reading difficulties. Katie cited that during LS, she had focused on the importance of "having that relationship with the children [...] to help them to learn". In cases D and E, review discussions centred around attachment styles in the classroom and managing children's need for adult attention during the lessons, through the careful use of language when talking to the children. I offered Geddes' (2006) Learning Triangle as a model of attachment, to frame these discussions. Alternatively, some teachers described difficulties building relationships with children with SEND, due to the time these young people often spend out of the classroom. LS had brought this into focus as an area for improvement.

Understanding of Dyslexia. Across three cases, children with a diagnosis of dyslexia were selected by teachers for LS. John (C) cited having a good understanding of dyslexia while Rebecca stated that dyslexia adversely impacted her confidence in her ability to meet needs, suggesting a perceived lack of understanding. John felt that using colour-coded paragraphs, to scaffold reading for comprehension, was beneficial for the child with dyslexia and that LS had improved his confidence in supporting this child within the classroom, rather than through 1:1 intervention. Katie (E) and John (D) felt that the use of key visuals was useful to support fluency.

Charlotte (A) and Katie (E) did not feel anything covered in LS led to improved understanding of dyslexia specifically; they felt they had focused on reading difficulties more widely and that strategies were "universally beneficial" to their classes. However, Charlotte, Katie and John all felt that reducing the amount of text was beneficial for children with dyslexia. For John, pre-reading the text with Hannah, meant that she did not have to decode words as frequently and could read more fluently in the lesson.

In summary, this theme shows that teachers considered the cognitive needs of case children, but also wider emotional needs, and motivation. Supporting motivation emerged as an important focus of LS. Child relationships with teachers were also discussed and observed as influential. During several planning meetings, I offered teachers psychological perspectives upon classroom needs such as self-determination theory and attachment.

5.6 Chapter Summary

In summary, chapter five has explored five case studies of LS interventions in primary school classrooms. The chapter shows that LS helped teachers to feel more confident in their ability to understand and support the case children. Improved knowledge may have been linked with increased TSE and increasingly positive attributions. Cross-case analysis showed that teachers felt children with reading difficulties can become labelled and understood through this lens. Overall, phase two shows that teachers' focus moved gradually from understanding child needs through their prior attainment and cognitive needs and towards the impact of teaching practice and environmental factors such as learning materials. Teachers focused on broader needs related to reading such, as the complexity of teaching comprehension and the importance of motivation. Teachers often increasingly identified changes they could make themselves within the classroom, showing improved attributions of their own ability to support learners. The qualitative findings of this chapter are supported by survey results that showed an increase in all constructs of interest to this study. In chapter six, I will discuss these findings in relation to literature and draw links with phase one.

6.1 Chapter Overview & Research Aims

This research project contained two phases; the overarching aim was to explore primary teachers' differing inclusive attitudes, self-efficacy, and pedagogical approaches to supporting children with reading difficulties. The impact of a dyslexia diagnosis upon teachers' approaches was evaluated across both phases. In this chapter, I revisit the research aims in turn, while considering findings in relation to wider theory and literature. I discuss the adverse effects of a dyslexia diagnosis upon teachers' attitudes towards vignette children, shown in phase one. I explore the importance of TSE upon teachers' attitudes and establish the links between this construct, and teachers' perceived ability to meet needs in the classroom. This allows consideration of the types of pedagogy teachers consider important to support reading difficulties, with reference to wider literature about reading acquisition. Through discussion of phase two, I show how TEP-facilitated LS impacted teachers' attitudes and self-efficacy, leading them to increasingly consider changes they could make in practice and consider environmental impactors on child progress. The impact of the label of dyslexia can be considered across case-studies, with three case children holding dyslexia diagnoses.

6.2 Discussion of Phase One Findings: Research Questions One & Two

6.2.1 Teachers' Inclusive Attitudes

Research question one was designed to examine teachers' inclusive attitudes towards fictional vignette children, described as having reading difficulties, and/or having a diagnosis of dyslexia. Teachers' attitudes towards all four children described in the vignettes were relatively neutral. However, participants attributed less controllability to children with dyslexia, over their own outcomes. Overall, participants held less positive attitudes towards children with dyslexia. In their study, Brady and Woolfson (2008) also found that attributions of controllability towards children were lower than stability and locus of causation; however, different sized Likert scales were used, which limits direct comparability of scores with this study. As is the case here, Brady and Woolfson (2008), Clark and Artiles (2000), Gibbs and Elliot (2015), Hornstra et al. (2010), Woodcock et al. (2022) and Woodcock and Moore (2021), all found evidence that a label of condition or disability, negatively affects teachers' attitudes, and specifically controllability in this study.

As shown, some authors argue that a diagnosis of dyslexia is often interpreted within a medical model, or as impairing a person's ability to read (Koon, 2020; Solvang, 2007). In this model, knowledge of biological dysfunction would be used to improve diagnosis and educational interventions (Macdonald, 2019). In this study, vignettes held no further information about child difficulties in class, beyond their wider attainment in other subjects. Therefore, attitudes were most likely formed by knowledge of the label. In line with wider research, a significant negative impact of the dyslexia variable upon teachers' attributions in this study, shows that children have been understood through this diagnosis, with the cause of difficulties seen as within-child (Reason, 2001; Woodcock & Moore, 2021). This lens has brought much criticism and goes against inclusive policy in the UK (Booth & Ainscow, 2002; Norwich, 2016).

Attributions of lower controllability, based on labels, are likely to impact teachers' interactions with children in the classroom; this could also mean that more objective evidence of difficulties, such as actual response to interventions, are overlooked (Schifrer, 2016). Further, according to Weiner's theory, a teacher who sees their pupil as less in control of their own progress may be more accepting of failure (Brady & Woolfson, 2008). As shown in chapter two, studies using attribution theory show that participants often held higher expectations of future failure towards fictional children with SpLD, than those without (Woodcock & Hitches, 2017; Woodcock & Moore, 2021). This could manifest as increased sympathy, or using an increased amount of praise, for example (Clark, 1997; Woodcock & Moore, 2021). A model by Poulou and Norwich (2002), showed that teachers' attributions predicted aspects of their actual behaviour when supporting learners. The present study did not capture direct links between TSE and types of pedagogy; however, research questions three and five regarding teachers' pedagogy will allow variations in this to be considered.

It is possible that a lack of well-founded knowledge linked to dyslexia may negatively impact attitudes towards children with the diagnosis. Wider literature suggests that teachers can often hold misconceptions around the nature of dyslexia (Bell, 2013; Hellawell, 2022, Knight, 2018, Washburn et al., 2017). Qualitative findings from this study showed many teachers linked dyslexia to a visual processing disorder; these participants recommended using coloured overlays to support children. This may represent an over simplified understanding or response to dyslexia. Overall, attributing towards children based on a label may mean that teachers are missing wider environmental impacts upon child needs, such as the curriculum and teaching practice. Attribution theorists aim to understand the reasons people give for why an outcome has occurred as it has (Chodkiewicz & Boyle, 2014). Thus, the present study joins others in showing that a label can be impactful on how a teacher may

cognitively appraise a child's possible outcomes (Weiner, 1995). Over time this has the potential to impact learners' own self-efficacy and motivation (Woodcock & Hitches, 2017). In this study, the three-fold taxonomy of attribution theory was used, as deployed in seminal studies (Clark & Artiles, 2000). Through the results of phase one, I am able to suggest that participating teachers saw children with dyslexia has having less control over their outcomes. This situates the seemingly explanative nature of dyslexia as within-child and perhaps immutable (Gibbs & Elliot, 2015). This provides a basis for the use of an intervention such as LS, for example, to accurately assess child strengths and difficulties.

The use of attribution theory as a theoretical framework to explore teachers' inclusive attitudes offers unique insight into teachers' responses to child difficulties in the classroom, as also shown by Woodcock et al. (2019). Thus, this framework allows for greater insight into inclusive attitudes than directly measuring teachers' attitudes towards inclusion. The key links between attributions and TSE provide insight into how teachers may be supported to implement inclusive practices in the classroom (Woodcock & Hitches, 2017).

6.2.2 Teachers' Self-Efficacy and Attitudes Towards Dyslexia

Research question two is designed to understand whether teachers with higher TSE would attribute more positively towards children with reading difficulties and dyslexia. This would mean teachers do not see children with dyslexia through a negative lens, or in line with a medical model. For example, Brady and Woolfson (2008) found that teachers with higher TSE, attributed children's difficulties to increasingly external factors, than less efficacious colleagues. Contrary to my hypothesis however, a test of linear regression showed that TSE and TSELI were negatively impactful upon teachers' attributions for the children with dyslexia. This indicates that when children were diagnosed with dyslexia, teachers with higher TSE, were likely to see these children less favourably. Conversely, wider research suggests that teachers who feel confident in their own ability, often see themselves as well positioned to provide effective support for children with specific difficulties and act inclusively (Wilson et al., 2020; Woodcock et al., 2019). Woodcock et al. (2019) argued that teachers with higher TSE were more likely to consider their own causal role in student underachievement. Therefore, the finding that teachers with higher TSE attributed towards children with dyslexia more negatively, was unexpected.

To explain this finding I offer several considerations. Firstly, Woodcock et al. (2022) show that links between self-efficacy and inclusive practice are complex. Woodcock et al. (2022) used the TSE scale created by Tschannen-Moran & Woolfolk-Hoy (2001). They

compared a measurement of TSE to qualitative analysis of teachers' considerations about inclusive practice. It is important to consider that teachers often explicitly report inclusive attitudes, but vary in the types of pedagogy they implement (Woodcock et al., 2022). In this study, I created a separate scale for TSE removing reference to behaviour and emotional difficulties for example. Qualitative findings from phase one show that several teachers advocated using RtI type approaches to assess children, showing that some teachers were optimistic about identifying adequate approaches to support the children. While I directly measured the relationship between TSE and attributions, teachers differing approaches to pedagogy may be more representative of teachers' true approaches to inclusive practice. Similarly Woodcock et al. (2022) reported that teachers with higher self-efficacy, focused more on creating an engaging pedagogical environment. Thus, while teachers' explicit attitudes may be reported similarly, they may differ more starkly in the types of provision they put in place. As such, Hornstra et al. (2010), found that only implicit measures of teachers' attitudes towards children with dyslexia, gathered through evaluative priming, were predictive of teacher ratings of pupil achievement; explicit self-reported measures did not relate to these outcome measures. Therefore, it is possible that this study focused on attitudes that were explicitly reported, restricting an accurate understanding of these.

Alternatively, the quality of teachers' experience was not captured within this study. Types of experience can have differing impacts upon TSE, and therefore upon inclusive practice. More broadly, Avramidis et al. (2000) and Brady and Woolfson (2008) found teachers with more experience working with children with additional needs, saw children's difficulties as attributable to teaching rather than within-child difficulties. Similarly to this study, Woolfson et al. (2007) found that mainstream teachers saw learners with additional needs, as having less control over their outcomes than colleagues working in special schools. Therefore, the impact of TSE may be reduced, in comparison with direct experience working with children with specific needs. Further, studies by Hind et al. (2019) and MacFarlane and Woolfson (2013) found that time in the profession is negatively correlated with inclusive attitudes. This strengthens the importance of the quality of teachers' experience in shaping attitudes towards children with SEND.

Teachers may require experiences of success supporting learners with difficulties (Guskey, 2020). This further justifies using LS, in building experiences of success. This study offers tentative evidence that teachers with higher self-efficacy can nevertheless harbour negative attributions when children are labelled with dyslexia. A further consideration is that the label of dyslexia may be impactful on teachers' attitudes to the point that even the most-efficacious teachers struggle to see themselves as in full control of child outcomes. In their

study, Gibbs and Elliott (2015) show the term ‘dyslexia’ had a slightly stronger effect on teachers’ essentialist beliefs in comparison to the term ADHD. Gibbs and Elliot (2015) and Lopes (2012) argue that teachers supporting children with dyslexia can sustain beliefs in their own efficacy, while also believing in the immutability of dyslexia. Teachers in the present study may have seen dyslexia as an immutable difficulty, similarly to the study by Gibbs and Elliott (2015). Qualitative findings showed that several teachers proposed to seek further external support for these children. Therefore, the label of dyslexia may have inferred that these children would require a higher level of support. Similarly, Avramidis and Norwich (2002) and Fives and Buehl (2012) argue that teachers' beliefs are influenced by contextual demands; they will likely feel more efficacious when meeting students’ needs presents with less challenge. I have demonstrated the complex relationship between experience, self-efficacy and explicitly reported inclusive attitudes, which may also differ in practice. This raises the need for investigation into teachers’ pedagogical approaches, focused on through research question three and five, in sections 6.3 and 6.6.

6.3 Discussion of Phase One Findings: Research Question Three

Within phase one, teachers were asked what types of pedagogy they would implement to support vignette children. A variety of responses were given, with differing levels of attention paid to the importance of supporting children with phonics approaches. Some teachers moved beyond this to consider wider support for comprehension and motivation. Interestingly, teachers varied in their perceived responsibility or capability of supporting these children within the classroom themselves, with some advocating further assessment, or 1:1 support.

6.3.1 Differing Approaches to Teaching Reading

As shown in chapter two, debates over teaching reading through a whole language approach against using SSPs have long existed (Castles et al., 2018). Phonics interventions considered by participants included Toe by Toe, Monster Phonics and 1:1 adult support, for example. As found by Molyneaux and O’Brien (2023), teachers often advocate individual interventions, taking place outside of the classroom when supporting children with dyslexia, for example. Scientific evidence does suggest the essential nature of decoding skills as the foundation to reading acquisition (Castles et al., 2018; Graham et al., 2020). Further, the DfE (2023b) hold that SSPs, are optimal in teaching early reading in schools. It is understandable therefore, that these participants focused on the importance of phonics interventions, or

catch up, to support struggling readers. These findings provide useful context to teachers' preferred pedagogical approaches that can be built on in phase two. Overall, phonics knowledge represented one of the primary concerns for the vignette children, amongst participants, as shown quantitatively and through TA.

Interestingly, when children were diagnosed with dyslexia in this study, teachers were less likely to advocate the use of further phonics interventions, as shown quantitatively. Chen and Savage (2014) suggest that reducing the amount of phonics taught, is important in motivating struggling readers. Similarly, Solity (2020) argues that teaching a small number of GPCs represents optimal reading instruction, as the 20 most frequently occurring are present in most phonetically regular words. Therefore, teaching phonics more broadly than this could inhibit wider reading acquisition, for struggling readers (Solity, 2020). In line with these principles, several participants in the present study advocated using sight words to teach these children, especially those with dyslexia; sight word instruction is often seen as important in developing fluency for struggling readers (Castles et al., 2018). These findings also provide a teacher perspective to the debate outlined in chapter two regarding the importance of using sight words when children struggle with phonological awareness (Solity, 2020). Overall, this indicates that participants were reflecting on potential limitations of these bottom-up approaches to teaching reading and considering alternatives.

Further, several participants in this study stated they would use decodable texts to support the vignette children. An implication of many SSPs is the use of decodable texts, banded by age-related progress. The DfE (2013) suggest the importance of "developing pleasure in reading", while they also state early readers should only read texts that are consistent with phonics knowledge (DfE, 2023b). However, teachers in this study were less likely to advise the use of decodable texts when children had dyslexia, indicating an understanding that these might not work for all learners, or of their wider limitations (Castles et al., 2018). Price-Mohr and Price (2020), Castles et al. (2018) and Solity (2022) argue that no empirical evidence exists showing superiority of decodable texts. Castles et al. (2018) argue that a drawback of using decodable books linked to SSPs, is that they begin to limit children's motivation and vocabulary over time. These books may lack more complex language structures and fail to promote children's developing comprehension skills (Mol & Bus, 2011; Solity, 2020). In an extensive critique of government policy, Wyse and Bradbury (2022) have recommended changing the national curriculum for reading; they argue for more balanced instruction with less importance set by SSPs. Clearly, some teachers in this study understandably base their practice in line with dominant discourses linked to phonics; others sought broader approaches to supporting these children. Teachers may require support to

identify reasons for children's lack of progress, as well as feeling confident in using alternatives when necessary.

Motivating Children. While there is a strong focus upon phonics and decoding in literature about early reading instruction, several teachers' qualitative responses advocated helping children to feel motivated to read. This finding was complimented by quantitative findings that participants rated motivational texts relatively highly as a potential approach for all vignette children. Qualitatively, teachers advocated using paired-reading, motivational literature, and providing space for discussion about stories. Undoubtedly, children require a sense of competence while reading (Deci & Ryan, 2012; Willingham, 2017). Accordingly, some teachers suggested paired-reading as a possible intervention to support with motivation, as this may allow children to read with 100% accuracy; this would promote children feeling good at reading (Willingham, 2017). Paired-reading would also mean children encounter more complex vocabulary and language structures in a supported way (Topping, 2014; Solity, 2020). These recommendations of pedagogy made by teachers show wider reflection upon the importance of motivating readers. The importance of techniques such as these will be explored in phase two, through focus on pedagogies deployed during LS.

Emphasis on the Teacher. Another theme identified within TA was emphasis on the class teacher, or the degree to which participants highlighted their own capability of meeting needs. As shown, many participants advocated 1:1 support for children with reading difficulties; this may denote a reduced sense of control within the classroom for several participants. 1:1 interventions were advocated by participants for functions such as intensive interventions and scribing, for example. Quantitatively, children with dyslexia were more likely to be rated as in need of 1:1 support, by study participants. This suggests that a perception of increased need means more intensive adult support is needed. A common critique for this approach would be the notion that those who have the most need, would receive the least time from class teachers (Webster & Blatchford, 2019). Teaching assistants are said by some, to receive inadequate training for the level of learning support they are often asked to provide in class (Radford et al. 2015). Teaching assistants may focus on task completion at the expense of learning (Rubie-Davies et al., 2010). It is likely, that increasing teacher and teaching assistant collaboration, with a view to strengthening curriculum knowledge of teaching assistants, would be beneficial in helping them to scaffold learning (Slater & Gazeley, 2019). This could be achieved by a collaborative approach such as LS.

Beyond advocating interventions and 1:1 support, several participants focused on what could be done within the classroom. Several participants in this study stated that the children with reading difficulties would be best supported by the classroom teacher, or through whole-class approaches. Some felt that only the training of a teacher was sufficient to support these children. Similarly, Shapiro and Solity (2008) advocate the importance of whole-class support for children with reading difficulties. This is further supported by the findings of Molyneaux and O'Brien (2023) whereby in class support for children with dyslexia was rated highly.

Several teachers cited the importance of scaffolding and differentiation techniques to support the children to access reading. This represents a Vygotskian lens whereby scaffolding should support growing independence (Perkins, 2015). Through guided-reading, teachers can talk less able readers through the process of reading texts they are not yet capable of reading independently (Perkins, 2015). Approaches such as these, address the notion of supporting struggling readers through whole-class approaches (Shapiro & Solity, 2008). Further, participants cited "chunking", concrete resources, and using different multi-media and multi-sensory techniques; this reflects teachers considering the need to take many different approaches while being responsive to child need. I argue that these findings are example of teachers seeking ways to support learners within the classroom and in response to need.

6.3.2 Further Assessment

As briefly shown above, participants often wished to know about children's underlying skills, such as their phonics gaps and working memory. They advocated further assessment, from SENCos, SpLD specialists, EPs, or consultant teachers, to identify child-related factors to explain reading difficulties. Further, some teachers sought understanding of whether the children without a diagnosis of dyslexia, did in fact require this. As shown in question one, this may return understanding of vignette children to more of a within-child lens. There is recognition among many researchers that identifying reading difficulties is best achieved through examining their response to interventions, rather than focusing on underlying skills or deficits (Miciak & Fletcher, 2020; Snowling & Hulme, 2011). This would raise the importance of an RtI type approach, or LS within this model, for example (Norwich & Ylonen, 2015). As shown in chapter two, ATT approaches to assessment may be more accurate at capturing the progress of children than standardised approaches (O'Connor & Solity, 2020).

Gibbs and Elliot (2015) and Wennås Brante (2013) argue that the label of dyslexia can offer a perception of certainty but is ultimately a misleading oversimplification of need. Alternatively, due to the complex nature of dyslexia, it may cause uncertainty linked to the label, reducing teachers' confidence in their ability to accurately identify difficulties and intervene appropriately (Worthy et al., 2016). This may be a reason for teachers seeking external support. Gibbs and Elliot (2015) and Elliot and Grigorenko (2014) argue that there are no pedagogical approaches unique to the condition of dyslexia. The label of dyslexia may cause practitioners to assume that specific interventions will be necessary (Gibbs & Elliot, 2020). The present study shows that teachers may believe specialist interventions would become available if a diagnosis was achieved. Some teachers in this study reported that they would implement 'dyslexia specific' interventions once in receipt of specialist reports. It is clear that these reading difficulties were seen as beyond the expertise of some participants, and this was likely impactful upon TSE and attributions.

6.5 Discussion of Phase Two Findings: Research Question Four

Phase two consists of five case studies of TEP-facilitated LS interventions, with primary school teachers supporting children with reading difficulties and/or dyslexia. Through research question four, I sought to establish how LS impacted TSE and inclusive attitudes towards the case children, following participation in the intervention.

6.5.1 Teachers' Self-Efficacy and Inclusive Practice

Increases in TSE through LS may have accompanied perceptions of success in supporting the case children; this may have coincided with teachers feeling more confident trialling new strategies. As shown, TSE is a construct relating to teachers' beliefs they can influence child learning (Guskey & Passaro, 1994; Tschannen-Moran & Woolfolk-Hoy, 2001). As this study has developed, the close related nature of TSE and teachers' attributions towards case children has been evident. According to Guskey and Passaro (1994), self-efficacy is based on teachers' perceptions of influence over child outcomes following appraisal of the external and internal factors impacting them; this relates to the locus of control that teachers perceive for themselves (Guskey & Passaro, 1994). This definition pertains to the degree of control that teachers perceive over outcomes in the classroom.

Quantitatively, every participant showed an increase in TSE at follow up. Further, most phase two participants also reported qualitatively that they had felt confident they were adequately supporting the case children, prior to LS. Teachers from two case studies,

described a culture shift towards supporting reading within the classroom, rather than through small groups, or 1:1 intervention. More widely, teachers saw themselves as able to successfully implement more appropriate provision within the classroom, following LS. This strengthens the notion that LS facilitated an increase in teachers' perceived ability to understand and meet needs. TSE may be likely to increase when teachers feel they have successfully met the needs of children and facilitated learning; this is likely to have acted as an experience of mastery and thus impactful upon self-efficacy (Guskey, 2021; Usher & Pajares, 2008). These findings sit in line with phase one responses that endorse the importance of whole class teaching to support reading. In line with Guskey and Passaro's (1994) definition, teachers may have begun attributing an internal locus of control to themselves, over child outcomes, during or following LS. Cross-case analysis of the impact of LS suggests that teachers felt increasingly able to differentiate and ensure reading materials were accessible for the case children. Participants placed a low emphasis on the role of supporting children with teaching assistants, either in the classroom or outside of it.

Conceivably, low TSE, may reduce teachers' willingness to trial different approaches in the classroom (Woolfolk-Hoy et al., 2009). Exemplifying this, Roy (C) cited that low confidence in the classroom represented a barrier to trying new pedagogical approaches, prior to LS. Roy suggested that school-wide planning structures can be rigid; thus, LS enabled teachers to implement changes with confidence. LS represents a significant change from teachers' regular practice, as it affords them the opportunity to reflect upon children's needs, while collaborating with colleagues and EPs (Norwich et al., 2018). This notion was echoed within these findings, whereby several participants felt time and space for reflection allowed them to notice more about children, gaining confidence to respond accordingly. For example, it was this space for reflection that helped Katie (E) to feel more confident about her teaching of Peter. Despite the two-person LS group of case E, it was possible for us to reflect on changes in Peter's learning observed by myself and Katie. Avoiding an expert model of myself providing Katie with advice, maintained a difference between this smaller LS, and a teacher coaching model. Katie reported an overall increase in TSE following LS; it is likely that this was due to the space for reflection about Peter's learning, offered through LS.

John (D) felt that he understood needs prior to LS, but the intervention had increased his confidence in developing personalised plans for the children in his class. Teachers in case B felt they had shifted their focus from teaching, and onto child learning. These findings

are supported by Woodcock et al. (2022), who found that more highly efficacious teachers are increasingly able to identify personalised learning goals and use strengths-based approaches to supporting learners.

While these findings stem from a small sample within case studies, wider research suggests that self-efficacy beliefs are rarely malleable, often remaining stable over time (Tschannen-Moran & Woolfolk-Hoy, 2001; Turner & Gulliford, 2020). For example, Turner and Gulliford (2020) reported that TSE was not significantly impacted by a Circle of Adults intervention. With this literature in mind, the increase in TSE following LS is a promising finding. The increase in TSE aligns with a study by Schipper et al. (2018), who found that teachers' participation in LS positively impacted TSE. These authors argued that two cycles of LS contributed to feelings of competence to adapt teaching (Schipper et al., 2018).

6.5.2 Teachers' Attitudes Towards Case Children

In this section I explore changes that teachers exhibited in their attitudes towards case children, through LS. I then show that teachers focused more on the importance of their relationships with children and acknowledged the impact of their attitudes upon these.

Cross-case analysis shows teachers regularly reflected on the influence of their own expectations and attitudes during post-LS interviews. Several teachers showed explicit awareness of lower attitudes prior to LS. For example, Roy (C), felt that low assessment scores means children can become "pigeon-holed" as struggling readers. This is an interesting consideration and research outlines the impact of reading difficulties upon student identity (Castles et al., 2018; Hall, 2012). For example, teachers may influence learners through the levels, and age-bandings they assign, as Roy suggested (Hall, 2012). A further participant described the fear that provision she put in place, such as laptop access, implied she felt the child would never be able to spell. I interpreted this as a reflection upon the impact of her attributions upon this case child. In line with this, research shows that learners can perceive their own reading difficulties in line with teachers' expectations (Kabuto & Harmey, 2020).

At the outset of LS, planning meetings show that teachers often described children in relation to deficits, such as phonics knowledge, and a lack of progress. However, during LS, several teachers identified child strengths that they had not anticipated, and this may have

impacted attitudes overall. Cross-case analysis of quantitative survey results shows that teachers' attributions increased on average, following LS. However, as opposed to self-efficacy discussed above, teachers' attributions only showed a small increase, and two participants reported the same score at follow up. Farouk (2004) argues that providing teachers time and space with colleagues can encourage them to address unexplored beliefs and assumptions within their practice. Farouk's (2004) point is pertinent here as teachers became conscious of past beliefs and challenged these. Therefore, these attribution scores increased for most teachers, perhaps due to participants gaining evidence about children and their teaching, throughout LS. Acknowledging the strengths they had identified is likely to mean teachers saw child outcomes as more likely to change; they may have perceived their own teaching as likely to facilitate this.

One teacher stated that LS had helped her realise that "every-child is reachable". This quote displays a shift in attitude towards the case children following LS. She felt she had begun to understand the case children as individuals, rather than through the lens of their SEND needs. More widely, group problem-solving approaches have been shown to shift teachers' attributions of child difficulty to teaching, and away from the child (Davison & Duffy, 2017). Overall, teachers here focused increasingly on the quality of their relationships with case children; they reflected less on deficits and the notion of children being behind in the curriculum. In further LS research, Plantin Ewe (2020) found the intervention to increase teachers' understanding of relational competence. Plantin Ewe (2020) describes this as teachers' perceived ability to develop positive relationships with children. In relation to teachers' improved awareness of relationships in this study, I supported them to frame understanding of their relational support, through the Learning Triangle, a model of attachment and learning developed by Geddes (2006). As shown, a socio-cognitive model of reading, emphasises the links between the learner and teacher (Ruddell & Unrau, 1994). Moreover, these findings fall in line with recommendations made by Harmey (2021), who advocates employing more holistic approaches to reading instruction, with teachers paying closer attention to the interactions between themselves and students. Further, the aforementioned findings also align with UDL literature, which suggests that learning barriers occur at the intersection between learners' strengths, challenges, and preferences (Basham et al., 2020). To increase inclusivity, teachers need to move beyond focusing on learner deficits, and towards a greater focus upon changes they can make to support children. LS facilitates this increased focus on the relationship between pedagogy and the learner and is likely to support all learners. Overall, LS facilitated positive attitudes with teachers taking an increasingly relational approach to supporting case children.

6.6 Discussion of Phase Two Findings: Research Question Five

Research question five was designed to explore the ways in which LS impacted teachers' understanding of the individual needs of case children with reading difficulties and/or dyslexia; changes to teachers' pedagogical approaches are discussed. I demonstrate that teachers often focused upon within-child factors at the beginning of LS, such as insufficient phonics knowledge or cognitive difficulties. Teachers' focus shifted towards other influential factors upon reading acquisition such as motivation and comprehension, throughout LS.

6.6.1 Understanding of the Case Children Prior to LS

As within phase one, teachers gave varied responses to questions about their understanding of the case children, prior to LS. At the outset of the intervention, some participants felt they did not fully understand the difficulties that children were experiencing; others considered themselves well informed about reading difficulties. At the beginning of LS, teachers often focused upon the low progress of case children in decoding and blending, despite instruction and intervention. Cognitive factors referenced by participants at this stage, included phonological awareness, working memory, and attention, for example. Mastering the correspondence between letters and sounds is seen by many, as a prerequisite for becoming literate (Hjetland et al., 2019; Snowling & Hulme, 2012; Duff & Clarke, 2011). Thus, teachers understandably began the intervention with their focus on this area of reading acquisition, as did survey respondents in phase one. Understanding reading difficulties through levels of phonological awareness and decoding could relate to a simple view of reading difficulties (Gough & Tunmer, 1986; Washburn et al., 2017). Teachers often understood case children through the lens of cognitive development and progress in phonics; at times, they were concerned about their ability to support this difficulty within lessons and through interventions. Nevertheless, children who struggle to read do require in-class support to cater for these difficulties, prioritising time in the classroom where possible (Molyneaux & O'Brien, 2023). As I show, LS may have supported teachers to focus increasingly upon in-class support. My role as TEP, was to help teachers to consider the resources and expertise that they already have.

6.6.2 Individualised Understanding and Support

Quantitatively, all teachers in the present study increased in their self-rated understanding of case children. This aligns with wider LS research showing that participating in LS may facilitate teachers to develop deeper insights into learners' needs, and respond to these (Van Halem et al., 2016; Xu & Pedder, 2015; Ylonen & Norwich; 2012, 2013). This strengthens findings above, that teachers felt more confident in meeting needs themselves in class. Through LS, teachers described moving away from trial and error, and towards appreciation of individual strengths and needs. Following the intervention, teachers felt able to "pinpoint" provision or adjust pedagogy slightly. In some instances, teachers reported that LS did not show them new approaches to reading instruction but improved provision already in place. Several participants in the present study described validation that previous approaches were working, and should be optimised. Participants' experiences reflect those of teachers supporting children with MLD, whereby LS enhanced their understanding of strategies they were already using (Ylonen & Norwich 2012; 2013). LS has been shown to support teachers in making inclusive adaptations to the learning environment, without necessarily impacting their subject specific knowledge (Mutch-Jones et al., 2012). As shown by Norwich et al. (2018), the strategies suggested by a psychologist may be helpful, but learning about what is already working through observation and consultation is of equal importance (Norwich et al., 2018). Overall, LS facilitated accurate and tailored approaches to be put in place that were aligned with pupils' identified needs and already within the skillset and knowledge of teachers. I helped the participants achieve this by encouraging them to reflect on what they could do that was achievable within the resources at their disposal.

As shown above, teachers were often concerned about how to support children to read at the word level. Teachers made several adjustments to class resources to support learners with this; they implemented visuals to support retention of key vocabulary covered at the beginning of the lesson and encouraged predictions linked to visuals. These are examples of small within-class adaptations that most participants considered trialling. It shows teachers' growing focus on the relationship between the environment and case children (Davies et al., 2013). In this way, teachers ensured case children could be supported to access the same texts as their peers. These approaches mirror recommendations of Moir (2019), for teachers to tailor the classroom environment to support reading difficulties holistically.

6.6.3 Pre-reading and Pre-teaching

In several case studies, teachers did try a range of strategies they had not previously considered; teachers used observations to explore the impact of pre-teaching vocabulary, or pre-reading texts. Teachers identified this approach themselves, when they asked how to support elements of reading, such as fluency and motivation. Supporting children through pre-teaching or pre-reading aligns with elements of Direct Instruction and wider inclusive practice. Here, teachers evaluated the vocabulary children needed to access the text fluently and taught this explicitly prior to the lesson (Solity, 2020). This meant that case-children accessed the same text as their peers and remained within the main lesson; as such, case-children are not expected to catch up, but were supported to access the learning through direct teaching of the essential elements of the lesson (Engelmann, 1980; Hempenstall, 2020). Pedagogical changes such as these ensured that all learners could access the same lesson within one classroom; this finding aligns the principles of LS with those of UDL, introduced in chapter one (Capp, 2017). As TEP facilitator, I did not prescribe how pedagogical changes should look, but asked participants to reflect on the purpose of the changes they were making; in this instance, pre-teaching was considered by participants to ensure all case-children held the requisite knowledge to access lessons, in line with UDL Rao & Meo, 2016). Overall, the use of pre-teaching, or pre-reading was perceived to be successful in supporting motivation and fluency in RLs. One participant commented that the case child relied on decoding less frequently, having already seen the text. This approach sits closer to approaches to reading where children are supported by reading some high frequency words by sight (Shapiro & Solity, 2016).

6.6.4 Pedagogy Supporting Motivation

Analysis shows that teachers often considered the impact of pedagogies they had implemented, upon child motivation. This was a key discussion point across four of the five case studies. Pre-reading and pre-teaching for example seemingly impacted several case children, helping them to feel more motivated during lessons. Children reported feeling supported by this as they felt familiar with texts in lesson. As shown, literature suggests that children are more motivated to read when they feel good at it (Mol & Bus, 2011; Willingham, 2017). Through my role as psychologist and facilitator, I also helped teachers to implement a paired-reading intervention focusing on motivation. This intervention was shared with participants when they wished it, and I used future meetings to reflect on teachers' experience of using it. The aim of this intervention was to support children to feel competent reading a chosen text, while being supported by the adult with harder words. Several

participants commented on their growing appreciation of the importance of text choice upon child motivation. This aligns with literature advocating text choice in facilitating intrinsic motivation to read (Willingham, 2017).

6.6.5 Pedagogy Supporting Comprehension

Across several cases, teachers in this study focused on supporting comprehension skills throughout RLs. As shown, comprehension is complex and requires a combination of cognitive skills such as working memory, vocabulary knowledge, and meaning-making skills (Harmey, 2021). Across two case-studies, teachers modelled predictions about the texts and encouraged learners to make these; it was felt that this supported learners' engagement and retention of the stories. More widely, authors consider that interventions targeting oral language leads to improvements in reading comprehension (Fricke et al., 2013). In this study, discussions relating to predictions about texts facilitated child engagement before reading. Teachers reported an increased appreciation that the processes of comprehension are complex, alongside the various skills children require to gain a cohesive view of the text (Pearson & Cervetti, 2021). For example, teachers in cases D and E felt they learned case children were struggling to infer deeper comprehension of texts; they felt that inference emerged as a harder skill for readers. This was reflected as a learning point for teachers across multiple case studies. My role as TEP was to help participants reflect on the wider skill of reading, beyond the word level; I centred discussions about reading acquisition away from the child, and helped teachers to think in greater depth about the difficulties the text may present. Tennent (2015) supports this finding arguing that inference skills are difficult to measure and isolate when teaching. Oakhill et al. (2014) also argue that while teachers can support children to make inferences through their teaching; learners may still struggle to do this independently while learning to read. In LS, teachers facilitated inference by breaking texts down, pre-teaching vocabulary definitions and modelling prediction about the texts; they began to support case children to operate as problem-solvers, as advocated by Pearson and Cervetti (2017). Teachers facilitated these skills more explicitly having previously discussed comprehension in planning meetings. They were able to identify the impact of their strategies through observation; this represented a development from the start point of LS, where teachers had most often focused on word-level difficulties.

6.7 Discussion of Phase Two Findings: Research Question Six

The final research question explores ways in which a child's diagnosis of dyslexia impacts upon the teacher-related constructs explored throughout this research. Case A, D and E all included a case-child diagnosed with dyslexia. The presence of a dyslexia diagnosis for the case children was considered by teachers in several ways. Firstly, the participants reflected on their understanding of dyslexia, and the needs associated with the case-children. Secondly, as within phase one, teachers associated several specific pedagogical approaches with supporting children with dyslexia.

6.7.1 Teachers' Understanding of Case Children with Dyslexia

Overall, findings about how participating teachers conceptualise dyslexia revealed some uncertainty over how these difficulties should be supported in practice. Teachers described a lack of confidence in understanding dyslexia and felt the term was too broad to accurately guide an understanding of the child's needs. For example, Katie (E) considered the label of dyslexia to be too broad to be helpful in understanding Peter's reading needs. This finding supported phase one results, and wider research suggesting that a label of dyslexia does not provide teachers with knowledge of how to support the individual and can be ambiguous (Gibby-Leversuch et al., 2021; Lauchlan & Boyle, 2007; Wennås Brante, 2013). Rebecca (A) felt that when the label of dyslexia was used, its broad meaning caused her to feel less confident that she was supporting the case child. This suggests the label of dyslexia implies a level of complexity that may require specific or specialist support. This would align with phase one findings whereby some teachers considered external assessment was needed to support children with a diagnosis; as shown, Gibbs and Elliot's (2015) also argue that dyslexia can be perceived by teachers as indicating that specific pedagogies are necessary. Rebecca was concerned about how she would support this case-child with her spelling, which was seen as a key difficulty and associated with dyslexia. Following LS, Rebecca felt that she had become more reflective about supporting the case-children.

John (D) felt that he understood Hannah's difficulties through her diagnosis of dyslexia; however, this did not support him to consider provision. He felt that prior to LS, he was not sure how to support her in the classroom and that she was best supported through 1:1 interventions. This sits in line with phase one results whereby teachers supported the notion of 1:1 support for children with dyslexia. However, following LS, John felt that he had

been able to focus on strategies to support Hannah's self-esteem in the classroom; for example, pre-reading the text with Hannah meant that she could rely on sight reading. John felt he had found effective ways of scaffolding texts so that Hannah could access the same content as her peers. This finding was echoed in other case-studies with children without the diagnosis. This aligns with studies exploring TSE suggesting that efficacious teachers will examine their own responsibility in meeting need of children with SpLD (Woodcock et al., 2019). In school D, both teachers felt that Hannah's needs could be met by finding ways to support her self-esteem in the classroom. Self-esteem was considered an important factor in supporting children across the case studies and in phase one findings. These teachers were acutely aware of their role and ability to support Hannah with this. Teachers' concerns here align with several studies that suggest children can internalise their difficulties linked to the diagnosis (Ross, 2021; Woodcock & Moore, 2021).

Therefore, the case studies show mixed findings as to the impact of dyslexia upon teachers' beliefs. For some, it was explanative of needs, while for others it was either unhelpful or ambiguous. While Gibbs et al. (2020) found that dyslexia is likely to affect teachers' perceptions of their pupils' abilities; this study suggests this may not hold true when child's needs have been considered in depth by teachers. It is clear from these findings however that the label of dyslexia did not provide helpful directions as to the pedagogy required to support these young people and I discuss this further next.

6.7.2 Pedagogy Proposed to Support Children with Dyslexia.

Across case-studies, teachers described visual support strategies they had put in place to support children with dyslexia. Teachers described colour-coding and coloured pages, for example. This aligns with phase one findings whereby teachers cited visual overlays as effective to support children with dyslexia. Within wider research, authors describe the notion that the presence of visual difficulties in dyslexia is a prevailing misconception (Knight, 2018; Washburn et al., 2014). However, teachers also focused on a wider range of pedagogies to support these children, such as targeted scaffolding, chunking, reducing texts and using alternative mediums of delivery such as audiobooks and supportive technology. Overall, teachers focused increasingly on the text and how to support with this; this aligns with wider LS research which suggests this intervention draws teachers' attention to the learning environment, and away from pupils' individual characteristics (Leifler, 2020).

These strategies were proposed by teachers following careful observation. While teachers may understand dyslexia through specific explanatory models, they were also able

to find more widely used pedagogies as effective at supporting these case children. LS provided teachers with precise understanding of the impact of pedagogy and moved well beyond the link to visual difficulties within reading, originally associated with dyslexia here. This finding is extended by the responses of Charlotte (A) and Kerry (D); these teachers felt that mostly, pedagogy put in place to support children with dyslexia benefitted all children in their classes. Charlotte and Kerry's response align with findings by Ylonen and Norwich (2012), where teachers identified provision put in place for children with MLD through LS, was effective for all children. The case studies show participating teachers felt able to support children with reading difficulties and dyslexia through high quality teaching as part of their whole-class provision. This aligns with guidance by the EEF (2021), who advocate supporting children with additional needs by gaining a more holistic picture of learning needs, rather than focussing on diagnoses. LS provided teachers with an opportunity to trial and assess the effectiveness of different pedagogies in supporting the children.

6.8 Chapter Summary

Across this chapter I have shown that teachers may harbour more negative views of children seen to be labelled with SpLD, in line with scholarship (Woodcock & Moore, 2021; Woodcock & Hitches, 2017). Research shows that children with dyslexia may be understood through the lens of this label (Gibbs et al., 2020). However, phase two of this research showed that this may not be the case when teachers engage in in-depth observation and reflection about child needs. The label of dyslexia was comparably less impactful upon teachers in phase two. Teachers often found that the changes in pedagogy highlighted through LS would be beneficial to all children, reducing the impact of a label (Ylonen & Norwich, 2012).

This research informs a wider understanding of teachers' inclusive attitudes towards children with reading difficulties across both phases of the research, whereby teachers can often see difficulties through the lens of within-child factors such as their prior attainment in phonics. Phases one and two show the variability of teachers' pedagogical approaches. Teachers vary also across both phases in the degree that they attribute difficulties to within child factors, or indeed, to more external factors such as their teaching or the curriculum (Guskey, 2021). Teachers showed a spectrum of confidence and willingness to support reading difficulties inclusively within the classroom, or to avoid withdrawal from class. In this study, phase two showed a shift in teachers' focus away from within child deficits such as phonics knowledge, and increasingly towards the detail and precision they could achieve in

understanding child needs in relation to teaching. Teachers often found that LS highlighted strengths in their teaching that could be used to support case children.

7.1 Chapter Overview

In this chapter I return to the overall study aims with reference to wider literature. I draw both phases together and outline how this study contributes to knowledge. The overall aim of this study was to explore primary school teachers' differing inclusive attitudes, self-efficacy and pedagogical approaches to supporting children with reading difficulties, and/or diagnosed with dyslexia. A further aim was to evaluate the impact of a dyslexia diagnosis upon teachers across both phases. Mixed-methods allowed me to triangulate and provide balanced evidence for my findings throughout the study. The differing methods used within the study allowed the findings to be strengthened; however, triangulation also allowed broad findings from phase one to be deepened through case studies.

This research contributes to literature relating to reading instruction, reading acquisition and contributes to a gap around teachers' perspectives of this. Primarily, this study addresses a gap in the literature surrounding psychologist-facilitated LS, to support teachers' classroom practice when supporting children with reading difficulties. The study has several strengths that I discuss. I also consider limitations and relate these to potential future research. I will finish this thesis by concluding and offering final reflections on my research journey.

7.2 Teachers' Inclusive Attitudes

A principle focus of this study was how teachers may respond to differing needs of struggling readers, inclusively. Teachers' attitudes towards inclusive practice are complex, due in part to a lack of universally agreed definition of what constitutes inclusive practice (Dimitrellou & Male, 2022). As shown in chapter two, teachers are often positive towards inclusive practice in principle, while their actual practice may vary (Avramidis & Norwich, 2002; Williams-Brown & Hodkinson, 2021). In line with wider literature, this study showed variation across teachers' attitudes, proposed pedagogy, and actual pedagogy, across both phases. Teachers held less positive attitudes towards children with dyslexia. This aligns with wider literature showing that labels of SpLD may be likely to adversely impact teachers' attributions. For example, teachers may hold lower expectations of these pupils and show them greater levels of sympathy (Woodcock et al., 2019). This study builds on this, by suggesting that when a diagnosis was not used, the effects described in the literature may

nevertheless be present. This is evidenced by phase one findings that some teachers wished to explore whether undiagnosed pupils in this study in fact should be diagnosed. Equally, phase two emphasised that some teachers saw struggling readers as far behind their peers and not responding to intervention. Both phases show that some participants saw certain levels of child reading difficulty, with or without dyslexia, through a within-child perspective of learning difficulties (Woodcock & Moore, 2021). Across both phases of this research, I found teachers often focused on cognitive and within-child explanations of reading difficulties such as working memory, phonological awareness, or phonics progress, for example. Phase two built upon this to suggest teachers' attributions towards children did become more positive through collaborative support and reflective practice. This finding is in line with wider research suggesting that experience of working with children with SEND is positively impactful upon TSE (Brady et al., 2008; Coates et al., 2020; Sharma et al., 2015). Inclusive practice in this country means that teachers adopt much of the responsibility in implementing this in the classroom (Dimitrellou et al., 2020). Therefore, this study extends this notion, outlining the complexity of including wide ranging reading needs within the classroom and the various impacts this requirement may have upon teachers' attitudes.

Norwich (2014) argues that teachers must believe they can teach all learners. This extends to seeing beyond a diagnosis or a label of difficulty, and understanding needs individual to the child (EEF, 2021). Undoubtedly, this study shows a need for teachers to engage in collaborative and reflective practice to achieve this. This may be achieved through working with external professionals such as EPs, or simply with colleagues in schools. Continued professional development also holds an important role in developing teachers' attitudes towards inclusion. This study's findings amplify the need for professionals to receive support and work collaboratively to ensure learners' needs are met within a classroom. My role as LS facilitator was frequently to reaffirm what teachers' felt they knew and offer reassurance and empathy as to the difficulties of the profession. Teachers frequently commented that it was positive to hear their approach was in fact working. This echoes findings by Norwich et al. (2018) who found that participants reported that EPs reaffirmed what they knew about the case children. This is an example of EPs' consultation skills that I aimed to deploy through LS.

7.2.1 Teachers' Self-Efficacy & Attributions

As outlined, measuring attributions allows us to consider teachers' reasons given for successes and failures of students, and themselves as practitioners (Graham, 2020). TSE is a construct shown to be positively associated with inclusive practice and attitudes (Brady &

Woolfson, 2008; Woodcock et al., 2022). A key focus of this study was to explore these constructs in relation to inclusive practice. The focus was to support teachers to perceive greater efficacy in supporting wide-ranging reading needs within their classrooms. However, phase one shows the complex relationship between TSE and attitudes. The unexpected finding that TSE in fact negatively influenced teachers' attitudes towards children with dyslexia may suggest that the quality of teachers' experience is of primary importance (Guskey, 2021; Wilson et al., 2020). Teachers' attitudes are contextual and affected by this experience (Brady & Woolfson, 2008). Phase one provides tentative support to a study by Gibbs and Elliot (2015), showing that dyslexia may be a powerful construct that teachers see as immutable. Due to teachers with high TSE and TSELI reporting more negative attributions towards children with dyslexia, it is possible they maintain perceptions of high TSE, despite feeling unable to adequately support children with the diagnosis. Phase two adds to this by showing teachers' attributions and TSE both improved over the course of LS. This finding is illuminated by research that shows teachers' role and their self-efficacy, are positively influential upon their attributions towards children with additional needs (Brady & Woolfson, 2008). In their study, Brady and Woolfson (2008) found that special education teachers held more positive attributions towards children with additional needs. Thus, it is likely that the positive experience of working closely with children with reading difficulties and dyslexia, was positively impactful upon attributions in the present study. Brady and Woolfson (2008) also argue that training is not impactful upon teachers' attributions. This may point to the importance of direct experience, such as that provided through LS.

In this study, teachers saw themselves as increasingly able to meet child needs within their classroom rather than through 1:1 support, following phase two. Triangulating findings in phase two shows teachers increased in their perceived ability to implement changes to reading materials and influence child outcomes. As such, TSE may predict teachers' actual practice and the types of changes they are likely to implement in their classrooms (Woodcock et al., 2019). TSE is linked to teachers' perceptions of their own role in child outcomes or attributing an external locus of causation for pupils (Woodcock et al., 2019; 2022). While the methods here do not show an empirical link between rising TSE and types of practice, the study does show the importance of supporting teachers to feel more efficacious in their practice and outlines some important avenues for future research.

This study provides tentative evidence that LS can support teachers to reexamine their understanding and approaches to supporting literacy difficulties, with one participant best exemplifying this by stating her reflection that "every child is reachable", following LS. Weiner (1995) stipulates that teachers who see a child as in control of their own outcomes will be less likely to accept failure (Brady & Woolfson, 2008). This finding further affirms that

teachers' attributions had shifted, with teachers' becoming less accepting of child failure and re-examining how to improve child outcomes through teaching. This study shows the potential of EP-facilitated LS in shifting attitudes in this way. In line with a study by Dignath et al. (2022), where these authors concluded teachers' inclusive beliefs are shaped by experience in applied practice, this study showed that LS could act as one such experience. Teacher training in the UK is a short process; teachers require direct support in developing their approaches towards creating inclusive environments (Robinson, 2017).

7.2.2 Teacher Professional Development

Research widely shows the importance of collaborative and research orientated approaches to developing teachers' inclusive practice (Robinson, 2017). Merchie et al. (2016) point to the importance of 'active learning' as a critical feature of teachers' professional development. Lewis and Perry (2017) have shown that this key characteristic of professional development is integrated in LS. Brady and Woolfson (2008) argue that hands on practice is more effective than formal postgraduate training when developing teachers' inclusive practice. LS can operate as a form of professional development, offering teachers the opportunity to learn through practice, while increasing their confidence and self-efficacy for inclusive practice (Schipper et al., 2018; Ylonen & Norwich, 2015). Changes in attitudes and beliefs may in turn lead to changes in teacher instruction and child learning (Perry et al., 2006; Norwich & Ylonen, 2013). This study provides support for these notions, by showing the positive impact of LS upon self-efficacy and inclusive attitudes. Research shows that continued professional development is also impactful upon teachers' approaches to supporting reading (Markussen-Brown et al., 2017). As discussed, LS was also impactful upon teachers' approaches to reading instruction and promoted critical thinking about pedagogy.

7.3 The Impact of the Dyslexia Label

As shown, Gibbs et al. (2020) found that dyslexia likely affects teachers' perceptions of their pupils' abilities. This study provides further evidence for this; however, it also shows teachers may not make these assumptions when close observation and reflection has taken place. Cameron (2016) argues that the label of dyslexia can cause judgements about intelligence and competence. Instead, Cameron (2016) emphasises the need for greater reflection about pedagogy. Phase one showed that teachers wished to know if children had dyslexia; similarly, in phase two, John did feel that dyslexia was explanative of needs. However, phase one showed that teachers struggled to relate any pedagogy to supporting

children with a diagnosis, advocating waiting for professional reports. In phase two, no participants felt a dyslexia diagnosis helped outline effective pedagogy. Cameron (2024) argues that acknowledging the socially constructed nature of special educational needs or in this case, dyslexia, can avoid the pitfalls of focusing solely on a scientific understanding of this. A scientific understanding of dyslexia may unfoundedly insinuate a specific pedagogy or intervention is needed to support. However, teachers in this study did not associate dyslexia with any specific pedagogy and LS allowed them to reevaluate their attitudes towards the label, thus potentially impacting their approach to support for these children and allowing them insight into the children's struggles with reading.

Wider research suggests that a label of dyslexia does not provide teachers with knowledge of how to support the individual, and can be ambiguous (Elliot & Grigorenko, 2014; Gibby-Leversuch et al., 2021). This finding is extended in phase two with participants suggesting that pedagogy they implemented was supportive of all children. Teachers became increasingly likely to advocate in class support and identify ways to differentiate accordingly for each learner. This is a positive finding, as Anderson (2009) found that students with dyslexia who were supported in class, made more progress than peers who were supported through 1:1 support, or withdrawal from lesson. LS may have influenced teachers' perceived ability to support children with reading difficulties and dyslexia in the classroom, rather than through 1:1 intervention. This study outlines avenues to support teachers to support learners with reading difficulties inclusively. In a study by Molyneaux and O'Brien (2023), some teachers advocated the importance of in class support for children with dyslexia. LS may be a further way to achieve this in practice. Similarly, LS ensures that teachers consider these diverse needs and is aligned with UDL as a way of ensuring all needs are thought about during lesson planning (Courey et al., 2012).

7.4 Teachers' Approaches to Reading Instruction

Finally, I provide an overall discussion of how this study extends understanding of teachers' approaches to reading instruction, and their perceptions of this. Participants cited the importance of phonics and pupil progression against this, throughout both phases; some phase one teachers also advocated more holistic approaches to reading instruction. In phase two, teachers progressed towards this, and focused on ways of supporting motivation and comprehension, for example. These findings align with wider scholarship calling for broad and balanced approaches to teach reading (Wyse & Bradbury et al., 2022). Whereby some participants focused on the importance of phonics knowledge and cognitive development for example, phase two participants increasingly focused on how teaching

affected learners and attended to the impact of the text. Wider research shows the importance of supporting teachers to examine the wider reading environment holistically (Ellis et al., 2014; Harmey, 2021; Moir, 2019).

As broadly concluded within this study, teachers' pedagogy ranged from 1:1 support and class withdrawal methods, to carefully structured whole class adaptations. Phase two saw teachers focusing specifically on the notions of pre-teaching, use of visuals, prediction techniques, and careful scaffolding to support guided-reading in the class. Teachers also increasingly focused on the importance of the interaction between themselves and learners, or relationships in the classroom when learning to read. This supported findings by Plantin Ewe (2020) who found LS improved children's perceived relational support from their teachers. This phase two finding extends phase one results whereby these first participants did not refer to focusing on the interactions between teacher and learner.

Many researchers point out the importance of whole class approaches to delivering inclusive practice (Molyneaux & O'Brien, 2023; Kurth et al., 2015). LS has been shown to have the potential to increase teachers' affective responses and motivation for teaching in mainstream classrooms (Norwich et al., 2021). Overall, this study shows that some teachers focused on the importance of supporting reading difficulties in the classroom where possible; LS helped teachers to identify ways of achieving this and allowed progression away from class withdrawal and towards inclusion through increased participation (Farrell, 2004). This further aligns LS with UDL literature, as a way of considering how all learners can be included through lesson planning and curriculum design (Hodge et al., 2012).

7.5 Contribution to Knowledge

Literature reviewed in chapter two explores the merits and limitations of differing approaches to reading instruction (Castles et al., 2018; Ehri, 2020; Solity, 2020). Research conducted in the field of reading difficulties has rarely focused on teachers' perceptions of the pedagogical approaches they take. The first reason this research is novel is due to it showing the broad spectrum of approaches that teachers themselves feel capable of using. This study shows the variation of teachers' focus, from cognitive explanations of reading difficulties, to wider environmental influences. I have demonstrated the importance of supporting TSE and the impact of collaborative practice when helping teachers to refocus on a more balanced approach to reading instruction (Wyse & Bradbury et al., 2022).

Secondly, this research adds to wider literature suggesting the powerful impact of labels upon teachers' attitudes. While past research has shown teachers' attitudes towards SpLD and dyslexia can be negative, this research extends this in the case of reading difficulties, showing that some teachers may seek a diagnosis of dyslexia where one does not yet exist. Further, in line with Gibbs and Elliot (2015), this research has shown tentative evidence that some teachers may maintain negative attitudes towards dyslexia, despite higher TSE. As such, teachers who feel confident in their classroom pedagogy may nevertheless hold negative expectations of child outcomes when they have a diagnosis of dyslexia.

Gibby-Leversuch (2018) highlights that a diagnosis of dyslexia has a potential to lead to inequitable access to support for some; this author calls for psychologists to take a role in considering the impact of labels upon young people and support teachers in how these are used. I feel that this study has further emphasised the importance of this, due to evidence of within-child understanding of reading difficulties and dyslexia shown across the study. As shown in wider but relatable research areas, EPs have a role in helping teachers to identify environmental influences upon children (Norwich & Ylonen, 2015). Using LS for assessment, teachers may move away from identifying areas of pupil difficulties and towards increased identification of enabling factors (Norwich & Ylonen, 2015). EPs could adopt this intervention as a method of promoting strengths-based approaches to supporting young people.

Finally, and perhaps most importantly, O'Connor and Solity (2020) argue that EPs have a role in promoting ATT approaches to understanding reading difficulties and dyslexia. LS has been explored as an EP-facilitated tool to supporting teachers through collaborative practice, as shown by Norwich et al. (2018). This study is the first to demonstrate the positive potential of EPs using LS to support teachers of children with reading difficulties. Thus, this study has shown the potential for EPs to support teachers' understanding of needs by using the ATT and RTI related method of LS. As Ward et al. (2012) argued, ATT approaches help teachers to focus on the learning environment rather than the learner. I have developed O'Connor and Solity's (2020) recommendations by showing avenues for EPs supporting assessment of reading difficulties through teaching. In this study, LS helped teachers to focus on wider environmental impactors upon reading progress, as advocated by Ward et al. (2017). This final contribution to knowledge presents the clearest avenue to develop EP practice from this study.

7.6 Implications for Professional Practice of Educational Psychologists

This study provides an exploratory survey into teachers' approaches to reading difficulties alongside case studies of this, using LS. The potential for these findings to be more widely transferred into educational psychology remain tentative. Firstly, the importance of teachers in promoting inclusion has been emphasised at multiple points of this thesis (Dimitrellou et al., 2020). LS has been shown to be effective at building TSE and confidence (Klefbeck, 2020; Schipper et al., 2017, 2018). This study adds to this within the context of EP practice. LS has been shown to enhance teachers' pedagogy and their attitudes towards diverse needs of case pupils (Norwich & Ylonen, 2015; Norwich et al., 2014). TEP-facilitated LS supported teachers to explore wider ways that children could be supported with reading, and spotlighted focus on the learning environment. I have provided tentative evidence that psychologist-facilitated LS has the potential to bring changes for teachers' attitudes and perceived ability to support inclusively within the classroom. Norwich (2015) argues that EPs can support the professional development of teachers through engaging in the psychology of how teachers learn, thus enhancing teacher practice and preparation. In conjunction with literature linking LS to teachers' professional development, this study has shown that LS allows teachers to learn about their pupils, their own practice, and may positively influence inclusive attitudes. This study strengthens evidence that EPs are well placed to facilitate LS through their understanding of inclusive practice, collaborative problem-solving, and consultation skills. Similarly to a study by Norwich et al. (2018), I was able to support teachers through the use of my consultation skills and by bridging the gap between theory and practice. A further similarity with findings by Norwich et al. (2018) is that I did not see or present myself to teachers, as a more knowledgeable other, or expert in reading.

Secondly, this study shows the potential of LS as a method of assessment or collaborative support for teachers and has drawn from literature advocating the importance of ATT and RtI approaches in supporting children with reading difficulties and dyslexia (Gibbs & Elliot, 2015; O'Connor & Solity, 2020; Ward et al., 2012). This study shows the potential of using LS in this way. This study has bridged gaps between RtI literature, and an initial study advocating that EPs work through LS to promote collaborative practice and inform the teaching of pupils with learning difficulties (Norwich et al., 2018). EPs bring an understanding of psychological theories such as those of motivation and learning (Moir, 2019). This theoretical understanding is key to the instruction of reading. Leifler (2020) found that teachers who took part in LS showed an increase in readiness to adjust the learning environment of their pupils, linking this to increased inclusivity. Dudley (2013) argues that LS may enable teachers to switch off automated responses, developed as filters to cope with

the speed and complexity of classrooms. LS allowed teachers in this study the time and space to reflect on learners and focus increasingly on the learning environment. Thus, I feel this study outlines the potential of LS to be used by EPs in supporting teachers to feel competent and willing to support a diverse range of reading needs in their classrooms. EPs can help teachers to understand the complex mixture of influences that may enact upon a child in their journey in learning to read.

Finally, I argue that LS has a potential to be developed as a model of EP-consultation framing their work with learning difficulties. Norwich et al. (2018) argued that EPs can join teams of teachers to help them develop their practice through research-informed knowledge and use their consultancy skills to positively affect inter-professional collaboration. However, EPs have previously outlined their unease at being cast in the expert role during LS; I feel the present study outlines the potential for LS to be used with a primary aim of facilitating collaboration, rather than knowledge dissemination. LS is a method of translating psychological theory into teaching practice and thus, a method giving psychology away (Miller, 1969; Norwich et al., 2016).

7.7 Critique of Research

The research I have presented here has many strengths, including the flexible and responsive use of a direct intervention alongside teachers. The research contributes to knowledge in several areas, including teachers' perceptions of reading instruction and how they can be supported to observe and reflect upon the learning environment. Working as a TEP within the research, I have been able to identify several ways in which LS could be of benefit to teachers. Phase one of this research achieved a large sample size of teachers, allowing for a broad measure of inclusive attitudes across the profession to be captured. Equally, through phase one I was able to measure multiple psychological constructs, including TSE, TSELI and attributions. The scales developed for the purpose of this study showed good internal reliability. Phase one allowed for robust triangulation of teachers' pedagogical approaches with a large amount of qualitative data, analysed through TA. The use of two phases has allowed for a broad and varied account of teachers' attitudes and pedagogies to be included. Triangulation was possible within both phases, and across these. Overall, there was a robust consideration of TSE and attitudes as these are triangulated across multiple methods. The study benefits from good depth of the data achieved through case studies in phase two, with LS allowing research within classrooms to take place.

It is important to consider any methodological limitations that exist in this research and to suggest methods to address these in the future. The first limitation of this study relates to phase one methods, as teachers' attitudes towards children with reading difficulties and dyslexia were sought through self-reported measures. Equally, vignettes create a possibility that teaches' responses could be primed by answering associated questions about the different children in quick succession. To mitigate this as much as possible, the order of vignettes was changed throughout the data collection period. Further, the potential for social-desirability bias in this subject area is strong and wider studies have shown that implicit measures of teachers' attitudes may yield different results (Hornstra et al., 2010). As explored in chapter six, this may have been one reason for the unexpected finding that TSE negatively predicted teachers' attributions towards children with dyslexia. The methodological approach of this study did not allow for the direct relationship between TSE, types of experience and types of pedagogy to be explored. Further, vignettes could only include boys described in each scenario; in future it would be helpful to add in girls to explore the impact of this variable.

A limitation of phase two I have identified is the use of case studies in evaluating small scale interventions with schools. There was only a small number of responses to surveys in phase two; while statistical analysis was not sought, this means that survey outcomes should be considered tentatively. A further limitation of case studies is they are prone to higher levels of observer bias than other forms of research (Nisbet & Watt, 1984). My role within as TEP facilitator of the LS means that teachers could have been influenced by any opinions about reading difficulties that I shared within the process. However, my proximity to the research allowed me to reflect on fine details of teachers' responses to the process and emphasise the importance of contexts I observed (Robson, 2011). While I considered the possibility of recruiting a further EP to conduct LS, this would not remove the possibility of that EP influencing participants. The flexible approach to case studies allowed me to learn from the process as I progressed and to grow in my understanding of what teachers may expect from the process. This said, my deployment of case studies remained closely guided by the templates (Dudley, 2013). My reporting of each case study individually, shows the close attention I paid to each stage of the process, communicating this to the reader to ensure transparency and trustworthiness of the research. My close proximity to the research may therefore be considered a relative strength as I was able to consider my own thinking at each stage of the LS and communicate this. I have been able to communicate this both in a reflexive diary and my discussion. An outside researcher observing an EP conduct LS would not be able to gain this in-depth insight into the process. These case

studies sat within a larger mixed-methods design which allowed for findings to be triangulated against other forms of data.

7.8 Future Research

LS has been used as a method of assessment, allowing professionals to collaborate while observing children in their usual learning environment (Norwich et al., 2014). This presents interesting avenues for future research seeking EPs' views when using LS as opposed to other forms of assessment outside of the classroom, for example.
Thus, the first potential for future research would be to expand this research to explore the experiences of EPs in delivering support to teachers in this way; I would propose that this research may begin by surveying EPs' uses of LS in practice.

Further, I feel there is scope to begin developing LS as a form of consultation or model of collaborative practice in line with the principles of Farouk (2004). Further research could explore the merits of training teachers to deliver LS, followed by EP consultation or supervision, to explore the benefits of EPs supporting teachers in this way. Equally, it would be useful to continue research into teachers' flexible use of LS with regular occurrence, and supervised by EPs.

Finally, it would be important to gather data to explore the impact of LS upon child outcomes. Exploring the impact of an EP-facilitated LS intervention aimed at supporting teachers of children with reading difficulties and/or dyslexia, would benefit from gathering outcome data longitudinally following LS completion. Equally, it would be beneficial for studies of LS to take place alongside other methods of EP involvement, such as group consultation approaches.

7.9 Chapter Summary & Conclusion

The findings from this study add to wider research into inclusive practice. Within resource pressured schools, teachers often carry much of the responsibility to deliver inclusion (Dimitrellou et al. 2020). Reading difficulties are complex and guidance around optimal instruction could be construed as confusing or at times, contradictory. Teachers therefore require support to meet this challenge. This study shows that teachers will undoubtedly vary in their attitudes, self-efficacy, and pedagogical approaches towards supporting children with reading difficulties and dyslexia. A diagnosis was impactful upon

teachers' attitudes, and this shows the powerful effect of labels of SEND upon teachers' perceived ability to build inclusive teaching environments. Some teachers may feel that supporting complex reading difficulties requires 1:1 support, specific interventions, or external professional support. Other teachers may themselves feel efficacious in their practice, and this can correspond with them implementing balanced and personalised approaches to reading instruction. This study highlights how teachers will differ in the degree of control they attribute to themselves in the classroom (Guskey, 2021). As such, some teachers may also attribute difficulties to within-child factors such as cognitive development, prior attainment, or the perceived presence of SpLD. With this in mind, LS supported teachers to focus increasingly on the interaction between the learner and the teaching environment. As shown, Dignath et al. (2022) conclude that teachers' inclusive beliefs do not develop naturally; they require opportunities to gain experience in applied practice. LS provides an opportunity for teachers to focus on child need in detail, learning about how these children can be supported.

7.10 Reflection on Research

I began this research in 2022, giving a presentation on research into teachers' attitudes, child reading difficulties, and EP practice. My earliest experiences as a TEP highlighted to me the complexities and anxiety that often exists around teachers' understanding and supporting reading difficulties. The pressures teachers face to meet an increasingly demanding academic curriculum puts pressure on them, and pupils. I set myself the goal of learning more about reading difficulties, reading acquisition and how teachers can be supported. I believe that through this research I have advanced my own practice in this area and provided a small contribution to developing EP practice in this domain. My dual role as LS facilitator and researcher has advanced my skills as a practitioner psychologist; LS is a tool I will continue to use.

I see the EP role as a collaborative one, working alongside others to help advance understanding of problem situations. I feel that LS embodies this. As shown by case studies, LS is adaptable to meet the differing needs of children and teachers in diverse classrooms. I feel that this study took me into what has been called the 'mess' of real-world research and supported me to develop my skills as a reflective and responsive psychologist (Robson et al. 2009). My vision is that LS will become a model of consultation capable of allowing professionals to come together around a shared understanding of needs within context, in the search of systemic solutions and improvements to practice. The aim of this is to promote a broader focus on the learning environment as influential upon children's learning needs.

This study offers tentative evidence that collaborative practice can support teachers to increase their self-efficacy and positive attributions towards children with reading difficulties.

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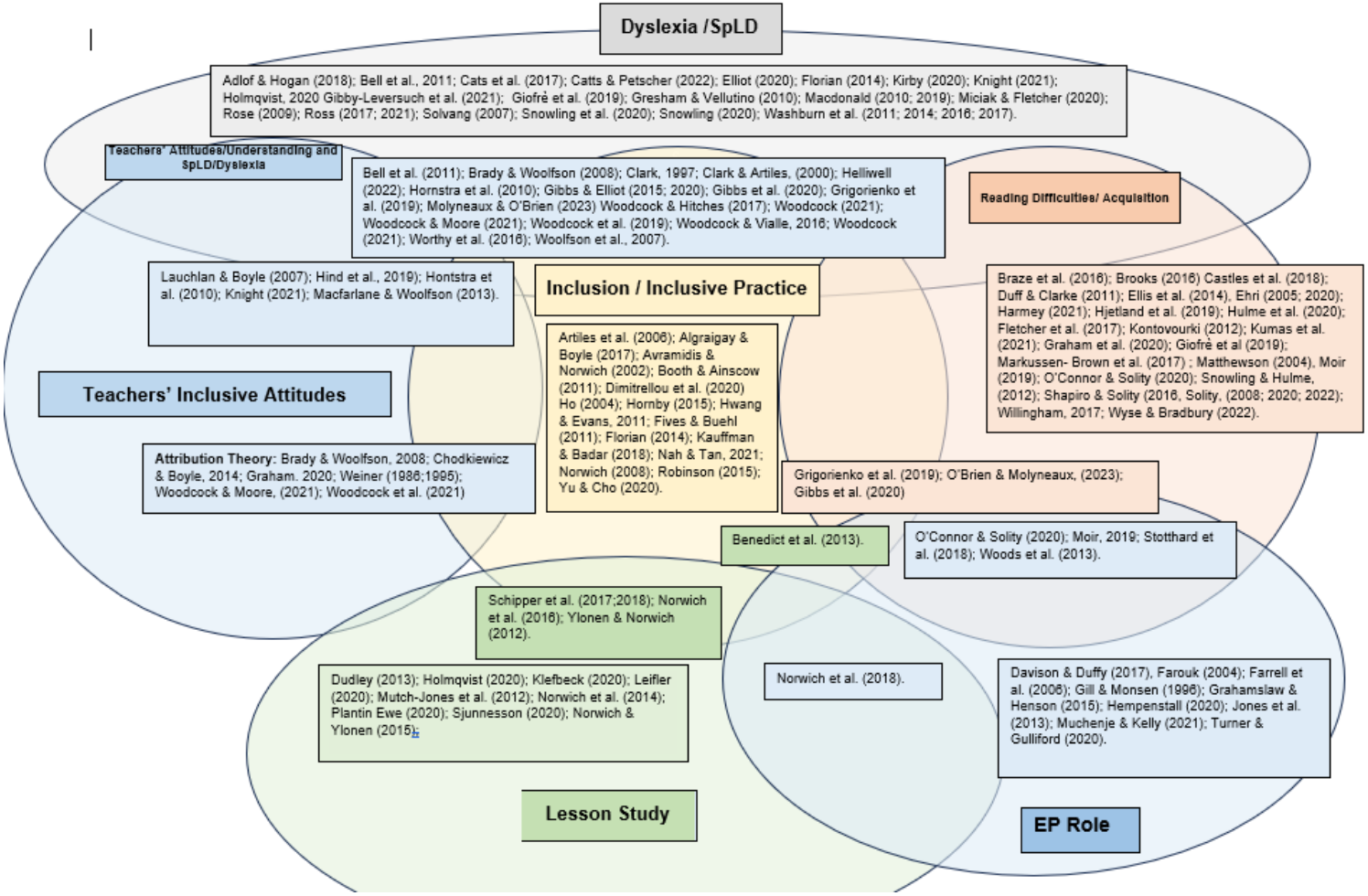
Appendix A: Literature Search Strategy



Appendix B: Sample of Reflexive Journal of Research (Braun & Clarke, 2022)
Excerpts from my diary are as follows.

Reflecting on choosing LS as a method – February 23

At this stage I am feeling apprehensive of the amount of work the LS represents; I had considered doing Circle of Adults, or Solution Circles as an intervention, but the benefit is that LS allows access to the classroom and is more likely to be impactful for teachers. I took this to supervision.

Reflecting on whether to use Case Studies or Action Research as a framework – Sep 23

A multiple-case study design was chosen following consideration of the alternatives. Initially, I compared two possible guiding frameworks for a LS intervention; these were Participatory Action Research, and case studies. In this study, participants directly influenced and guided the decision-making process of LS, alongside me as the researcher; this is a key principle of participatory action research. This framework would allow important considerations for reducing the power dynamics between researcher and participants throughout our interactions during LS. Following consideration and discussion with research supervisors, I decided (with the help of supervisors) that researcher led LS could not adequately match an action research approach. It was not anticipated that any major adjustments would be made to the process of LS throughout the process, within the boundaries of this project. Within this research, I planned to follow a structured LS approach as outlined in previous research and following templates created by Dudley (2013). Thus I chose to use case studies as a framework and discarded the idea of action research.

[...]

Reflecting on LS1 – 31 October 23

The LS meetings over the last few weeks have been full on with admin and preparation; it was positive to get to the stage of reviewing a lesson. The process of LS feels to me as a refined process of consultation. We have been able to get right down to key details and ask questions of each other to check assumptions and understanding. Participants led the consideration of children's needs, and I guided problem solving question.

Reflecting on thematic analysis – 2 November 23

In November 23, I began the process of immersing myself in the phase one data data; in reality this took place over a number of weeks as I spent 2 months completing LS, which I was working on simultaneously. Overall, I also had two thematic analyses to undertake through this period starting now in November (phase one) and will continue into feb/march for phase two. This meant data is gathered gradually; I am inputting this, reading/re-reading and added new pieces of data as they arrived. As the data set has grown over time, I am coming back to the data regularly and trying to get used to the idea of spending a lot of time on this stage of my research. Realistically I will complete thematic analysis (phase two) in around February so there is a long stage of getting to know the data really well. This reflection represents my acceptance of the amount of time I will spend looking at the qualitative data in my research.

Reflecting on latent coding – 3 November 23

I have been applying my understanding of the literature and for example, I can see when I am thinking about attribution theory when teachers are discussing pedagogy - e.g. discussing assistive technology for dyslexia may insinuate stable attributions. This represents my construction of what they are saying, in these instances.

Situating myself in relation to the data – 8 November 23

Collating all of the LS study records and data over time; I am trying to step back and focus on the meaning made by participants. For example, probe and ask about their perceptions of child difficulty prior to LS and thus, how this affects their engagement. I am taking a curious approach with participants and trying not to overly influence their thinking in meetings. It really helps me to have the LS templates to guide the process.

Familiarising myself with the data – 10 November 23

As with a few days ago, when coding I am today thinking about latent coding; some teacher provision shows certain attributions e.g. advocating 1:1 support which might denote low attribution of controllability over child outcomes and specific teacher led interventions, such as pre-teaching, which show high attributions of controllability.

Reflecting on review/planning meeting – 16th of November 23

This is now the midpoint of the second Lesson Study I have undertaken. We have got to a point where we are able to review the techniques that have been useful for children. I feel that the process has again been impactful in shifting focus onto preparation for a lesson that is not often done. It seemed to me that staff were thinking in depth about their perceptions, asking questions about children they had not previously considered. I have noticed some assumptions being challenged between teachers – e.g. that peer partnerships in lesson would lead to lower ability child copying. We felt this wasn't the case following observation. I have reflected on the role of the EP in lesson study to share psychological models that can support our understanding of different learning observations. For example, today I shared an explanation of self-determination theory to understand motivation in the reading lesson. I am aware of my influence as a researcher upon those participating in lesson study. For this reason I have been ensuring a 3 week "cool-off" period take place between the end of lesson study and interviews.

Reflecting on Lesson Study (observation). 17 November 23.

Today doing the Lesson Study I recognised that a focus on the two pupils may have led to added pressure on teacher to ask them questions – does this negatively affect the process? On a positive note I noticed my impact as an EP was to introduce the theory: self-determination theory and teachers used it as a model to reflect on their practice.

Reflecting on phase 3 of TA – 19 November 23.

Today I am developing phase 3 candidate themes for phase one analysis (Braun & Clarke, 2022). I am working on grouping my themes together to form initial meaning. I am looking for themes across the data set; so a theme may be different participants saying the same thing.

Reflecting on analysis – 4 January 24

I have been reflecting on some of the themes I am beginning to recognise in the data; as I focus on pedagogy in thematic data overall; I need to apply a deductive analysis to go

through again searching for specific types of pedagogy with one term; for example, direct instruction.

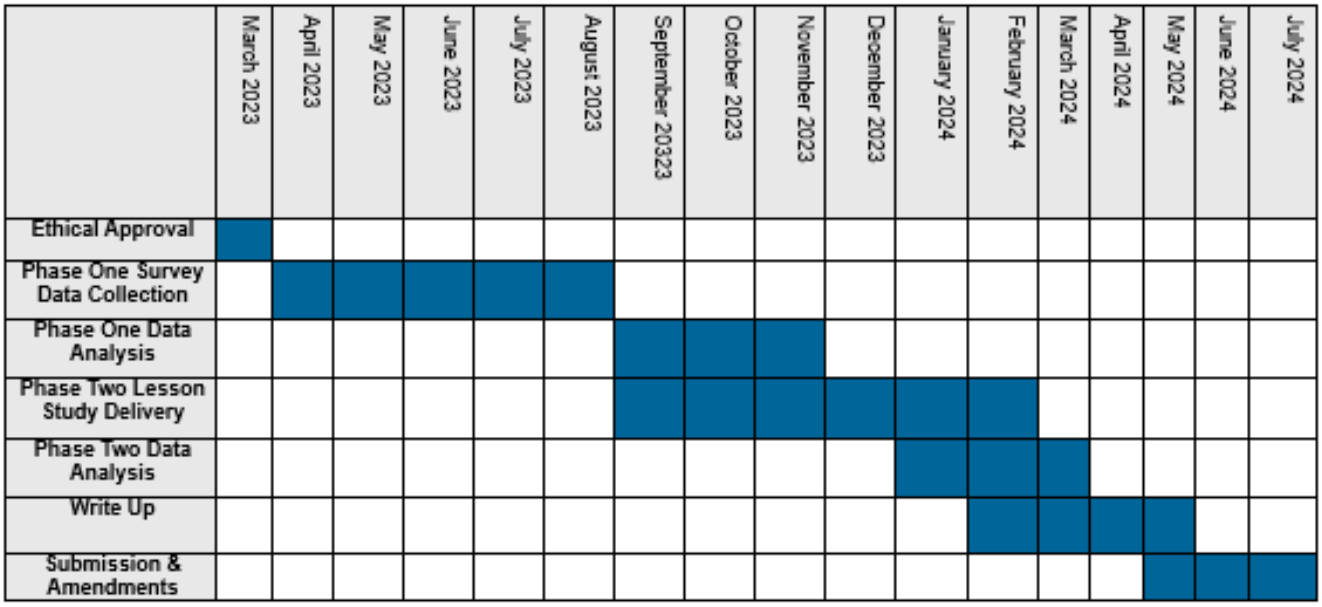
Reflecting on finishing LS - 28 February 24

Finishing LS today means I have completed five LSs in five different schools, which feels like a huge achievement and a big step from where I started, worrying if it was the right intervention. I have felt like each LS showed something unique, such as teachers reflecting more on their role in the classroom for example. I have developed a passion for LS throughout this research.

Reflecting on my understanding of findings – 23 March 24

I was pleased to see an overall shift from my perspective of within-child focus at the start of LS, towards a more environment/curriculum/teacher focus in time.

Appendix C: Final Timeline of Research



Appendix D. Phase One Survey

Teachers' Classroom Beliefs

Please indicate your opinion about the questions below by ticking any one of the seven responses in the columns, ranging from "Strongly Disagree" to " Strongly Agree" as each represents a degree on the continuum.

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree/nor Disagree	Somewhat Agree	Agree	Strongly Agree
1. I can help pupils to value their learning	○	○	○	○	○	○	○
2. I can collaborate with other professionals and staff (teaching assistants) to teach pupils with special educational needs in the classroom.	○	○	○	○	○	○	○
3. I can assist families in helping their children do well in school.	○	○	○	○	○	○	○
4. I can provide an alternate explanation for example, when students are confused.	○	○	○	○	○	○	○
5. I can implement alternative teaching strategies in my classroom.	○	○	○	○	○	○	○
6. I can use a variety of assessment strategies.	○	○	○	○	○	○	○
7. I can meet the needs of those who are struggling.	○	○	○	○	○	○	○
8. I can meet the needs of children with specific difficulties.	○	○	○	○	○	○	○

Teachers' Beliefs: Reading Instruction

Please indicate your opinion about the questions below by ticking any one of the seven responses in the columns, ranging from "Strongly Disagree" to " Strongly Agree" as each represents a degree on the continuum.

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree/nor Disagree	Somewhat Agree	Agree	Strongly Agree
1. I can meet the needs of struggling readers.	○	○	○	○	○	○	○
2. I can use a variety of informal and formal reading assessment strategies.	○	○	○	○	○	○	○
3. I can help my pupils figure out unknown words when they are reading.	○	○	○	○	○	○	○
4. I can help students to read fluently during oral reading.	○	○	○	○	○	○	○
5. I can support students to decode difficult words.	○	○	○	○	○	○	○
6. I can motivate students who show low interest in reading.	○	○	○	○	○	○	○
7. I can recommend a variety of quality children's literature to my pupils.	○	○	○	○	○	○	○
8. I can model effective reading strategies.	○	○	○	○	○	○	○

Vignettes.

You will now read four vignettes describing four fictional children. Please read the fictional scenario involving a KS2 pupil that you are teaching. Each of the following children is struggling with reading in some way. Please read the profile and decide to what extent you agree or disagree with the statements that follow the scenario. The statements will explore your thoughts/beliefs, and proposed provision.

→

Adam

Adam is a 9-year-old boy who has lots of friends and is enjoying school. Adam always participates in lessons and gives his best. Parents are worried that Adam is struggling to read age-appropriate texts. He is struggling to make progress in line with his peers. Adam struggles to read back what he has written as his handwriting can be messy. Adam remain about two years' below his peers in reading. However, Adam appears to be doing well in other subjects such as maths.

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree/nor Disagree	Somewhat Agree	Agree	Strongly Agree
1. Adam's reading performance is due to factors within himself such as his ability, effort etc, rather than due to external factors such as teaching, or the curriculum.	○	○	○	○	○	○	○
2. Adam's reading performance is likely to continue more or less the same.	○	○	○	○	○	○	○
3. Adam's reading performance is due to factors within his own control.	○	○	○	○	○	○	○

Implementing Support for Adam.

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
1. Adam requires support from a teaching assistant 1-1 or in small groups.	○	○	○	○	○	○	○
2. Direct phonics instruction will be an effective method of support for Adam.	○	○	○	○	○	○	○
3. Focusing on high frequency sight words with Adam will be effective.	○	○	○	○	○	○	○
4. Adam would benefit from highly motivational and varied literature.	○	○	○	○	○	○	○
5. Adam should follow texts that are phonetically accessible; Adam should read texts that include words that are phonically accessible.	○	○	○	○	○	○	○

Please add any other provision you would implement for Adam (if required).

Tom

Tom is a 9-year-old boy who has lots of friends and is enjoying school. Tom always participates in lessons and gives his best. Parents are worried that Tom is struggling to read age-appropriate texts. He is struggling to make progress in line with his peers. Tom struggles to read back what he has written as his handwriting can be messy. Tom's reading age is now two years' below his peers. Further to this, Tom is finding all other areas of the curriculum difficult, such as in maths.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree/nor disagree	Somewhat agree	Agree	Strongly agree
1. Tom's reading performance is due to factors within himself such as his ability, effort etc, rather than due to external factors such as teaching, or the curriculum.	○	○	○	○	○	○	○
2. Tom's reading performance is likely to continue more or less the same.	○	○	○	○	○	○	○
3. Tom's reading performance is due to factors within his own control.	○	○	○	○	○	○	○

→

Implementing support for Tom.

	Strongly disagree	Disagree	Somewhat Disagree	Neither Agree nor disagree	Somewhat Agree	Agree	Strongly Agree
1. Tom requires support from a teaching assistant 1-1 or in small groups.	○	○	○	○	○	○	○
2. Direct phonics instruction will be an effective method of support for Tom.	○	○	○	○	○	○	○
3. Focusing on high frequency sight words with Tom will be effective.	○	○	○	○	○	○	○
4. Tom would benefit from highly motivational and varied literature.	○	○	○	○	○	○	○
5. Tom should follow texts that are phonetically accessible; Tom should read texts that include words that are phonically accessible.	○	○	○	○	○	○	○

Please add any other provision you would implement for Tom (if required).

Kian

Kian is a 9-year-old boy who has lots of friends and is enjoying school. Kian always participates in lessons and gives his best. Kian has a diagnosis of dyslexia and receives SEN support. He finds reading very challenging and takes longer to complete these tasks than his peers. Kian struggles with his handwriting, and he struggles to read back his own work. Kian's reading age is now over two years below his chronological age. Despite Kian's difficulties, he is performing well in other subjects such as maths.

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree/nor Disagree	Somewhat Agree	Agree	Strongly Agree
1. Kian's reading performance is due to factors within himself such as his ability, effort etc, rather than due to external factors such as teaching, or the curriculum.	○	○	○	○	○	○	○
2. Kian's reading performance is likely to continue more or less the same.	○	○	○	○	○	○	○
3. Kians reading performance is due to factors within his own control.	○	○	○	○	○	○	○

Implementing support for Kian

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
1. Kian requires support from a teaching assistant 1-1 or in small groups.	○	○	○	○	○	○	○
2. Direct phonics instruction will be an effective method of support for Kian.	○	○	○	○	○	○	○
3. Focusing on high frequency sight words with Kian will be effective.	○	○	○	○	○	○	○
4. Kian would benefit from highly motivational and varied literature.	○	○	○	○	○	○	○
5. Kian should follow texts that are phonetically accessible; Kian should read texts that include words that are phonically accessible.	○	○	○	○	○	○	○

Please add any other provision you would implement for Kian (if required).

Charlie

Charlie is a 9-year-old boy who has lots of friends and is enjoying school. Charlie always participates in lessons and gives his best. Charlie has a diagnosis of dyslexia and receives SEN support. He finds reading very challenging and takes longer to complete these tasks than his peers. Charlie struggles with his handwriting, and he struggles to read back his own work. Charlie's reading age is now over two years below his chronological age. Further to these difficulties, Charlie is also struggling in other areas of the curriculum such as maths.

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree/nor Disagree	Somewhat Agree	Agree	Strongly Agree
1. Charlie's reading performance is due to factors within himself such as his ability, effort etc, rather than due to external factors such as teaching, or the curriculum.	○	○	○	○	○	○	○
2. Charlie's reading performance is likely to continue more or less the same.	○	○	○	○	○	○	○
3. Charlie's reading performance is due to factors within his own control.	○	○	○	○	○	○	○

Implementing support for Charlie

	Strongly disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
1. Charlie requires support from a teaching assistant 1-1 or in small groups.	○	○	○	○	○	○	○
2. Direct phonics instruction will be an effective method of support for Charlie.	○	○	○	○	○	○	○
3. Focusing on high frequency sight words with Charlie will be effective.	○	○	○	○	○	○	○
4. Charlie would benefit from highly motivational and varied literature.	○	○	○	○	○	○	○
5. Charlie should follow texts that are phonetically accessible; Charlie should read texts that include words that are phonically accessible.	○	○	○	○	○	○	○

Please add any other provision you would implement for Charlie (if required).

Thank you for participating in this survey. The time you have taken is appreciated. If you have time to send the survey link to colleagues then this would also help.

If you would like to hear about the results of this study then please email the researcher: Matt Coxon mc1004@exeter.ac.uk

Appendix E. Ethical Application Form

Ethics Application ID: 845784

Details:

Risk:	Medium
Title:	Teachers' approaches to supporting children with reading difficulties; Lesson Study as a method of collaborative support in mainstream primary schools.
Version	1.0
Applicant:	MATTHEW COXON
Submitter:	MATTHEW COXON
College:	School of Education
Student Project: **Supervisor:** **Module Code:**	Yes - Research degree (e.g. PhD & MD) Brahm Norwich
Date Application Submitted:	25 Jan 2023, 15:45
Project Duration:	21 Mar 2023 - 1 Jul 2024
Funder:	

Project Description:
Broader Topic: Exploring the role of the educational psychologist (EP) in facilitating support for teachers of children with reading difficulties or dyslexia. Using Lesson Study (LS) as a medium of collaborative professional support.

Focus of Phase One: An exploration of teachers' inclusive attitudes and pedagogical knowledge, when supporting children described as having reading difficulties or dyslexia.

Focus of Phase Two: Exploring how an EP facilitated LS can improve teachers' self-efficacy, knowledge of learners' needs, pedagogical knowledge, and inclusive attitudes towards children described as having reading difficulties or dyslexia.

Project Scope:

Does your research involve only secondary data?
No

Is your project exclusively based on published literature or library/archival materials which have beer
No

Does your project require external ethical review? ***Please give details of the external review route for***
No

Will your research involve human participants?
Yes

Will your research involve the use of animals?
No

Does this project involve the use of sensitive or restricted materials?
No

Does the project have the potential to cause environmental damage or harm?
No

Please summarise the background to the project.
The project aims to build on literature that explores teachers' inclusive attitudes as well as how labels such as 'dyslexia' can af
shows the efficacy of this intervention in supporting teachers to be precise and responsive in providing for pupils needs. I will ex
teachers' attitudes, self-efficacy and knowledge when supporting children with reading difficulties and with dyslexia. This will a
and utility of this label.

- The project will consist of two phases.

- In Phase 1, I will look at teachers' attitudes, self-efficacy, and approaches to supporting children with reading difficulties at a
inform pre-intervention understanding of these aforementioned constructs.
- I will use questionnaires to capture teachers' self-efficacy, attitudes and known pedagogies towards supporting children with
questions based on children
with reading difficulties with and without the description of dyslexia. This data will be analysed quantitatively through use of S
anonymised through
use of survey software.

- Phase 2 will consist of the Lesson Study intervention.
- Lesson Study involves the researcher observing up to three research lessons led by the teacher; following this interviews wi
case pupils who were the subject of the intervention. This will be used to capture attitudes and changes perceived through th
- An Educational Psychologist will plan and review up to three lessons (most likely 2 lessons) with the class teacher and other s
SENCos. There will be a plan and review meeting before and after each lesson.
- Teacher participants will also fill in questionnaires capturing their confidence and current approaches to pedagogy, similar to p
intervention delivery.
- Lesson Study data including the planning/review meetings and the interviews will be audio recorded for later transcription.
- Recording may also take place in lessons where possible.
- Lesson Study interviews will be analysed thematically in comparison with questionnaire data found in the first phase.

Please explain the aims of the project and what you intend to achieve
Overall I aim to explore how teachers' self-efficacy, attitudes, and pedagogy towards children with reading difficulties can be s

Through the use of questionnaires (Phase 1):

- I aim to capture an understanding of teachers' attitudes and approaches towards supporting children with reading difficulties
- I aim to explore the extent to which teachers' inclusive attitudes towards primary-aged children with 'dyslexia' differ to those w
- To measure the relationship between the psychological construct of self-efficacy and teachers' causal attributions towards ch
- To gain an understanding of the similarities and differences of teachers' pedagogical approaches between children with rea

Through the use of Lesson Study (Phase 2):

- To compare a qualitative understanding of teachers' inclusive attitudes, self-efficacy and pedagogical approaches within the
teachers' self-efficacy for these same concepts measured during phase one.
- To explore the extent to which any differential trends, are replicated in this phase two data.
- To compare the impact of LS upon teachers' self-efficacy, inclusive attitudes, knowledge in the cases of reading difficulties an
- To explore what participants learned about the teaching and learning needs of children with dyslexia and reading difficulties

Has the project been peer reviewed?
Yes

Please describe the peer review process and outcome
I have submitted two drafts of my research proposal to course tutors (Katie Howard and Margie Tunbridge) and followed steps
Margie Tunbridge & Brahm Norwich have given approval to proceed with the project based on the reviewed proposals.

Please explain why your project has not been peer-reviewed

Please describe how the research will be conducted in a way that ensures its quality and integrity
- I have read and will abide by the British Educational Research Association (BERA) Ethical Guidelines for Educational Rese
- I will develop a questionnaire that is based on the available research literature. For example, a published questionnaire of tea
to suit the focus of this study upon reading.
- I will develop vignettes describing children with reading difficulties that are adapted from similar research, using these me th
example.
- I will develop a questionnaire that captures teachers' pedagogy in these different scenarios from the available literature. Piloti
questionnaire based on the feedback of teachers. I will run a focus group to achieve this.
- The whole questionnaire will be piloted with a small group of primary teachers to ensure it is a valid measure of the constru c
- I will inform teachers that the purpose of the study is to ascertain their approach to supporting children with reading difficulties
their approach to children described as having 'dyslexia' and as having 'reading difficulties', so as not to undermine the purpo
within this section of the research, that surveying teachers' attitudes towards fictional children will reduce the possibility of guil

- I will practise a Lesson Study in the run up to the beginning of this phase of the research. There are opportunities for me to do training course as part of teaching introduced by Brahm Norwich. - I have considered potential harm to children by identifying them as having reading difficulties. It is felt that parents and child r reading and the proposal of an intensive intervention such as Lesson Study is hoped to have benefits to these children and a - I have considered at length the position of the educational psychologist in the Lesson Study phase. As a trainee EP myself, it research. However, I have decided to try and recruit one fully qualified EP to take this role during this section of the research t process. This part of the research design is subject to review, and I will make modifications to the design if an EP cannot be re - I will ensure that all participants are fully informed of the purpose and requirements of the research before they agree to p artic can be provided in person for Lesson Study and before the questionnaire in an online format. Examples of the information she
Are there any potential conflicts of interest, or what could be perceived by an outside observer as conflicts of interest?
Does the proposed research raise any ethical issues or risk of reputational damage that are not covered above? If yes

Research Methodology:

Please provide a summary of the research methodology using the table below. For each method, please describe how it be analysed.

Method	Description of Participants	Why method was selected	Data Ana
A questionnaire made of three parts. This questionnaire will be deployed on Qualtrics. - Section A, capturing the self-efficacy of teachers to act inclusively. - Section B capturing teachers' attitudes towards children described in vignettes, as having reading difficulties, or dyslexia. These vignettes will be developed with close reference to similar studies employing this methodology. - Section C capturing teachers' proposed pedagogy in response to children described in vignettes. The aim of this section will be to capture the level of responsibility that teachers accord to their own practice and the degree to which they can make within classroom modifications.	Primary school teachers. Teachers that can be be included in this part of the study include primary teachers from training up to any level of experience including leaders.	To access a wide sample of teachers and collect a large number of responses. To increase the chance of accessing implicit attitudes (avoiding socially desirable answers). To decrease the chance of teachers feeling guilty, as they will be answering questions based on fictional children. This reduces the possibility of causing any harm.	Descriptiv SPSS.
Lesson Study: Lesson Study is an intervention aimed at assessing and responding to child need. An Educational Psychologist will work with a Lesson Study group that includes at least, a teacher, a teaching assistant, and a SENCo. The group may also include a 'more knowledgeable other' such as a literacy support assistant or specialist teacher. This group will plan and review up to two lessons where a case pupil or case pupils, is/are the main focus of discussions. Understanding and meeting the particular need of this child or children is the principal aim of the Lesson Study process. Methods for gathering data during Lesson Study include the following: - A pre and post intervention survey capturing knowledge, attitudes and self-efficacy of teachers. This pre and post survey will be completed in paper form. - Post intervention interview with teachers of up to one hour focussing on what they learned about teaching and learning needs of the child. - Audio recordings of planning/review meetings and any recording of lessons will be analysed within the data set.	Adult participants: Primary school teachers Primary school SENCos Literacy support assistants/specialist teachers. Primary school teaching assistants	Lesson Study is an intervention aimed at assessing and responding to child need in a dynamic and accurate way. It is considered an assessment method that is most representative of what is happening in the classroom. As opposed to standardised and dynamic assessment methods used typically be educational psychologists, this method allows the psychologist access to the classroom environment. Follow up interviews will allow a comprehensive and in-depth analysis of teachers' and child experiences of the intervention. Surveys will also allow a measurement of change.	Thematic audio rec Thematic Descriptiv
Lesson Study: - Following the Lesson Study Intervention: a post intervention interview with the case child will take place. This	Child participants: Children will participate in this study as 'the case pupil(s)', for the Lesson Study element of the	Lesson Study is an intervention aimed at assessing and responding to child need in a dynamic and accurate way. It is considered an assessment	Thematic

child will be asked about their perceptions of changes to their learning, and engagement with the lesson. - Audio recordings of planning/review meetings and any recording of lessons will be analysed within the data set. - It is hoped that this method will be effective at responding to child need and improving their learning experience in the class.	study. They will take part in their lessons as normal but may be aware of people in the room observing the lesson. Child participants will be primary aged children of at least 7 years old to account for potential dyslexia diagnoses beginning at this age. Children will complete a post intervention interview after Lesson Study has been carried out.	method that is most representative of what is happening in the classroom. Follow up interviews will allow a comprehensive and in-depth analysis of child experiences of the intervention.	

Where will the project be undertaken?
I will seek to gain survey data from a UK wide sample of primary school teachers.

Lesson Study participants will be drawn from the [redacted] Local Authority schools. This is due to my current placement in this lo
to participate in this research and a maximum of four.

Please describe details of any permissions required to use the location(s) specified
Part 1 will be by online questionnaire, so there is no location. The survey will be deployed using Qualtrics.

For Lesson Study participants I will in the first instance approach primary school head teachers to gain approval of working wit
before I can work in these schools and with teachers in question. The location therefore is schools and leadership permission s

Will the research involve international travel and/or travel to a potentially risky environment?
No

Please describe the risk to researchers

Please provide details of the actions to be taken to reduce risks to researchers and procedures to deal with potential pr

Will the research involve the use of hazardous or controlled substances?
No

Please describe the risk to researchers

Please provide details of the actions to be taken to reduce risks to researchers and procedures to deal with potential pr

Does the research have potential to cause distress or discomfort to any member of the research team?
No

Please describe the risk to researchers

Please provide details of the actions to be taken to reduce risks to researchers and procedures to deal with potential pr

Does the research involve lone working?
Yes

Please describe the risk to researchers
Lone working will take place in schools. I will be required to travel to these schools from my own address.

Beyond travel, I do not foresee any risk to the researcher. I will be working in schools where other adults (non-University staff) w
other adults throughout the process.

I will complete a risk-assessment for each school I work in. Example uploaded to documents.

Interviews with children will take place in a pre-agreed space that is comfortable for children and allows them to easily exit if th
close by to ensure standard safeguarding procedures are followed.

Please provide details of the actions to be taken to reduce risks to researchers and procedures to deal with potential pr
Lessons will involve at least one other adult to be present. The only time I may be alone with a child will be during interviews - fo
familiar and comfortable to the child; space will need to allow them to easily exit if they wish and at any point - school staff will b
procedures are followed.

Interviews with children will take place in a pre-agreed space that is comfortable for children and allows them to easily exit if th
close by to ensure standard safeguarding procedures are followed.

Does the research involve visiting participants in their home or other non-public space?
No

Please describe the risk to researchers
Please provide details of the actions to be taken to reduce risks to researchers and procedures to deal
Please describe the training which will provided to researchers in relation to the risks identified above No training is required.
Does the research involve the use of genetically modified organisms? No
Please describe the use of GMOs in the research

Human Participants:

Identifying participants I aim to firstly recruit teachers for the survey stage of the research: Phase 1 participants: - Up to 100 primary school teachers of any age, any geographical location within the UK, any experience level or educational background. Teachers will be anonymised through using Qualtrics surveys. Qualtrics will not collect name, school, address/email address or any identifying information. However, data such as age, level of experience and educational background will be collected. Once a survey is sent it will form part of a data set, but individual responses will be identifiable. Phase 2 participants: - At least two groups of at least 1 teacher, 1 teaching assistant, one SENCo will be recruited for the Lesson Study phase. The teacher and SENCo will be required to identify at least one child in their class who they identify as having reading difficulties or identified or suspected of having dyslexia. I will then need to acquire child assent and parental consent to work with these children. If this is not attained, I will need to recruit a new Lesson Study group. Children will be required to be of primary age and school years' 3-6. - I will also aim to recruit one of, an educational psychologist, a trainee educational psychologist, or a literacy specialist to support planning the Lesson Study phase with teachers. - All phase 2 participants are most likely to be recruited from the [redacted] Local Authority area due my current educational psychology training placement in this locality. - Teachers will be required to be primary school teachers who have at least one case pupil meeting the criteria. They can be of any age or experience level.
Please list any inclusion criteria to be used Teachers: - Primary school teacher. - Any experience, training, age. - For surveys: any geographical location. - For Lesson Study: [redacted] initially. - For Lesson Study: teachers must be willing to participate for up to three hours of planning with an educational psychologist. Children: - Primary age. Years 3-6. - Parental consent gained. - Assent: willing to participate and aware of their difficulties.
Please list any exclusion criteria to be used Teachers: - For surveys: secondary teachers responding will be excluded from the data set. Children: - If it is felt that the intervention is likely to cause any distress by the presence of an educational psychologist, the lesson study group will not be established around this child.
Please specify if you are using any of the protected characteristics as defined in the Equality Act 2010 as an exclusion criterion None.
Please specify how potential participants, records or samples will be identified and by whom

For phase 1 (questionnaires) the participants will self-identify, responding to the survey if they wish to participate and meet the criteria of being a primary school teacher.

For phase 2 (Lesson Study), I will work with SENCos in [redacted] primary schools firstly to identify whether teachers know of children who would benefit from the Lesson Study process. Secondly, teachers will then be asked if they are interested in participating alongside the SENCo and teaching assistants. Lesson Study groups will be brought together following this process.

Alternatively, teachers who have completed phase 1 or heard about the study (for example on social media) may also self-identify as interested in the study and communicate with the researcher and their own school to see if a Lesson Study group can be formed.

Does your research involve participants who are in a potentially vulnerable situation?
Yes

Please describe why the participants may be in a potentially vulnerable situation
If children are identified by their teacher to participate in the research, they may be put in a vulnerable position by drawing attention to the fact that others believe they are experiencing difficulties with reading. This will need to be carefully managed and if a child is thought to be distressed by inclusion in the intervention, then it will be stopped. I will provide child friendly information sheets for children to decide if they are happy to assent. I will give them a timeframe of at least a week in which for them to decide to assent. They may also withdraw this assent at any point during the intervention.

Further, the research lessons will avoid focussing exclusively on the one child who is the focus of the Lesson Study, and wider focus will also be on the learning environment and teacher pedagogy. This can be made clear to all children in the class.

Please describe how the participants will be protected
Efforts will be made to ensure the class at the centre of the Lesson Study are not informed who the case child is.

The child will be informed of their ability to withdraw from the study.

If children are not aware they are struggling with reading, then they will not be included in the study.

Approaching participants
(Phase 1): For the survey section of the research participants will be approached in a number of different ways, in order to gain a large and broad sample.
- Through distributing the survey on social media: eg. twitter.
- Through approaching gatekeepers at primary schools, first of all in [redacted]. EG. Approaching a head teacher and/or SENCo and asking for the survey to be distributed to teaching staff.
- Through Inward snowballing and encouraging teachers to distribute to colleagues. Teachers may agree to distribute to colleagues on behalf of the researcher. This is likely to take place within one school for example.
- Through advertising the survey through contacts at universities to gain access to preservice teachers.
- Approaching my own network of primary school teachers known from my own time in the profession.

(Phase 2): For the Lesson Study section of the research:
- Through approaching gatekeepers at primary schools, first of all in [redacted]. EG. Approaching a head teacher and/or SENCo and asking whether they have a child who would benefit from the intervention and whether they are interested and happy to take part in this research. They will be made aware of the time requirements eg. at least 2-3 hours of planning + an interview. I will contact these schools through my capacity as a trainee educational psychologist in [redacted]. The LS intervention will represent a free access to educational psychology services for interested schools and will not detract from or reduce any of their current traded time.
- Participants who take part in the survey will also be made aware of the second phase of the study and directed to the researcher if they are interested in participating further.
- If teachers/SENCos are happy to participate/approach the research, they will be asked to gain parental consent and child assent for the intervention. I will follow this up with my own consent forms.

Will the researcher be in a position of influence or authority over the participants that could give rise to a perceived pressure to participate?

If applicable, describe any existing relationship between the investigator(s) and participant(s) (e.g. teacher-student or employer-employee). Please explain how this will be managed to reduce the risk to participants
There is a likelihood that I will have a relationship with some of the schools approached for participation through my professional capacity of trainee educational psychologist already working with these schools. The only risk I foresee is that schools may see this as reducing their traded time. I will reassure them that this is a form of 'pro-bono' intervention and will be in addition to any educational psychology time they already receive.

I will not seek to work with any children that I have already worked with through my capacity as a trainee educational psychologist as this may make children feel obliged to participate.

Recruiting participants
(Phase 1). At the survey stage:

I will inform participants that they are being asked to fill in a questionnaire about their attitudes towards children with 'reading difficulties' and 'dyslexia'. I will inform them that they are asked to fill in a survey relating to their teaching confidence and to outline their proposed pedagogical response to these children. I will use an information sheet and a consent form at this point. These will be attached to the Qualtrics survey. I will also use an information sheet to attach to any correspondence I may have with potential participants.

(Phase 2). At the lesson study stage:

I will use information sheets including the purpose of this part of the study and importantly the time requirements for teachers if they participate.
I will use paper copies of consent forms that can easily be distributed to teachers and parents of case children.
I will also develop a child friendly information sheet to introduce the intervention and what they may speak to myself about during the post intervention interview.

Please describe how long you will allow participants to decide whether to take part
(Phase 1): For the survey sections participants will be allowed the full duration of the survey open window to decide whether or not to take part. At the moment it is anticipated this will be around 3 months (March 22-June 22).

(Phase 2): For the Lesson Study section of the research I will approach schools such through gatekeepers. Gatekeepers will be head teachers or senior multi academy trust leaders.

I will give gatekeepers up to one week to decide whether they would like to participate. Individual class teachers will require one additional week to decide. If they decide they would like to participate then the final decision will lie with the case child and their parents. For this I will provide another week for them to decide.

Will informed consent be obtained from the research participants?
Please describe the process that will be used to obtain and record valid consent. Remember to upload copies of any consent forms to the application. If informed consent is not to be obtained, explain why.
Yes

(Phase 1): For the survey section.

- Participants will be able to read an information page displayed at the beginning of the Qualtrics form and decide whether they are will to provide consent before they complete the survey. They will thus provide informed consent virtually before they are presented with any questions relating to them or their attitudes. By exiting the the form before completion, participants will be able to withdraw their consent for participation.

(Phase 2): For Lesson Study:

- Participants will be provided with clear information sheets regarding what is involved, the purpose and the time requirements.
- Participants who will be sent information sheets and asked to provide informed consent include all Lesson Study participants, including teacher, SENCo, teaching assistant and educational psychologist.
- I will provide information and consent forms for the parents of any children potentially involved. These will be returned to the school. Child and parent information sheets are written and presented in an accessible way.
- I will ensure will provide child friendly information sheets and will discuss these with the child in advance of the intervention to ensure they have assented after understanding what is involved.

How will feedback be provided to participants either during or at the end of the project?
Information of where to find the research at the University of Exeter will be provided to all participants. This will be provided at the end of the Qualtrics survey for phase 1; and in person with participants following phase 2.

Member checking will be performed to ensure participants agree with analysis and interpretation of their views. This will be performed for the Lesson Study section.

I will provide a separate link for all survey participants to provide their email addresses if they are

interested in receiving results from the survey and Lesson Study. If they are willing to provide their email address then results can be sent out following analysis. Results will be sent out to participants in an easy to access poster format. I will also share links to a virtual presentation of results following analysis of phase 1 and 2 data, or completion of the study.

Email addresses can thus be kept entirely separate from the data set.

Withdrawal of participation
Please describe the arrangements that will be made for participants to withdraw their participation and data (either in part or in full) both during and after the research project
(Phase 1): Participants will not be able to withdraw their consent once they have completed the survey due to the immediate anonymisation of the results.
(Phase 2): Lesson Study participants will be able to withdraw their participation or consent at any point. If any member of the Lesson Study team wishes to withdraw, or the child wishes to withdraw, the process will cease. After the Lesson Study data collection has concluded participants of this stage will be able to withdraw their consent up until their data has been included in the analysis. Participants will be informed of this stipulation on the consent form.

Please explain any consequences for the participant of withdrawing from the study and indicate what will be done with the participant's data if they withdraw
Where participants withdraw at a stage prior to submission of the project, their data will be removed from the data set and destroyed. Participants are informed in the information sheets that they may withdraw until the research is submitted for assessment.

Please describe whether and how participants will be able to withdraw their data after the results have been published
Participants data will be anonymised following completion of analysis by erasing the key document that links participants' names to their pseudonym. Any identifiable information can be withdrawn up until this point. It will not be used in any further outputs.

Will the research involve actively deceiving participants? ***Please describe the nature of the deception and how any associated risks will be mitigated.***
No

Does the project involve study or participation in social media activity? ***How will social media sites be used?***
Yes

I will use Twitter to reach teacher participants for phase 1.

I will create a research profile that includes my name, contact details, my academic status as doctoral student, and University name aswel as the course title. I will disseminate links to the Qualtrics survey from this research profile. I will not use any other forms of social media beyond Twitter, where there is a significant professional teaching community.

Will the research involve discussion or collection of information on potentially sensitive, embarrassing, or distressing topics? ***Please provide more information about the sensitive topics involved.***
No

Does the research involve investigation or possible disclosure of illegal activities or behaviours? ***Please describe the potential illegal activities or behaviours involved. Describe the potential nature and risk of disclosure, how participants will be informed of the potential disclosure and how the risks will be mitigated.***
No

Is it possible that this research will lead to awareness or the disclosure of actual or intended harm to a participant or other individual? ***Please describe the procedures to be followed by members of the research team in the event of disclosure, including any training to be provided for researchers before the research starts and information to be provided to participants***
No

Is there a risk of physical harm, psychological harm or discomfort for participants, or prolonged or repetitive testing which may be a burden to participants?
Yes

Please describe each potential risk and the likelihood of the risk occurring
It is possible that if children are not already aware of their difficulties with reading, that being made aware of this could cause some distress.
I will ensure that children being recruited are already aware of needs/diagnosis etc. I will discourage teachers from beginning the Lesson Study process if the child they are concerned for is unaware of their difficulties.
It is also considered that the benefits of this study outweigh the possibility of harm that could be caused by identifying difficulties. This can be weighed up with parents and teachers in advance of the Lesson Study beginning.

Please describe how each potential risk will be monitored and mitigated If children do for whatever reason become distressed by knowledge of additional difficulties they may have during the Lesson Study process process, then firstly the research will be ceased within that class, so as not to cause any further harm. With parental consent, I will then work individually with children to explore these difficulties and identify any changes to teaching that can be made to support them. I will help parents by signposting any additional support that they can access. I will offer this service to the school and child similarly to my capacity as a trainee educational psychologist within the Local Authority, but this will be additional to any time they are already receiving.
Does the research involve invasive or potentially intrusive procedures? ***This may include blood sampling, tissue biopsy, imaging, EEG, radiation, MRI, or fMRI*** No

Will your research involve collecting, storing or processing human tissue samples? No
What types of human tissue samples are involved?
Please describe how each type of sample will be a) Collected b) Processed and c) Stored
Please describe what will happen to the samples at the end of the study, including how they will be destroyed, transferred or retained
Please advise the latest sample storage end-date.
If the samples are to be retained for use in your future research or by other researchers, please describe the process that will be followed to store the samples and to provide access to them at a later date
Are you using any medical device in the UK that is CE/UKCA marked but is being used outside its product limitation? Or are you using any non-CE/non-UKCA marked product(s)? if yes, please provide additional information.
Does your research require you to have a DBS check? Yes
Will the participants receive financial compensation or other rewards? No
Please describe the financial compensation or other rewards
Will undue incentives for participants be offered? Incentives should be proportionate to the burden imposed and justified by the benefits. Please provide additional information.
Please describe how you will deal with compensation if participants choose to withdraw

Animals:

Security:

Describe the use of sensitive or restricted materials
Please describe any associated risks and how they will be mitigated

Environmental Impact:

Describe the potential environmental impact of the research or its results
Please describe how any potential impacts will be monitored and minimised

Data Management:

What data will be collected and used during the project?
Survey data will be anonymised immediately.

Personal data for Lesson Study part including names of teachers, children they are supporting, school name and location.

Process data will be collected from Lesson Study meetings, this will show how Lesson Study was conducted.

Audio recordings and will be made of interviews following Lesson Study.

Is there an access control process or a gatekeeper for access to data e.g secondary data? *Please describe the access control or gatekeeper processes that you will need to follow.*
Yes

I will approach headteachers of schools as gatekeepers to the research process. Their consent for the intervention to take place in their schools will be sought to approach SENCos and teachers in the first instance.

Where and how will data be stored during the project?
Data will be stored on my University protected SharePoint Account for the duration of the project.
A university SharePoint account is already available to me through my role as a trainee educational psychologist at the University.
I will not store any project data on my personal laptop.
My academic supervisors will have access to data throughout the process via SharePoint to ensure ongoing supervision throughout the project.
At the end of the project it will be archived as per University procedures on the repository as instructed at: https://ore.exeter.ac.uk/repository/bitstream/handle/10871/26168/Revised%20Open%20Research%20Policy%20FINAL_full.pdf?sequence=3&isAllowed=y
The final thesis will be stored on ORE following completion of the project.

How long will the data be retained after the project is complete?
1 Jul 2024

Will any of the data be used in future research and/or made available to other research projects?
No.

How will data be destroyed when it is no longer needed?
Data stored on the University SharePoint account can be destroyed using the computers recycle bin function. This will account for the majority of data.
Hard copy data such as consent forms can be destroyed using a shredder or the confidential waste bins at the University.

How will access to the data be controlled?
Data will be kept on my University SharePoint account that is password protected. No other party will require access to it until it is deposited on the ORE.

Will your project involve processing confidential data belonging to organisations? *Please explain the strategy you will deploy if the organisation wishes to remain anonymous.*
No

Will your project involve collecting new personal data from participants? ***Please describe what types of data will be collected, and for each type, describe how it will be collected.***
Yes

For the Lesson Study phase:

- Names will be anonymised using a code system.
- School worked for or attended will be anonymised using a code system.
- Observations will be taken of lessons involving teachers and children but it is not anticipated that this will involve the collection of new personal data.

Does the research involve photographs, videos, or audio recordings of research participants? ***Please describe and explain how you will ensure that you are only capturing data from research participants who have given consent to participate in the research project.***
Yes

Audio recording using recording device of interviews and planning/review meeting during and following the Lesson Study phase.

There may be audio or video recording of lessons that are delivered as part of the Lesson Study intervention.

All data will be be uploaded to the University ORE as per University guidance. This data will be removed from my University SharePoint, using the computer recycle bin function after uploading to ORE.

Will participant data be treated as confidential? ***Please describe the procedures to be used to ensure confidentiality of data both during the conduct of the research and in the release of its findings.***
Yes

All data gathered will be anonymised during the data collection process.
This will be automatic during the survey section.
After the LS process all data will be anonymised using a coding system.
All data gained from children will be treated as confidential unless a child raises a safeguarding concern. In this case children will be informed that this cannot be kept confidential. Due to the nature of this research looking at reading, it is not anticipated that safeguarding concerns are likely to be raised but this procedure has been considered.

Will participant data be anonymous? ***Please describe the procedures to be used to ensure anonymity of participants both during the conduct of the research and in the release of its findings. If you propose to anonymise data, please explain the strategy you will use here.***
Yes

I will use a code system to anonymise interview responses. I will keep a link to the participants on my SharePoint account for the duration of the project or until a participant withdraws consent.
Following completion of analysis, any link back to participants will be deleted and participants will therefore not be re-identifiable.

Will participant data be pseudonymised or link-anonymised? ***Please explain the arrangements for managing the process including, but not limited to, the length of time that the link will be retained, who will have access to the linking information and how the linking information will be stored.***
Yes

The data will be retained for the duration of the project and until deposited on the ORE. Following this, data will be removed from my University SharePoint account and the account will be closed following or shortly after the end of this project.

Following completion of analysis, any link back to participants will be deleted and participants will therefore not be re-identifiable.

Data will be anonymised using pseudonyms or code systems and a link document kept separately on my University SharePoint account for the purpose of the research.

Appendix F. Ethical Approval Letter

University of Exeter

Research Ethics Committee Review Outcome Decision

Dear MATTHEW COXON

Ethics Application ID: 845784

Title: Teachers' approaches to supporting children with reading difficulties; Lesson Study as a method of collaborative support in mainstream primary schools.
(Version: 1.0)

Proposed Project Duration: 21 Mar 2023 - 1 Jul 2024

Your research study ethics application submitted above on 25 Jan 2023, 15:45 has been reviewed by the FHASS Social Sciences and International Studies Ethics Committee.

Outcome decision by Research Ethics committee: **Favourable Opinion**

Subject to the following conditions *(if applicable)*:

Ethics Committee Comment:
Dear Matthew

Your study is now approved and from your start date, you are free to commence research. Please be aware that any significant changes to the study should be reviewed by proposing an amendment for review and receiving a favourable opinion prior to implementation.

If during the research process you encounter issues or events that significantly change the level of anticipated risks of the research, you should contact the Research Ethics Committee for advice. Please also remain aware of any UK government guidance or advice that might affect your research.

You can download a copy of your decision letter (including the reference number) from within Worktribe. Click the link below below and scroll down to the 'Top Tip's section.
https://universityofexeteruk.sharepoint.com/sites/SSISResearchEthicsCommittee/SitePages/Guide-to-using-Worktribe.aspx

Feel free to get in touch if you have any queries. Best wishes for a successful study.
Regards
Mark Slater
Research Ethics Officer

PS: Please *do not* mark your application complete until you actually complete your research project.

Decision Date: 21 Mar 2023, 14:50*

Research Ethics Committee Approval End Date: 1 Jul 2024

*You can only start your research once you have received a Favourable Opinion outcome decision. *The start date of your research will be no sooner than the Ethics Committee Approval decision date above.*

Please be aware that any significant changes to the study should be reviewed by proposing an amendment for review and receiving a favourable opinion prior to implementation.

If during the research process you encounter issues or events that significantly change the level of anticipated risks of the research, you should contact the Research Ethics Committee for advice. Please also remain aware of any UK government guidance or advice that might affect your research.

Regards,
FHASS Social Sciences and International Studies Ethics Committee

Appendix G: Phase One Participant Landing Page for Information and Consent

General Information

Thank you for participating in this questionnaire/online survey. Please read through the information below before agreeing to participate (if you wish to) by clicking the 'I agree to take part' option below.
The purpose of this stage of the research project is to understand how teachers feel about supporting reading difficulties and their knowledge of support pedagogies. Later, this data will be analysed against the potential impact of Lesson Study upon these concepts.
You may ask any questions before deciding to take part by contacting the researcher (details below).
The Principal Researcher is Matt Coxon who is attached to the Education Department at the University of Exeter. This project is being completed under the supervision of Brahm Norwich and Margie Tunbridge.
Taking part in this study will involve engaging with an online survey in three parts. It is foreseen that this survey will take between 20 and 30 minutes of your time.

Do I have to take part?

No. Your participation is entirely voluntary. If you do decide to take part, you may withdraw at any point for any reason before submitting your answers by pressing the 'Exit' button/ closing the browser.

How will my data be used?

We will not collect any data that could directly identify you.
Your IP address will not be stored. We will take all reasonable measures to ensure that data remain confidential.
Your data will be secured on the researcher's University SharePoint Account for the duration of the research project. It may be used if the research is published. Data will be kept securely on the University archive for up to five years

Who will have access to my data?

Qualtrics is the data controller with respect to your personal data and, as such, will determine how your personal data is used. Please see their privacy notice here https://www.qualtrics.com/privacy-statement/. Qualtrics will share only de-identified data with the University of Exeter, for the purposes of research.
We would also like your permission to use the data for any future publication of this research. Data will be de-identified before it is made public. This survey/ questionnaire/ project will be written up for a DEdPsych Educational Child and Community Psychology degree.

Who has reviewed this study?

This project has been granted a favourable ethics review by the University of Exeter Faculty of Humanities and Social Sciences (FHASS) Research Ethics Committee (REC): 845784.

Who do I contact if I have a concern or I wish to complain?
If you have a concern about any aspect of this study, please speak to Matthew Coxon – mc1004@exeter.ac.uk, or his supervisors Brahm Norwich b.norwich@exeter.ac.uk, Margie Tunbridge m.tunbridge@exeter.ac.uk, and we will do our best to answer your query.
I will acknowledge your concern within 10 working days and give you an indication of how it will be dealt with. If you remain unhappy or wish to make a formal complaint, please contact the Chairs of the FHASS REC who will seek to resolve the matter as soon as possible by emailing fhass-ethics@exeter.ac.uk, or alternatively the University of Exeter Research Ethics & Governance Office cgr-reg@exeter.ac.uk

Please note that you may only participate in this survey if you are 18 years of age or over.

I certify that I am 18 or over.

If you have read the information above and agree to participate with the understanding that the data you submit will be processed accordingly, please check the relevant box below to get started.

Yes, I agree to take part

Are you a primary school teacher?

Yes

No

What is your gender?

Male

Female

Other

→

Appendix H. Phase Two Teacher Information Sheet

University of Exeter

Lesson Study

Trainee EP name: Matt Coxon

- A trial **Lesson Study** intervention is being offered to support classroom primary teachers to help children with **reading difficulties and/or dyslexia** to make improved progress. This is part of a trial project that forms the basis of a doctoral thesis.
- LSfA (Lesson Study for Assessment) is a systematic approach to the formative assessment of primary or secondary school pupils about whose learning and progress teachers may have concerns. Lesson Study procedures involve the observational assessment of learning and a pupil interview about their specific learning in response to planned teaching in a classroom context. It has been adapted to act as a 'response to teaching' or a dynamic approach to assessment.
- Lesson Study was originally developed in Japan over a century ago, as a collaborative form of professional development for small teams of teachers involving an elaborated version of a study-plan-do-review model of practice. It has come to prominence over the last 20 years internationally in different variations including the UK, other European countries and the USA. Part of the LS model may involve the contribution of a 'knowledgeable other'. This is where the educational psychologist/or a consultant practitioner can join the LS team and become involved in joint work that can be seen as an elaboration of a broad consultative approach. This person may join for part of the process or all of it.

What is distinctive about LS?

1. **The study of lesson (pedagogic focus):** for and by teachers with support of an EP.
2. **Focus on learners.**
3. **Research oriented** (how to improve learning): Research lesson as a specially planned lesson.
4. **Collaborative**: team involved at each stage (lesson observation by team); it enables inter-disciplinary collaboration and provides support and knowledge.
5. **Reflective practitioner model**: use of craft and research informed knowledge.
6. **Dynamic,** and real world specific.

How Lesson Study can be used for assessment purposes

- The collaborative model of planning, doing, and reviewing has its focus on the learning of specific pupils (case pupils)

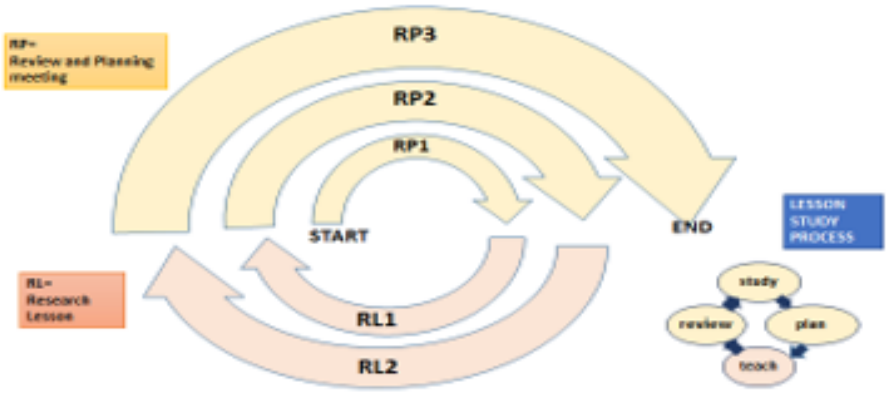
Version Number 3 Date: 11.09.23

- Cyclical process: makes it possible to assess learner responses to changes in teaching over 2-3 research lessons
- Assessing response to teaching enables interactive analysis of learning difficulties. pupil's strengths and difficulties with contextual supports and barriers
- Integrates different knowledge perspectives through collaboration (practice and theoretical/research)
- Pupil's perspective are also used to contribute to review and planning.

For more information about Lesson Study for Assessment see this website:

http://www.lessonstudysend.co.uk

A typical Lesson Study cycle:



Lesson Study team:

Class teacher, SENCo/(or another class teacher / TA; and trainee EP

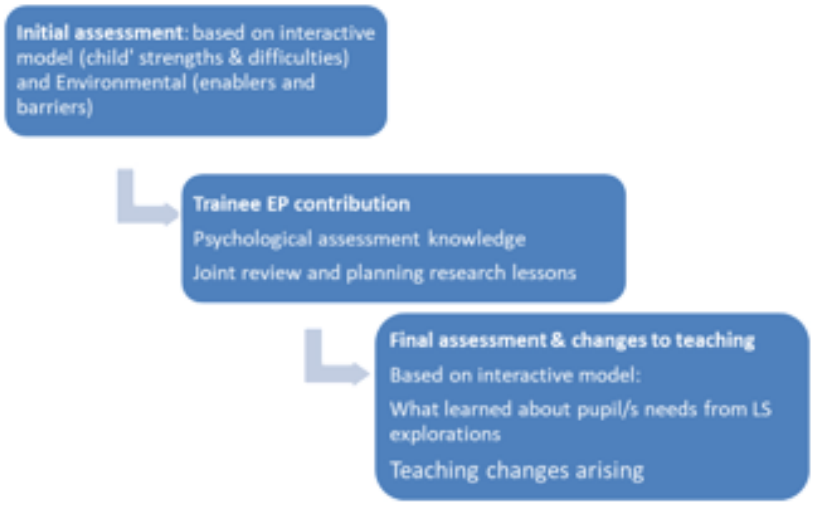
pupils:

1-2 pupils about whom teacher and SENCo has concerns

Review & planning meetings (RP)

Research lessons (RL): teaching & assessment takes place

How will change take place?



What is involved in doing LSfA?

The time required for the process of a 2 Research Lesson LSfA is covered in this table. 3 Research lessons can also be used.

It is important to note that delivering the lessons is part of the teacher's normal timetable and is **not** an addition to their weekly lessons.

3 Review & Planni meetings	2 research Lesson	Evaluative Interview (for research)	Total
Up to 3 hours	2 hours	1 hour	6 hours
	Key points: LSfA can be spread out over 2-4 weeks		

How will my information be kept confidential?

- Your data will be secured on the researcher's University SharePoint Account for the duration of the Lesson Study. It may be used to write up into a final project evaluating the efficacy of the intervention. You can choose to provide consent for this on a separate document.
- The University of Exeter processes personal data for the purposes of carrying out research in the public interest. Further information may be obtained from the University's Data Protection Officer by emailing informationgovernance@exeter.ac.uk. or at http://www.exeter.ac.uk/ig/

Appendix I. Phase Two Child Information And Assent Form

University of Exeter

INFORMATION SHEET AND

ASSENT FORM TO BE READ TO THE CHILD

Title of Project: Teachers' approaches to supporting children with reading difficulties; Lesson Study as a method of collaborative support in mainstream primary schools.

Form adapted from: Simonoff, E., Palmer, M. and Chandler, S. "Information Sheet for Minimally Verbal Group, aged 4-8 years". IAMHealth, King's College London.

Name of Researcher: Matthew Coxon **Email:** mc1004@exeter.ac.uk

Version Number: 2.0 Date: 25.01.2023

I am Matt Coxon: I am the researcher and trainee educational psychologist.

I'm here because you may find reading tricky, and I'd like to help.

If you agree, you will see me in two of your literacy lessons.

You will carry on as normal but parts of the lesson will be filmed.

After I have seen your lessons we will have a talk about how these went for you. This will last 30 minutes.

Information about you will have a number on it instead of your name; this makes it anonymous.

Version Number: 2.0 Date: 25.01.2023

If you want to stop, we will stop, just tell me or your teacher.

We will say thank you and goodbye.

Do you have any questions?
Ask as many as you like.

Thank you for your interest in this study.

Version Number: 2.0 Date: 25.01.2023

Assent Form:

Please tick box

- I have read or had the above form read to me. I understand what has been said. ☐
- I would like to the participate in the research. ☐
- I agree to have my voice recorded in an interview at the end of the study. ☐
- I understand that if I change my mind I can tell you, my teacher or parent that I no longer wish to be part of the study. I can say 'yes' now, but change my mind later. ☐

Full name: _____ Date: _____

Signed: _____

Signed by Researcher: _____ Date: _____

Version Number: 2.0 Date: 25.01.2023

Appendix J Phase Two Parental Information Form

University of Exeter

Participant Information Sheet

Title of Project: *Teachers' approaches to supporting children with reading difficulties; Lesson Study as a method of collaborative support in mainstream primary schools.*

Researcher name: Matthew Coxon

Invitation and summary:

- The project explores teachers' attitudes towards and pedagogy for, children with reading difficulties; it explores whether Lesson Study is effective in improving teachers' practice. By participating, you will be taking part in a Lesson Study intervention.
- Lesson Study is a form of teacher inquiry in which teachers, SENCos and TAs, collectively complete a cycle of 'plan-do-review' activities. One teacher teaches a series of two 'Research Lessons', while the other team members observe the learning of specific pupils (Case Pupils). Learning is analysed to inform the planning of the next Research Lesson. An Educational Psychologist/or literacy specialist may support this process.
- Interviews will be conducted with teachers and case pupils. Surveys capturing confidence and current approaches to pedagogy will be completed before and after the intervention.
- Data will include audio recorded meetings and may include photography of lessons and/or recording.

What would taking part involve?

3 planning/review meetings	Up to 3 hours total
2 lessons	2 hours total
Post-intervention interview with the researcher.	1 hour total

Why have I been approached?

- You are a primary practitioner supporting a child identified as having reading difficulties.

What are the possible advantages and disadvantages?

- By participating in this research, you will be helping us to understand whether Lesson Study is an effective method of supporting teachers to support children with reading difficulties. Lesson Study represents a significant time requirement but aims to increase understanding of case pupils' needs, lasting beyond the completion of the intervention.

What will happen if I don't want to carry on with the study?

- If you decide that you no longer wish to participate, you may withdraw your consent at any point during the intervention. If you decide to withdraw your consent without giving a reason, you may do so without detriment to yourself. Following completion of the intervention, you can withdraw consent for your data to be used until submission of the study.

Version Number 2 Date: 25.01.2023

How will my information be kept confidential?

- Your data will be secured on the researcher's University SharePoint Account for the duration of the research project. It may be used if the research is published. Data will be kept securely on the University archive for up to five years.

- The University of Exeter processes personal data for the purposes of carrying out research in the public interest. Further information may be obtained from the University's Data Protection Officer by emailing informationgovernance@exeter.ac.uk. or at http://www.exeter.ac.uk/ig/

What will happen to the results of this study?

- The results of this study will form part of the researcher's doctoral research and thesis. It is possible that these results and analysis will be published in academic journals following completion of the study. If you wish to receive a copy of the results of this you may request this by contacting the researcher directly.

Who is organising and funding this study?

- The sponsor for this study is the University of Exeter. Matthew Coxon is the lead researcher and trainee educational psychologist on the Doctorate of Educational Psychology course at the University of Exeter. No payment is provided for participation of this study, and you participate on a voluntary basis.

Who has reviewed this study?

This project has been reviewed by the Research Ethics Committee at the University of Exeter (Reference number 845784)

Further information and contact details

For further information, including if you wish to make a complaint, participants can contact the researcher and/or the project supervisor using the following details.

Matthew Coxon - researcher
Mc1004@exeter.ac.uk

Darren Moore - project supervisor
d.moore@exeter.ac.uk

Caroline Gallagher
c.gallagher@exeter.ac.uk

University Research Ethics & Governance
Cgr-reg@exeter.ac.uk

Research Ethics Committee
Fhass-ethics@exeter.ac.uk

Thank you for your interest in this project.

Appendix K. Phase Two Parental Consent Form

University of Exeter

PARENT CONSENT FORM

Title of Project: Teachers' approaches to supporting children with reading difficulties; Lesson Study as a method of collaborative support in mainstream primary schools.

Phase 2: Exploring how an EP facilitated LS can improve teachers' self-efficacy, knowledge of learners' needs, pedagogical knowledge, and inclusive attitudes towards children described as having reading difficulties or dyslexia.

Name of Researcher: Matthew Coxon

Please tick box

1. I confirm that I have read the attached information sheet dated for this project and have had the opportunity to consider the information, and questions answered satisfactorily. ☐
2. I understand participation of my child is voluntary and I am free to withdraw consent during the study and up until its submission to the University, without giving any reason and without my detriment to myself. ☐
3. I understand that data I provide in this project will be anonymised and no identifiable reference will be made to my child's name or school. ☐
4. I understand that sections of my child's anonymised data collected during the study may be looked at by members of the research team and individuals from the University of Exeter/I give permission for these individuals to have access to records linked to my child's participation in this project. ☐
5. I understand that my child taking part involves two lessons being observed by teachers and researchers. ☐
6. I agree for my child to be interviewed by the researcher in relation to his/her experience of the lessons and his/her learning. ☐
7. I understand that my child's anonymised data will be kept in the University archive for up to five ~~years;~~ and any data collected may be published in anonymous form in academic books, journals, or reports. ☐
8. I agree for my child to take part in the above project. ☐

Full name: _____ Date: _____

Signed: _____

Signed by Researcher: _____ Date: _____

Version Number: 2.0 Date: 25.01.2023

Appendix L. Phase Two Teacher Consent Form

University of Exeter

CONSENT FORM

Title of Project: Teachers' approaches to supporting children with reading difficulties; Lesson Study as a method of collaborative support in mainstream primary schools.

Phase 2: Exploring how an EP facilitated LS can improve teachers' self-efficacy, knowledge of learners' needs, pedagogical knowledge, and inclusive attitudes towards children described as having reading difficulties or dyslexia.

Name of Researcher: Matthew Coxon

Please tick box

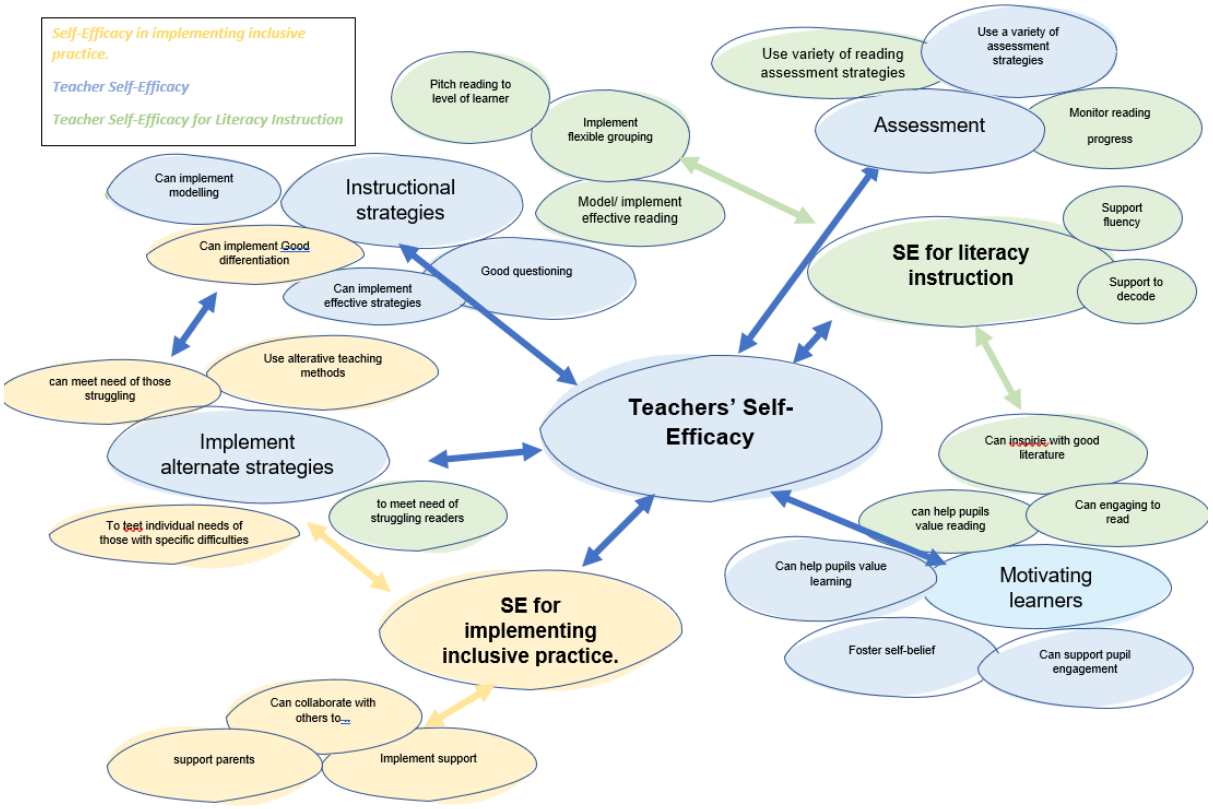
1. I confirm that I have read the attached information sheet dated for this project and have had the opportunity to consider the information and have questions answered satisfactorily. ☐
2. I understand my participation is voluntary and I am free to withdraw consent during the study up until its submission to the University, without giving any reason and without my detriment to myself. ☐
3. I understand data I provide will be anonymised and no identifiable reference will be made to me. ☐
4. I understand that sections of my anonymised data collected during the study may be looked at by members of the research team and individuals from the University of Exeter, where it is relevant to me taking part in this research. I give permission for these individuals to have access to my records. ☐
5. I understand that taking part involves taking part in a Lesson Study cycle, where I will plan and review up to two lessons as part of a Lesson Study team. ☐
6. I agree to be interviewed by the researcher in relation to my experience of the Lesson Study after it has completed. ☐
7. I agree that any data collected will be kept for up to five years and may be published in anonymous form in academic books, journals, or reports. ☐
8. I agree to take part in the above project. ☐

Full name: _____ Date: _____

Signed: _____

Version Number: 2.0 Date: 25.01.2023

Appendix M. Concept Map for Development of TSE/TSELI scales



Appendix N. Phase One Thematic Analysis – Sample from Codebook

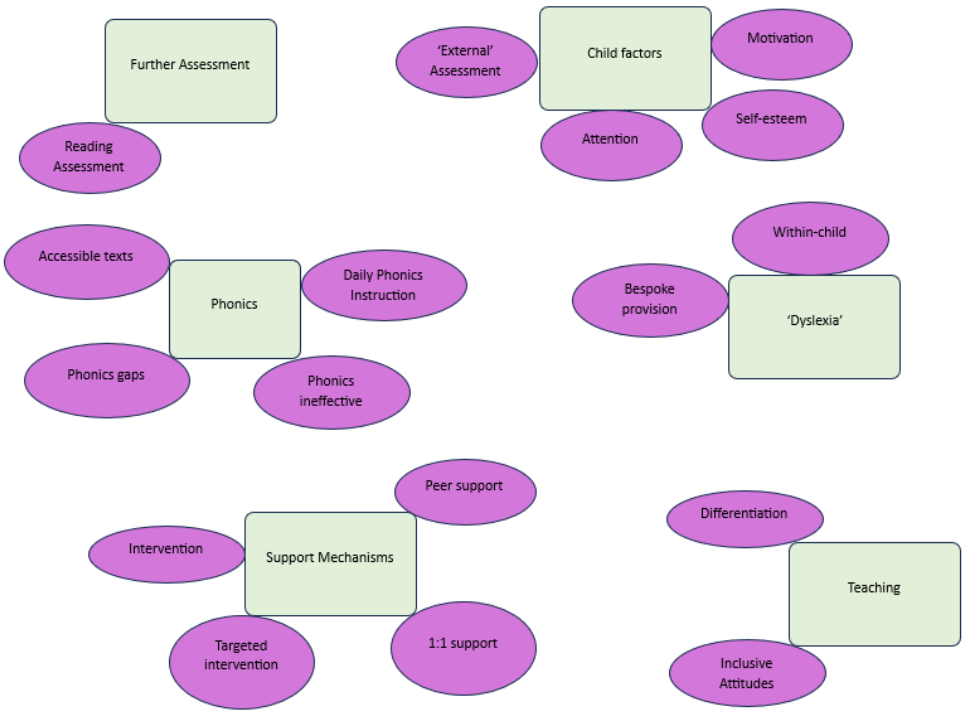
Theme	Code number	Code	Quotations with participant number
Child Factors	1	Further assessment	**15.** Investigation into the difficulties with reading - Is it working memory, stamina, phonics, HFW? **43.** Refer him to Senco regarding his reading and hand write showing indication of dyslexia **84.** Encourage wide range of texts in range of multimedia, audio books etc. Assess in a variety of ways. Fine and gross motor interventions that can be completed at home. **3.** Assessment for learning to find out exactly where the gaps are **4.** Again assessment is needed **13.** Further assessment to assess barriers to learning. **52.** He may benefit from assessment for his understanding of receptive & expressive language. **56.** Needs some gaps bridged. Assessments. **52.** Vocabulary assessment receptive & expressive. Working memory assessment. **52. Vocabulary assessment receptive & expressive.** **52. Working memory assessment.** **62. Are his memory skills ok?** **15.** Is it working memory, stamina, phonics, HFW? **34.** I would carry out more assessments and use prof gathercoles assessments on working memory. **35.** If working memory and visual aspects are v poor children find it hard to remember or recognise each phoneme in complex words.

Appendix O. Phase one Thematic Analysis.

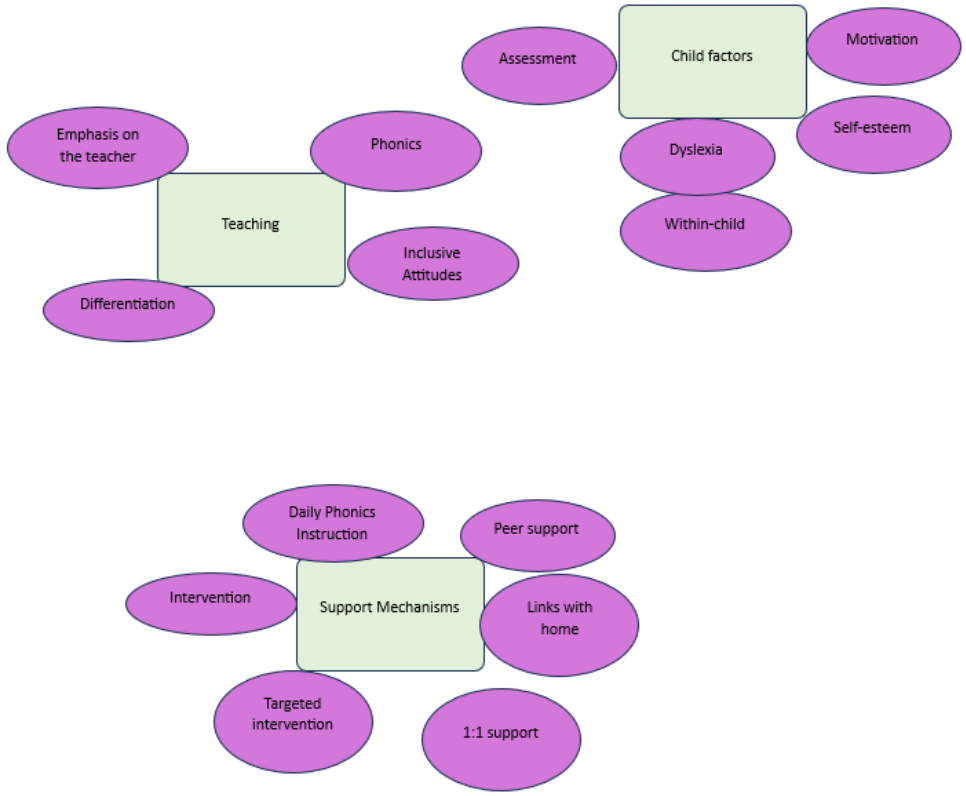
Stage 3 of Braun & Clark, (2022) – Initial Themes

Theme – Assessment *Codes:* External Assessment Further/assessment/ Not enough information in vignettes Working memory assessment	**Theme – Child factors** *Codes:* Academic Self-Concept Attention needs Chronological age Vocabulary knowledge Emotional Wellbeing Tracking issues
Dyslexia *Codes:* Assess for dyslexia Visual difficulties Phonics ineffective A fixed difficulty ***Subtheme:*** Bespoke Dyslexia Provision Phonics ineffective for dyslexia Coloured overlays Dyslexia friendly books General: dyslexia specific interventions ***Subtheme:*** **Attitudes towards Dyslexia:** *Codes:* Dyslexia an immutable difficulty	**Theme – Support mechanisms and interventions:** ***Codes:*** Adult support Links with home Peer support **Subtheme: Adult support 1:1** *Codes:* **Subtheme: Interventions** *Codes:* Targeted support Assistive technology Specific programmes Daily reading Audio books Preteaching Precision teaching
Theme – Motivation: *Codes:* Reading for pleasure/success Motivating texts Confidence Extrinsic motivation Games	**Theme – Phonics** **Phonics books** Comprehension over phonic Daily Phonics / intervention Phonetically accessible books Phonics alongside motivational texts Reading phonetically Phonics not working
Theme – Teaching *Codes:* Adaptation / Differentiation Quality first teaching Instruction Chunking Targets Adaptations In class resources	

Stage 4 of Thematic Analysis. Developing and Reviewing Themes.



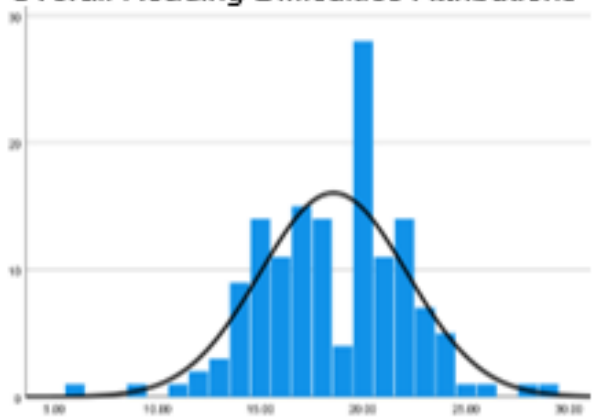
Stage 5 of Thematic Analysis. Naming Themes



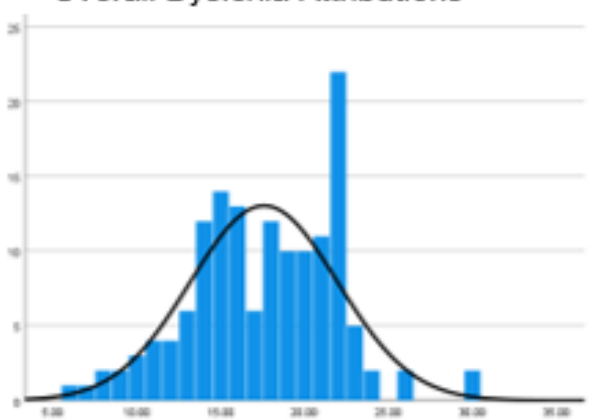
Appendix P. ANOVA Assumptions

SPSS Outputs. Histograms Demonstrating Normal Distribution of Attribution/ Attitude Data.

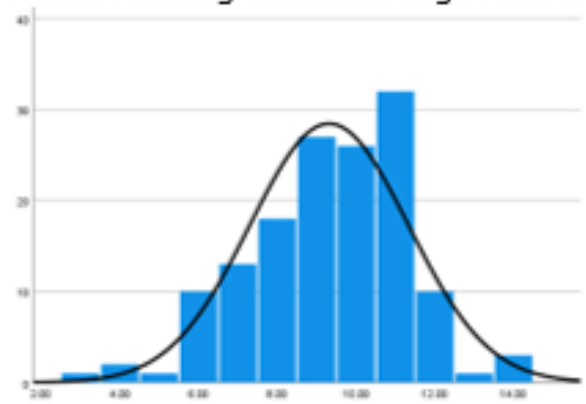
Overall Reading Difficulties Attributions



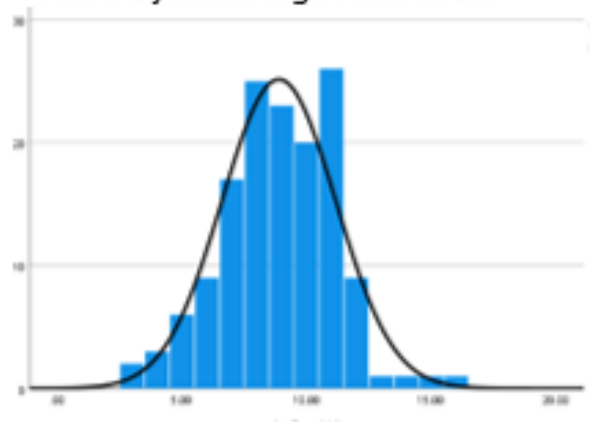
Overall Dyslexia Attributions



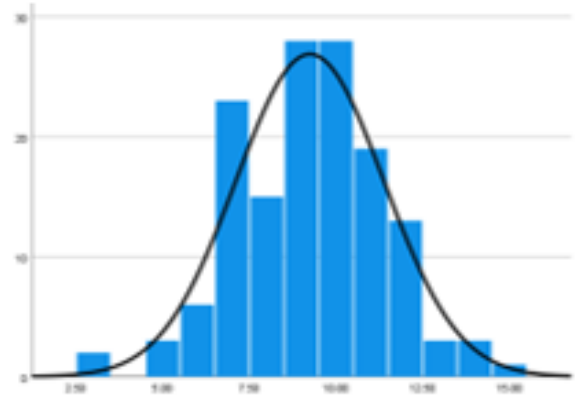
Adam: Reading Difficulties High Attainment



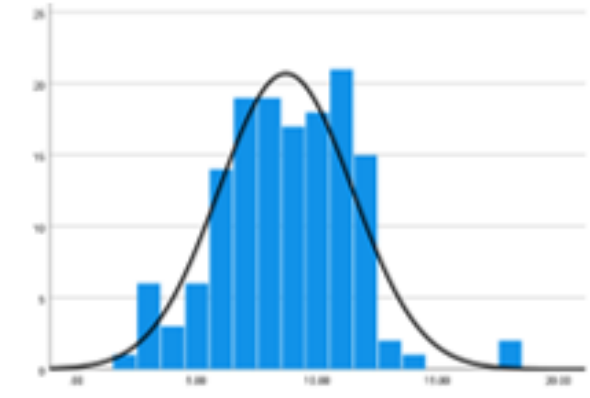
Kian: Dyslexia High Attainment



Tom: Reading Difficulties Low Attainment



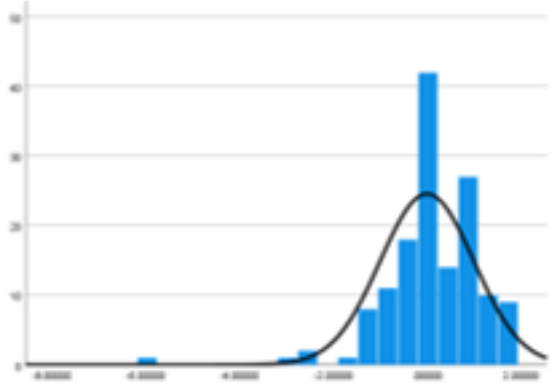
Charlie: Dyslexia Low Attainment



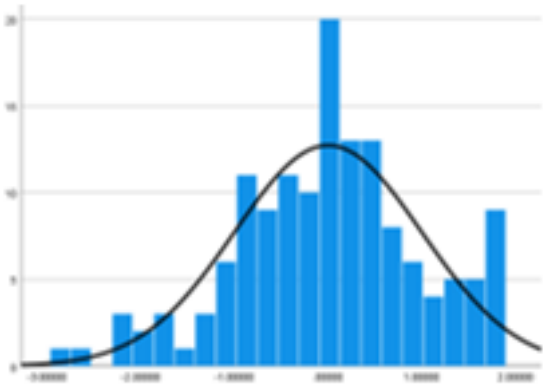
Appendix Q. Linear Regression Assumptions

SPSS Outputs. Histograms Demonstrating Normal Distribution of Standardised TSE and TSELI Scores.

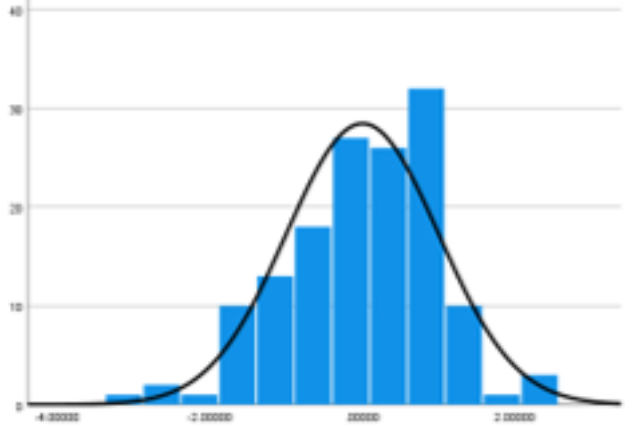
Standardised TSE score



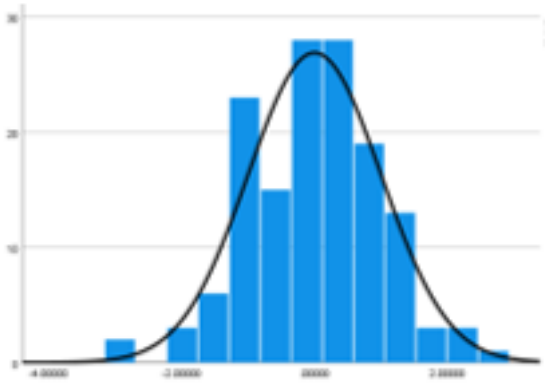
Standardised TSELI score



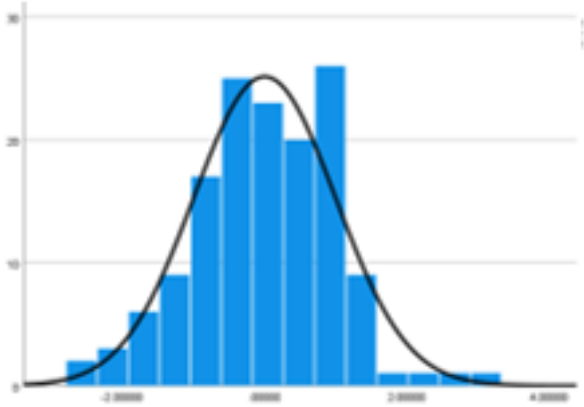
Standardised Adam Attribution



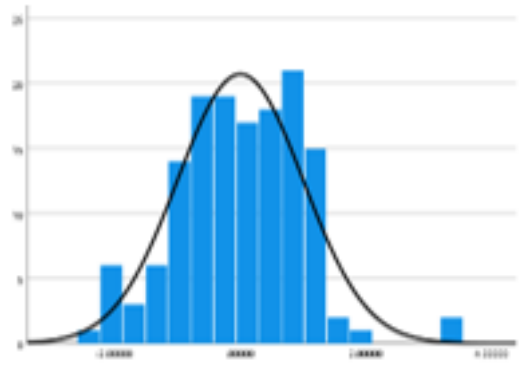
Standardised Tom Attribution



Standardised Kian Attribution



Standardised Charlie Attribution



Appendix R. Case A Completed LS Templates

LS Templates Case A: Initial Meeting

TEMPLATE 1: LESSON STUDY FOR ASSESSMENT DESIGN
Date of initial meeting: October 2023
CASE PUPILS **Who will be case pupils and why?**
Case pupil 1 **Male / female:** Chris. **Age / class:** 10-years-old / Year 5. **Reason chosen:** Not sure how to move him on following lots of intervention. He is: 2 years behind in reading. 1:1 don't know what to do. Interventions: Has received Nessy support and daily reading. Is not currently segmenting or blending. Not currently tracking. No sight issues. Intervention not making much difference. Single word reading. When you present him with more than one word: he will struggle. Loses meaning. We discussed short-term memory. Dad says he's dyslexic. Dad has difficulties with word order himself. Possibly a family issue – and difficulties extend to his writing. One-word blends into the next one. Queried ADHD. Parents are supportive with him. Theres been a lot of input. He has relatively better comprehension skills.
Case pupil 2 **Male / female:** Ellie. **Age / class:** 10 / year 5. **Reason chosen:** Similar to above reasons. Similar reasons. Lack of progress. At least 2 years behind. Has a dyslexia diagnosis. Will try to segment and blend. Intense phonics intervention. Lots of school input. Little support at home. Key reading years: these have been missed. Reads regularly. She's desperate to read. She has specific barriers: e.g. not recognising sounds. She doesn't pick up on sentences: she won't make the appropriate guesses. Lack of prediction skills? Struggled when past CVC words. Digit recall low: discussed phonological awareness – auditory processing? She goes back to phonics when reading. Read write INC scheme. No intervention with them yet. Reading ruler has been tried. She has picked yellow.

MEMBERS OF LS TEAM: WRITE NAMES **Matt Coxon** – Trainee EP **Charlotte** – Year 5 Teacher (Deputy Headteacher) **Rebecca** – Year 5 Teacher
NUMBER OF RESEARCH LESSONS? **2**

LS Templates Case A: Pupil Assessment: Chris

TEMPLATE 2: INITIAL ASSESSMENT BY CLASS TEACHER (ONE PER PUPIL)		
PUPIL NAME	Chris	
AGE	10	
CURRENT ATTAINMENT LEVELS IN AREAS OF CONCERN		
ABOUT WHAT IS GOING ON IN PUPIL'S ENVIRONMENT	**WHAT FACILITATES LEARNING?**	**WHAT ARE BARRIERS TO LEARNING OR ABSENT CONDITIONS?**
IN SCHOOL		
Curriculum: content and focus of learning	Not having too many requests/demands Focusing on reading and not recording. Can't get vocabulary on paper	Too much recording / simultaneous cognitive demands. Can't copy sentences.
Teaching methods and strategies	Removing demands/requests. Looking at tricky vocab first. Chunking the text. Steps to read. Look at new vocabulary in advance. Multi-sensory approaches have been successful. Having visual clues. Giving a word mat.	
Class management relationships and settings	He can be quite motivated in maths. He would prefer to be independent. He would prefer scaffolded resources. He doesn't put hand up and relies on being checked in. Does use his peers.	Can want adults to go away when being supported.
AT HOME		
Immediate family	Family split -had emotional challenges. Mum got the brunt of it more than dad.	Emotional difficulties

Extended family and/or community		
History of schooling / changes of school etc.	Settled and always been here.	
ABOUT PUPIL'S CHARACTERISTICS OR FUNCTIONING	**STRENGTHS**	**DIFFICULITES / NEEDS**
Sensory and motor functioning		
Health conditions		
Emotional states, self-perception & self-esteem		
Motivation and interests		
Approaches & styles of learning	Visuals help. He prefers to be active.	Focusing for a period of time. He doesn't like to stand out. He'll be looking at others.
Memory, meta-cognition, and reasoning		
Basic educational skills (literacy, numeracy	PE is a strength. Quite creative. Computing. Animated when interested. Likes to get on with things.	He likes to know where the end is.
Language, communication, speech	Auditory comprehension. His vocabulary is good and adventurous. Follows stories.	Speech can be immature.
Social skills and interaction with others (adults and peers)	Has a good set of friends? He is quite popular. Plays imaginative games.	

LS Templates Case A: RL Planning Sheet

TEMPLATE 5: PRIORITY CONCERNS, TARGETS, ASSESSMENT QUESTIONS AND SUMMARY OBSERVATIONS		
Old poem. What is the poem about.		
A. Based on collected assessment information (templates 2, 3 and 4), identify three key priorities for pupils		
	1. To see if they can achieve the task - or are they masking and relying on peers.	Identify information as to the effectiveness of their seating. (i.e. peer support: too much/too little?)
	2. Are they widening the strategies to others' stages.	Environmentally: are we helping or hindering them? (Are there distractions?).
	3. Is the scaffolding in the lesson enough?	
B. Based on these concerns, what will be learning targets for pupils in Research lessons? These targets are chosen to highlight their strengths and difficulties.		
LEARNING TARGET 1	They can explain what's happening in the poem using words from the poem.	
LEARNING TARGET 2	They will be able to pick out words from the poem.	
C. Assessment questions about pupils relevant to targets		
About where child starts from (baseline)?	Do they have strategies from previous lessons? E.g. text marking / reading and rereading / are they note taking / are they engaging in the modelling part?	
About learning approaches the pupil uses.	What learning approaches did they use in the lesson and how did they engage the models. Are we pitching their cognitive load adequately?	
About what methods and conditions could help or hinder pupil progress to target?	Whether resources and scaffolding are helping or are we limiting them too much? (Most of the class will have six stanzas – they will have 2).	

LS Templates Case A: RL1 Teacher Lesson Plan

Lesson Plan		
TEMPLATE 5 D	Chris	Ellie
Learning Target:	They can explain what's happening in the poem using words from the poem.	They will be able to pick out words from the poem.
Approaches to be used:	Teacher to introduce new vocabulary using explanation and pictures. Teacher reads aloud. Children complete quiet second read. Third read together for fluency, expression, pace and meaning. Introduce anchor question. Teacher model using text marking, re-reading, and explaining in your own words. Collaborative practice supported by an adult. Independent application to the rest of the stanza. Adult to scribe children's answer.	Teacher to introduce new vocabulary using explanation and pictures. Teacher reads aloud. Children complete quiet second read. Third read together for fluency, expression, pace and meaning. Introduce anchor question. Teacher model using text marking, re-reading, and explaining in your own words. Collaborative practice supported by an adult. Independent application to the rest of the stanza. Adult to scribe children's answer.
Learning methods to be used by child:	Text marking Re-reading Explainiing in their own words	Text marking Re-reading Explainiing in their own words
Resources / support:	Vocabulary including explanation and pictures. Enlarged copies of individual stanzas. Adult to scribe.	Vocabulary including explanation and pictures. Enlarged copies of individual stanzas. Adult to scribe.
Support Staff role:	Complete re-read of stanza. Assess whether children need access to stanza 3. Scribe answers.	Complete re-read of stanza. Assess whether children need access to stanza 3. Scribe answers.

LS Templates Case A: RL1 Observation Notes: Chris

Observation of RL1 - Chris		
D. Summarise observations relevant to these assessment questions during and after the Research Lesson. (TO BE USED IN RESEARCH LESSON)		
Agreed targets:	They can explain what's happening in the poem using words from the poem. They will be able to pick out words from the poem.	
	Enabling factors	**Preventing factors**
About starting points for these pupils in relation to targets	- Answered a whole class question.	- Appeared to demonstrate low self-esteem towards reading.
About learning approaches used by pupils	- Was scanning imagery used. More visuals needed to support the text. - Could he match meaning to images?	- Fidgety and distracted by environment. - Less able to concentrate on whole class instructions. Struggling to follow teacher-led instructions. - Executive function: concentration / inhibition / planning?
About teaching methods and learning conditions that enable or prevented learning.	- The scaffolding worked / both children appeared to retain the pre-taught language. - Memory for meaning of words appeared secure.	- ... but there were many other words that prevented meaning being made from the wider text? - Large text? Tricky words from Old English. - Got a bit lost in the read through?
Progress against identified targets:	- Both pupils seemed to be using effective peer support.	
About other observations		

LS Templates Case A: RL1 Observation Notes: Ellie

Observation of RL1 - Ellie		
D. Summarise observations relevant to these assessment questions during and after the Research Lesson. (TO BE USED IN RESEARCH LESSON)		
	Enabling factors	Preventing factors
About starting points for these pupils in relation to targets	- Listening to teacher. - Appeared to bring higher self-esteem to the lesson but child voice shows reading is a recognised difficulty. - Checking resources/task initiation/planning what she needed to do. - Answered whole class question. - Joint attention on vocabulary and teacher explanation.	- Task initiation at times. - Struggling to decode words in the help box. - Struggled to get started with these.
About learning approaches used by pupils	- Text scanning / highlighting /re-reading	- The complexity of the text for both children.
About teaching methods and learning conditions that enable or prevented learning.	- Scaffolding worked – the child new what strategies to apply; had good metacognition. - Reading ruler appeared to encourage and focus, first half of the text. - Even more scaffolding e.g. taking the word marking out and TA do this. Asking to predict the rest of the paragraph? - Could retain vocabulary once pre-taught. - Prediction. Guessing the context from words. Could they do more of this?	but there were many other words that prevented meaning being made from the text. She was losing meaning from text because of speed of decoding and holding memory. Processing auditory and visual information.

TEMPLATE 7: MAIN POINTS ARISING FROM RESEARCH LESSON 1 – PERSONALISED TARGETS AND RELEVANT ASSESSMENT QUESTIONS		
	PUPIL 1	PUPIL 2
A. Based on review of research lesson 1, what are the main points relevant to the assessment of pupils' needs		
	1. Executive function: concentration on adult explanation / self-esteem seemed quite negative? 2. Can be distracted by the environment (peer distractions) / too many resources and demands. Perhaps low self-esteem is linked to poor attention? 3. Cognitive load – we're not sure? Is it this or is he becoming too distracted first?	1. Speed of processing / memory of meaning while decoding words appeared a difficulty. 2. Cognitive Load / Scribe helped. Spelling is an issue. 3.More limited vocabulary and ability to link sight words to memory fast enough to make meaning? May have caused motivation to dip here.
A. Based on these points what will be learning targets for the pupils in research lesson 2 (they might be the same as previous research lesson)		
LEARNING TARGET 1		
LEARNING TARGET 2		
LEARNING TARGET 3		
B. Assessment questions about pupils relevant to targets		
About where child starts from (baseline)?		
About learning approaches the pupil uses.	Would even more prediction help? / How will A respond to different uses of Imagery? Would more group-reading help? A pre-read of the poem together.	Would a preteach have worked? This would help Chris & Ellie due to added familiarity?
About what methods and conditions could	Does his barrier look more like cognitive load / or his executive function & task initiation.	How do we support her decoding – speed – and retaining memory?

TEMPLATE 5: PRIORITY CONCERNS, TARGETS, ASSESSMENT QUESTIONS AND SUMMARY OBSERVATIONS		
A. Based on collected assessment information (templates 2, 3 and 4), identify three key priorities for pupils		
	1. Can they achieving fluency of reading after the meaning of words and whole class reading being modelled.	
	2. Can they complete comprehension sentences with a starting point.	
B. Based on these concerns, what will be learning targets for pupils in Research lessons? These targets are chosen to highlight their strengths and difficulties.		
LEARNING TARGET 1	We want them to be able to skim read – and retrieving words.	
LEARNING TARGET 2	Can they interpret how the character disguised herself. How to make a best guess following the meaning that is modelled.	
C. Assessment questions about pupils relevant to targets		
About where child starts from (baseline)?	What is Chris & Ellie's affective responses to the text following a pre-read?	
About learning approaches the pupil uses.	Skim reading / text marking / taking information from the text and answering in their own words.	
About what methods and conditions could help or hinder pupil progress to target?	Their seating positions will support them. Access to the learning assistant; the timings of her input/ leaving the model of how I scripted an answer on the board. Is the level of comprehension skills requiring a barrier for these two children.	

LS Templates Case A: RL2 Teacher Lesson Plan

Lesson Plan RL2		
TEMPLATE 5 D	Chris	Ellie
Learning Target:		
Approaches to be used:	- Extract to a folk tale. - Looking at vocabulary. - Model how unfamiliar words are worked out. - Reading extract through - Sharing anchor question. - Fluency extract. Build familiarity. - How question. - Use skim reading to look out for baker's daughter. - Text mark the words will help. - Reshare the anchor question. -	Same
Learning methods to be used by child:		
Resources / support:	- Using a task list.	
Support Staff role:	- Task initiation at the start of the lesson.	- Scribing the written answer.

D. Summarise observations relevant to these assessment questions during and after the Research Lesson. (TO BE USED IN RESEARCH LESSON)		
	Chris	Ellie
About starting points for these pupils in relation to targets	Chris showed much better affective relationship with the lesson today – is this the result of the pre-read? This correlated with good prediction skills. Both children listening and engaging in starting point. Both engaging with peers when prompted.	Ellie showed good willingness to engage in prediction at the start – answering questions effectively. Both children listening and engaging in starting point. Both engaging with peers when prompted.
About learning approaches used by pupils	Both responded well to imagery on the board – attentive and engaged by the picture linked to myths. Prediction / and searching for resources on desk.	Both responded well to imagery on the board – attentive and engaged by the picture linked to myths. Text skimming: using skills modelled.
About teaching methods and learning conditions that enable or prevented learning.	Children engaged in vocabulary prediction. Chris was not following vocabulary modelling. He did not follow the class read through – auditory processing / attention / task initiation / tracking / check list? If tracking – paired reading may be effective. Understanding of meaning of words (from modelling and pre-read?) seemed to help both children to commit words to memory. Ellipsis modelling and encouraging prediction of language around this was successful for both children in terms of engagement and comprehension.	Children engaged in vocabulary prediction. Understanding of meaning of words seemed to help both children commit words to memory. Ellie followed class read through and was tracking words. Ellipsis modelling and encouraging prediction of language around this was successful for both children in terms of engagement and comprehension. Modelling difficulty and how to search for word meaning was effective for Ellie

About other observations	Seating plan was effective – both children talking to their peers productively. Chris showing some sensory needs. Lots of fiddling, stretching, and shuffling his paper around. Chris had written his answer to the anchor question – he could read it back to me. What allowed him to get here? - Writing had supported his memory – he was able to read back and use words from the text. His memory was well supported in the lesson – helped success. - This makes me think that Chris's difficulties are linked to cognitive load. When this was supported by pre-read and prediction – he was able to engage more in his writing and comprehension task. Both children experienced more success in this lesson – what are our thoughts on this? Chris appeared in a positive mindset in this lesson.	Seating plan was effective – both children talking to their peers productively. I observed her standing and moving her head around the text, coming at it from different angles. Indicative of visuo-spatial attention difficulties? Chris read her answer out. Both children experienced more success in this lesson – what do we think allowed this?

LS Templates Case A: RL2 Child Views of Lesson

TEMPLATE 6: PUPIL PERSPECTIVES ON THE RESEARCH LESSON		
THESE QUESTIONS MIGHT NEED TO BE ADAPTED ACCORIDNG TO THE PUPIL'S AGE AND NEEDS.		
	Chris	Ellie
What did you enjoy about the lesson?	That I read it before the lesson. It was easier to write because I knew what I was doing.	I liked reading it because it was interesting.
What did you learn?	About the rich woman. She was trying to get free bread but she was disguised as a poor woman – so it would be free.	The Baker's daughter was mean.
How did you learn these things?		Reading it before the lesson.
What part of teaching and learning activities helped you?	Reading it before the lesson.	Because I knew what it said so when you read it I could follow along. The pictures next to the new words in the long text. It made them make sense in the sentences.
What did you not enjoy about the lesson?	-	-
What did you find hard to learn?	-	-
Would you know why it was hard?	-	When people read together 'fluency' I can't hear myself.
What part of teaching and learning activities did not help you?	-	-
What could change to help you learn better?	-	-

LS Templates Case A: Final Assessment Document

TEMPLATE 8: ASSESSMENT AND ACTION PLANNING SUMMARY FOLLOWING LESSON STUDY CYCLE		
This is completed at the end of the process, drawing on initial information templates (1-4) and the points arising from reviewing the Research Lessons using the relevant templates. One completed for each pupil.		
A. ASSESSMENT SUMMARY		
Pupil name	Chris & Ellie	
Subject area	Reading	
Date	November 23	
Environmental factors and wider class context	**What helps learning?**	**What prevents learning or is needed for learning?**
1	Peers sat with – both pupils have been able to engage in productive chats with tables peers about reading.	Organising resources on the table – eg. task initiation and getting started with support materials.
2	Being sat at the front.	
3	Perhaps having opportunity for quiet independent reading helps.	At times, Ellie may field she becomes lost when others are reading aloud and she can't hear herself.
Pedagogical approaches and conditions		
1	Modelling prediction and encouraging children to make predictions themselves. For example, Elipsis was helpful.	
2	Modelling difficulties in how to understand and work out unfamiliar words. Supporting both children with metacognitive skills.	
3	Prereading and use of visuals has been highly effective for both children.	We are unsure if group reading aloud is a help or a barrier to Ellie. Further exploration needed.

Pupil factors	strengths	difficulties / needs
Learning approaches and motivation		
1	Chris: Prediction when the text is familiar. Modelled prediction in class helps a lot.	
2	Ellie: Generally motivated and wants to learn.	Ellie: Reading aloud can be tricky for her.
3		
Memory and cognitive factors		
1	Chris: Retention of task specific vocabulary when the text is familiar.	Chris: Executive function; he requires support to start tasks, use resources and maintain attention.
2	Chris: is better at sight reading than decoding/blending.	Chris & Ellie Struggle to decode text and perhaps struggling with fluency.
3	Ellie: Able to use text specific vocabulary in context when this is familiar to her.	Chris cognitive load needs supporting – pre-read / familiarity helped this.
Communication and interaction factors		
1	Chris & Ellie engaged and able to participate, for example following the pre-read.	Ellie struggling to hear what she is reading when others are reading.
2	Chris & Ellie able to interact with peers in lesson.	
3		

A. What changes will be made to teaching based on this assessment?	
1	Prereading of texts when a new concept is coming up.
2	Use of images for vocabulary to be careful considered when supporting both of them.
3	An element of prediction in each text to be used.
B. How will these changes be put into operation?	
1	Timetabled staff meeting to share findings with other staff.
2	Gain pupil voice over fluency from different abilities.
3	

Appendix S. Phase 2 Pre & Post LS Questionnaire

Part A: Classroom Practice

Teacher Name:

School:

Please consider the children we are about to work with or have finished working with. In the instance of working with two or more children, please think about the child you are most concerned about. We will refer to them as **child A.**

On a scale on 1-7, please rate your **understanding** of A's reading needs.

1	2	3	4	5	6	7
No understanding						Excellent understanding

On a scale on 1-7, please rate your understanding of **appropriate support** for A's reading needs.

1	2	3	4	5	6	7
No understanding						Excellent understanding

Part B: A's outcomes

On a scale of 1-7 please rate your response to the following statements:

1. A's reading performance is due to factors within himself/herself such as their ability, rather than due to external factors such as teaching or the curriculum.

Strongly disagree	Disagree	Somewhat disagree	Neither agree/nor disagree	Somewhat agree	Agree	Strongly agree
1	2	3	4	5	6	7

2. A's reading performance likely to continue more or less the same over time.

Strongly disagree	Disagree	Somewhat disagree	Neither agree/nor disagree	Somewhat agree	Agree	Strongly agree
1	2	3	4	5	6	7

3. It is within A's own control to improve their reading in the future.

Strongly disagree	Disagree	Somewhat disagree	Neither agree/nor disagree	Somewhat agree	Agree	Strongly agree
1	2	3	4	5	6	7

Part C – Supporting difficulties in the classroom.

1. I can collaborate with other professionals and staff (teaching assistants) to teach pupils with special educational needs in the classroom.

Strongly disagree	Disagree	Somewhat disagree	Neither agree/nor disagree	Somewhat agree	Agree	Strongly agree
1	2	3	4	5	6	7

2. I can implement a variety of teaching strategies in my classroom.

Strongly disagree	Disagree	Somewhat disagree	Neither agree/nor disagree	Somewhat agree	Agree	Strongly agree
1	2	3	4	5	6	7

3. I can differentiate to meet the needs of all learners.

Strongly disagree	Disagree	Somewhat disagree	Neither agree/nor disagree	Somewhat agree	Agree	Strongly agree
1	2	3	4	5	6	7

4. I am confident in designing learning tasks so that the individual needs of pupils with special educational needs such as specific learning difficulties (eg. dyslexia, dyscalculia, dyspraxia), are met.

Strongly disagree	Disagree	Somewhat disagree	Neither agree/nor disagree	Somewhat agree	Agree	Strongly agree
1	2	3	4	5	6	7

5. I can help pupils to believe they can do well in school.

Strongly disagree	Disagree	Somewhat disagree	Neither agree/nor disagree	Somewhat agree	Agree	Strongly agree
1	2	3	4	5	6	7

6. I can motivate pupils who show low-interest in school-work.

Strongly disagree	Disagree	Somewhat disagree	Neither agree/nor disagree	Somewhat agree	Agree	Strongly agree
1	2	3	4	5	6	7

7. I can model effective reading strategies.

Strongly disagree	Disagree	Somewhat disagree	Neither agree/nor disagree	Somewhat agree	Agree	Strongly agree
1	2	3	4	5	6	7

8. I can adjust reading materials to the appropriate level for individual students.

Strongly disagree	Disagree	Somewhat disagree	Neither agree/nor disagree	Somewhat agree	Agree	Strongly agree
1	2	3	4	5	6	7

9. I can meet the needs of struggling readers.

Strongly disagree	Disagree	Somewhat disagree	Neither agree/nor disagree	Somewhat agree	Agree	Strongly agree
1	2	3	4	5	6	7

10. I can motivate students who show low interest in reading.

Strongly disagree	Disagree	Somewhat disagree	Neither agree/nor disagree	Somewhat agree	Agree	Strongly agree
1	2	3	4	5	6	7

11. I can get students to read fluently during oral reading.

Strongly disagree	Disagree	Somewhat disagree	Neither agree/nor disagree	Somewhat agree	Agree	Strongly agree
1	2	3	4	5	6	7

12. I can help students to figure out unknown words when they are reading.

Strongly disagree	Disagree	Somewhat disagree	Neither agree/nor disagree	Somewhat agree	Agree	Strongly agree
1	2	3	4	5	6	7

Appendix T. Phase 2 Semi Structured Interview Schedule

Thank you for taking part in the Lesson Study process; I hope that you found it useful. Just to remind you that your inclusion in this stage of the project remains anonymous. Child names and references to your school will be anonymised. You are completely free to end the interview at any time,

1. I will ask you to think back to when we started the project.

   How did you feel about your ability to support the case children before the intervention? / How did you feel about meeting their literacy needs?

2. What have you learned about the children that we focused on for the LS focus?

3. To what extent has LS impacted the types of provision or pedagogy you would implement?

   a. Are there any approaches you would use now that you did not consider before?

   b. Has it brought any changes to you & your classroom?

   c. How do you feel now about your ability to meet the needs of case children?

4. In our project – one child is thought to have dyslexia - To what extent has LS influenced your understanding of reading difficulties/dyslexia?

   a. Do you feel that LS has highlighted changes/pedagogy that is specific to children with RD/Dys?

Appendix U – Sample of Transcript for Interviews: Charlotte

Me

So I just want you to think back to when you started the project. And so just trying to imagine you were back at the start and how did you feel about your ability to support the children prior to our lesson study?

Charlotte

Umm, so I felt like I had some ideas about how to help them, but it was a bit kind of like I've got this bag of ideas. I wasn't sure which ones were going to be best, and I think with the children being in year five when they get to that point, I'm always really conscious that we're kind of running out of time doing trial and error. I really need things that I can be confident I'm going to support them in terms of making progress and setting them up well for high school. So I think that that was my worry that I'd be trying things and having to give them time to see if they worked rather than trying things that I felt confident working to work.

Me

OK, so time is a quite crucial variable there then?

Charlotte

Yeah, I think by the time they've got into year five, we've already done a range of things. So, you are starting to hit that point where you're thinking, crikey, and you know, we need some perhaps some external support or some more expertise.

Me

And then just slightly more specifically, how did you feel about meeting their literacy needs or reading?

Charlotte

So I think again, I was probably in the middle. If you were going to put me on a on a scale, probably in the middle, you know, I've got some strategies and things that I can go to support them. But in terms of having a something specific that I knew was going to work for them was a little bit worried to say, yeah.

Me

So then moving on to post-lesson study. So, what have you learned about the children following the lesson study.

Charlotte

Umm, so I guess how they learn best and therefore we've been able to refine the strategies and I think with the exception of paired reading, we're not using anything that I hadn't encountered before. We've been able to refine it umm. More by really focusing and actually they've been they've been quite different, haven't they?

What approaches to use and what motivates them? So yeah, that it's been able to refine what we're doing.

Me:

So are you able to still elaborate a little bit on how you feel about the differences between the two (children)?

Charlotte:

Yes. So, it's kind of really bespoke things. I guess the biggest thing is that we're able to be quite unique with them is when we one to one reading. So, things like Ellie does use phonic strategies. Uh, but we need to increase that pace and fluency. So that's what we're sticking with her helping her to sound things out.

But then also being able to jump in with words when she's tiring and take over and then with Chris, it's been more that picture recognition and whole word reading. So embedding images with new vocabulary and texts seems to have been really successful for him, and it seems that once he's encountered that a few times or three times, then he will, he'll recognize that word within the rest of the text. With Chris as well. Rereading familiar texts several times and because of that whole word recognition, the way that he's reading better seems to be improving his fluency and confidence. Whereas Ellie does like new material, and applying a phonic strategy to a new book, she's more motivated by that. So yes, so those are a couple of the things anyway.

I guess sorry, going back to both of them, something that has worked for both of them is that pre-teach hasn't it and so we are absolutely making sure that when we're on a new text, we're doing that pre-read with them and which is making them both feel more confident. But we're using that across the curriculum as well. I think that's something that we've learned from the reading [Lesson] study that's gone much wider for them both. And again, that's something you know, it's not something new to us. The idea of pre-teach but seeing how effective it was, not just for, umm, not just for their cognitive support but for their particularly with Chris; Ellie was quite intrinsically motivated to do well, wasn't she? But Chris, much less so. So, getting him to come into sessions more enthused and confident, it's been a good win for us.

ME:

OK, so the lesson study sort of focused the results of a pre teach more for you.

Charlotte:

Yeah.

Appendix V – Sampled Analysis of Case Study A.

Steps 2 & 3 of Within Case Study Analysis

This appendix shows example codes with associated notes relating to the analysis of the research lessons. This coding took place during stage two of my analysis of each case study.

Planning of RL1

RL1 Aims	Research Questions
To retrieve words from the poem that were read aloud by the teacher. Demonstrate comprehension of the poem.	What strategies are they applying from previous lessons (IE: tracking, retrieval, rereading)? Is the cognitive load of the lesson appropriate? What is the effect of reducing the text length for these two pupils?

Analysis of RL1

Example Coding	Description of Group Discussion
Executive Function	Chris struggled to concentrate on adult explanations
Processing Speed	Ellie struggled to decode while holding sentence meaning in mind Discussions too place around how to support this
Learning environment	Chris was distracted by too many resources and too many demands
Cognitive Load	Cognitive load of the lesson was discussed as a possible barrier for children
Self-esteem	Discussions took place about how to foster improved self-esteem linked to reading for each child
Memory	Discussion over how memory was a barrier for children and losing meaning while reading could affect motivation
Motivation	Discussions to place around motivation and best to foster this through Lesson 2
Prediction	Discussion about bring more prediction into pedagogy to support engagement.
Pre-reading/Pre-teaching	It was decided in this meeting that Chris & B would receive a 'pre-teach' of key vocabulary to build familiarity.

Planning of RL2

RL2 Aims	Research Questions
To skim read for words modelled in whole class teaching. To interpret how the character is disguised, following whole class modelling.	How will child motivation be affected by a 10 minute pre-teach session, aimed at teaching vocabulary immediately before the lesson? Is the level of comprehension skills required for the poem, a barrier for these two children? Can they achieve fluency of reading after the meaning of words and whole class reading has been modelled? What would be the effect of visuals and task lists?

Analysis of RL2

Example Coding	Description of Group Discussion
Chucking the lesson	The team discussed creating manageable chunks of reading to ensure success
Peer support	The team discussed ensuring both children were at with a suitable peers. Mixed ability peer groups were thought to work for these case children
Use of visuals	The group discussed using vocabulary alongside visuals.
Cognitive load and reading demands	Reducing the amount of text was deemed to not disadvantage, but support the children
Vocabulary support	Overall, the group felt that pre-teaching vocabulary was highly effective. In this meeting the group discussed the child voice, in which Chris had stated he felt like 'an expert' in the topic following pre-teaching and the lesson. Modelling vocabulary in lesson was thought to be successful by staff
Silent reading	Silent reading was identified as a barrier for Ellie. Reading aloud is easier for her as staff can support with tracking and anticipating words. Equally she didn't like hearing others read as she 'can't hear herself'.
Pre-teaching	This was a code that appeared numerous times across the LS notes. The LS group

	identified that pre-teaching enabled familiarisation and frees up cognitive load. The team decided that this requires careful planning in future to optimise. Pre-reading supported familiarity.
Peer work	Peers were supportive of case children during this LS.
Decoding	Identification of child need. The group felt the Ellie displayed continued difficulties at the word level and they felt more confident using sight words to teach her
Motivation	Pre-teaching supported the motivation of both children.
Processing/Working memory	Processing speed was seen as a barrier for Ellie but the pre-teaching had a positive effect on this. Identification of child need. Ellie requires support at the word level and holding words in mind while retaining meaning. Chris stated that there is a lot going on in his head when he reads.
Resilience	The group observed and commented on the differing resilience of both children in response to the difficulty of the lesson.
Executive Functioning	The group concluded they had observed the children applying some good executive function skills. They felt that using task lists had helped Chris. Chris requires help to begin tasks and this was identified as a need.

Interview Coding

I used the research questions to split coding of teachers' interviews into two a-priori determined themes Understanding of child need, and pedagogical approaches.

Example Coding	Quote	Code Description
Trial and error	I'm always really conscious that we're kind of running out of time doing trial and error. I really need things that I can be confident I'm going to support them in terms of making progress and setting them up well for high school.	Charlotte described focussing on what works rather than trying different things in a less structured manner

Confidence (Teacher Self-efficacy)	**Charlotte:** So I think that that was my worry that I'd be trying things and having to give them time to see if they worked rather than trying things that I felt confident working to work. **Charlotte:** I feel much more confident about supporting these two, these two children,	Case children chosen to find out more about them and develop teacher confidence. Charlotte describes increase confidence following LS.
External support	**Charlotte:** So you are starting to hit that point where you're thinking, crikey, and you know, we need some perhaps some external support or some more expertise.	Charlotte felt more help was needed for these children for LS began
Lacking Specific strategies	**Charlotte:** But in terms of having a something specific that I knew was going to work for them was a little bit worried to say, yeah. **Carolyn:** So, to be honest, know what I could I could see where they struggled, but I didn't really know how to support them other than use of more general strategies that you would use with sort of any child	Prior to LS, Charlotte describes not knowing specifically what works. Described as worry. Lack of understanding of why they struggled.
Refining strategies to what works (Pedagogy)	**Charlotte:** We've been able to refine it umm. More by really focusing and actually they've been they've been quite different, haven't they? What approaches to use and what motivates them? So yeah, that it's	Post LS, Charlotte describes having found out more about the differences between the children and which approaches are motivational for the children. Moving away from phonics for example and exploring other ways of teaching reading.

	been able to refine what we're doing. **Carolyn:** I thought we've done phonics and that's not working for him. Do we need to keep doing more? And actually knowing yeah, that that's how he learns and that that's OK that he learns that way.	
Pre-teach (Pedagogy)	**Charlotte:** something that has worked for both of them is that pre-teach hasn't it and so we are absolutely making sure that when we're on a new text, we're doing that pre-read with them and which is making them both feel more confident. But we're using that across the curriculum as well.	Charlotte describes the effectiveness of the pre-teach put in place during LS.
In depth assessment	**Charlotte:** Because it's not just the observation that's really important, it's the discussion that you have in the planning of the lesson. It's their questions about what do you think is going to work for this child? **Carolyn:** It's made me sort of question about what, what do I want her to do in this lesson? What do I wanted to get out of it? How can I make sure so it's just just made more reflective I suppose?	Charlotte describes the process of planning meetings leading to deep guiding questions about the case children. Focusing on answering key questions through observation.
Chunking	**Carolyn:**	

	I think just sort of breaking the lesson down into the into the different sort of chunks. What can we do to support those different parts of the lesson?	Carolyn discusses reflecting since LS upon how to make lessons more accessible for children with different needs.
Motivation	**Charlotte:** By the time they got to year five, of course they're lacking that motivation. [...] I'm consciously going through our stocks of books and seeing what we've got and where we can fill gaps	Charlotte discusses using motivational literature and developing the schools practice in regard to this.
Levelled books (Pedagogy)	**Charlotte: S**o yeah, trying to find some books that are really going to motivate them and then stick them up so OFSTED know I know that they're not full, fully, phonetically decodable,	Charlotte discusses a contrast between using decodable books and fostering motivation with a wider set of texts.
Dyslexia	**Charlotte:** I think that's probably what I've always found. We're supporting children with dyslexia, so like all our exercise, books are on kind of buff colour paper rather than white, and I think like a lot of the things that we've found are all been told are good practice, actually have helped all the children.	Good practice for the child with dyslexia in this LS has helped all children.
Accurate assessment	**Charlotte:** it doesn't matter whether they're EHCP or not. Even first concerns just any child that you're struggling. Yeah, it's just a reflection and I think like Child A didn't have a SEND support plan before he has now, and	Charlotte discusses accurately putting together a support plan for one child following the information gathered in LS.

	it's been super easy to write because of all the things I've learned about him from lesson study.	

Analytic memos

- I identified a theme around the coding of 'Pre-teaching' as a theme linked within the pedagogy that teachers focussed on. This was seen to impact child factors such as motivation and self-esteem.
- I also identified processing as a theme across this case study that the group regularly discussed. How to support processing through reducing the need to decode at the word level was discussed for Ellie. Chris also stated in child views how he felt a lot is going on in his head when he reads. This helped the group to understand his needs.
- Executive Function was a theme that I could identify as being discussed across this LS. The teachers began by questioning whether Chris demonstrated difficulties with differing executive functions. However, the LS group concluded that he could be best supported through reducing cognitive load of the lesson.
- Both teachers focused on using Sight word instruction instead of phonics for Chris and growing in confidence that it was necessary to explore alternative mediums of teaching reading.
- Motivation is repeatedly referred to throughout the LS notes and post LS interviews. Supporting motivation is a primary focus of this LS team.

Appendix W – Sampled Analysis of Case Study B.

Steps 2 & 3 of Within Case Study Analysis

This appendix shows example codes with associated notes relating to the analysis of the research lessons. This coding took place during stage two of my analysis of each case study.

Figure X

RL1 Aims	Observation Questions
They will be able retrieve task specific vocabulary from the text, with support. They will be able to make inferences about the text and show comprehension.	What allows them to predict what is going to happen. What supports their own links to the text? How can we bridge the gap to their vocabulary difficulties?

Analysis of RL1

Example Coding	Description of Group Discussion
Pre-teach	For RL1, a TA had taught a simplified version of the lesson in advance to prepare the case children.
Vocabulary	There was a focus of this group discussion upon the work that had been done to support the case children with vocabulary knowledge. This was thought to be effective.
Motivation/Engagement	The group felt that the two case children were engaged in the lesson thanks to familiarity with the vocabulary.
Peer support	The group felt that peer support was effective at helping the two case children. The two teachers had thought carefully about the seating plan.
Attachment Learning Triangle	A section of this group discussion focussed on Heather Geddes' Learning triangle.
Inference	The group wished to understand more about the extent to which case children could infer meaning from the reading.

Planning RL2

RL1 Aims	Research Questions
They will be able to scan and retrieve pre-taught words.	Are they able to decode and blend?

They will be able to answer a comprehension question following teacher modelling.	Are they able to track and read around pre-taught key vocabulary. Are they able to follow the text during a silent read? Are they able to follow a class read?

Analysis of RL2

Example Coding	Description of Group Discussion
Chunking	Chunking the lesson into manageable amounts was important for these children.
Peer support	Sitting with mixed ability peers. Children cited this as helping them in their post LS interviews. Working with some peers was also cited in this meeting as a barrier and hard to get right.
Visuals	The group cited the importance of using visuals to support unfamiliar vocabulary. Annie felt using print outs was better for engagement than using the whole book.
Memory	Following RL2, the teachers had time to explore the vocabulary with children a number of days later. They were able to establish that the lesson vocabulary was still recallable for both case children.
Pre-teach	For RL2 the group discussed child feedback that they had felt like 'experts' in the vocabulary due to the Pre-teach.
1:1 support	The group identified that the children struggle at the word level and silent reading was a barrier. Reading aloud with an adult was supporting this.
Decoding	Identified as a need for Eve. The teachers concluded that she has a preference for 'top-down' sight word approaches.
Prediction	Prediction work with the TA had helped the children.
Resilience	The teachers felt they had learned about the levels of respective resilience for each case child. They felt that Eve displayed higher levels of resilience for longer.
Vocabulary	Annie modelling the vocabulary in lesson was successful in engaging children. Similar to pre-teaching, it aided familiarisation with complex words. The group felt that this had freed up cognitive load for the children.
Motivation	Working within the interests of the case children ie volcanoes here, had been successful across both lessons.
Metacognition	The group identified from RL2 that the children had struggled with certain skills such as scanning for retrieval. The group felt they required more support with this.

Interview Coding

I used the research questions to split coding of teachers' interviews into two a-priori determined themes Understanding of child need, and pedagogical approaches.

Example Coding	Quote	Code Description
Confidence	Lizzi: Probably that I didn't feel confident at all. Actually, I would say reading and literacy, even just not even as a Senco, as a teacher. I find probably the most difficult to plan for, to teach and to attempt to meet SEND needs within lessons Annie: I think I felt a bit frustrated that I couldn't, that there were issues that I couldn't address. I felt at the time, I knew I was supporting them as a class teacher, but that I didn't know whether I was doing the right kind of support.	Description of apprehension around the teaching of reading. Prior to LS, Annie states feeling frustrated
Teachers' Attitudes	Annie: And I think what I have learned and is probably a very basic thing for teachers that that every child is reachable.	Annie describes a shift in her attribution for children's reading needs
Targeted understanding of needs	Lizzi: certainly have a better understanding of their needs, so prior to going into the lesson study, like I said, I knew that there was some gaps and there was definitely barriers. But it was really difficult to pinpoint what that what, what those needs were and therefore be able to plan for it Lizzi: actually to sit and observe just two specific children and to really hone in on what is it that they're that they were struggling with was really great because you never, you never get that opportunity	Lizzi describes understanding the child need better due to focusing on the two case children through observation Annie describes trying new things to find a better understanding of child need.

	Annie: It's like it's just it's I suppose it's just a case of finding a different ways in, to overcome their barrier, and you know, the things that we did during the lesson study was just like, I mean, I mean I'm an experienced teacher, but gosh, you know, it was almost like, well, why didn't I think of that?	
Fine grain assessment	Lizzi: Those little tiny details of how he was behaving in ways, or what was it that he was really struggling with was really highlighted Lizzi: I think it was. It was quite clear that probably she had a difficulty with decoding. So actually blending but actually whole world word reading for her was probably a bit more successful and you pick that up quite quickly in that first couple of minutes in the lesson when she was asked to do that, that word. And so she'd learned it pre-teach wise. Annie: I think I learned, perhaps to look at them a little bit more carefully in terms of individuals rather than lumping them together with perhaps low ability children and look more at their needs on an individual basis. Rather than just the low ability group.	Discussion about identification of word level difficulties and the improvement following sight word work with Eve Annie discusses finding a more individualised understanding of need for struggling readers
Peer match ups	Lizzi: the mixed pair workings I think was a really successful strategy and really easy to do Annie: You know the buddying that's worked to a degree, but it's definitely about the child that sits next to them. So the pre teach has worked, the buddying up, but you have to have the right child and I think the little girl that was with Child C, that worked well and has since, and	Similar to group discussions above; Lizzi feels that focussing on the careful seating alongside supportive peers was effective Annie describes success but that getting peer match ups correct is challenging

	we've tried different girls; we've had more success with the girls.	
Motivation	**Lizzi:** You could see the difficulties that they had, especially, you know. With Child D a lot of that hinged on his motivation Lizzi: So the choice of text and the motivation to read is a really important factor. I think within children who have difficulties with reading, that really showed up through the lesson study.	Discussion about what supported motivation for Sam Lizzi raises the importance of motivation to supporting children with reading difficulties. She felt this was a theme of the group's discussion and focus.
Pedagogy	**Lizzi:** We were gonna do it today, but we want to share the impact of the pre teach and the impact that's had on on the children that we've been working with. So in terms of provision, it's also given me ideas on how to ensure that scaffoldings right and pitched at the right level. So I feel like it's really it increased my skill.	Overlapping with Pre-teach, Lizzi describes the importance of Pre-teach and careful scaffolding in class
Pre-teach	Lizzi: He clearly benefited massively from having that time to go through it prior through a pre teach And I asked TA1, who was the TA, if he would go out and teach the children just how to use a dictionary. And you know how to look for words, how to look for meaning. And you know, that's a that's a strategy that they needed to know. Annie: Yeah, I think the pre teach, I mean that's been a complete game changer, not just for the literacy, but for the for other tricky subjects I mean the maths particularly, that's worked as well with them, and I know we've not done maths but it was more about the reading;	Pre-teach supported the motivation of Sam Lizzi talks about the TA working on skills with Sam; in order to support him to access the main lesson Pre-teach is something that Annie describes bringing in across the curriculum and in her role as a senior leader, across the school It has been extended to numeracy for example

	but the pre teach has been a game changer for both children.	
Attitude towards support	Lizzi: having that time prior to the lesson study as well to have that to go over the profile of each child was really helpful because I kind of had an idea what I was going in to look for then. I suppose it's changed the way I view how I support staff with difficulties like that Annie: I think it's just I think as class teachers, sometimes you can just become a bit bogged down and you know quality first teaching is absolutely you know the way forward I get that. But they're just there are other little things that you can do to supplement, right.	Both teachers describe finding the confidence to explore child need in more detail and to try new things as opposed to 'getting bogged down'.

Misconceptions	Annie: It's really focused perhaps my misconceptions about reading difficulties and it's very easy	Annie describes addressing automated responses to teaching reading. She describes focusing on the learners rather than the teaching
Teacher responsibility	Traditionally in schools, you've always put your lowest children with the TA's and sometimes they, like you say, with the best will in the world. And you know, with the greatest respect to them, they're not always equipped with the vocabulary, the language, like the deeper understanding of that subject. It's building up that relationship, isn't it, because I think also in the past, I know that if in some classes that I've had my SEN children, I don't feel like I've known them very well because the teaching assistant will take them out.	Annie describes a refocussing upon her own role and away from TA deployment. Annie describes moving away from a time when she didn't know SEN children as well as she could.

Analytic memos:

The effects of peer grouping could be seen from the reviews as something the LS group had focussed on.

The group focused on the work to support vocabulary, both through prediction, visuals and pre-teaching. This was visibly impactful on the children's motivation. There is a theme around the benefit of pre-teaching upon Sam.

Pre-teaching was effective at familiarising vocabulary. However, the children needed more support with metacognition and task specific skills such as scanning. This was a barrier identified. Pre-teaching is described as a 'non-negotiable'. They now use it across the curriculum

Motivation can be identified as a theme of this LS. The importance of supporting motivation to help children with reading difficulties is raised by the teachers.

Annie focuses on the importance of the class teacher and her own role in the learning of children with reading difficulties and focusing on the individual learning of

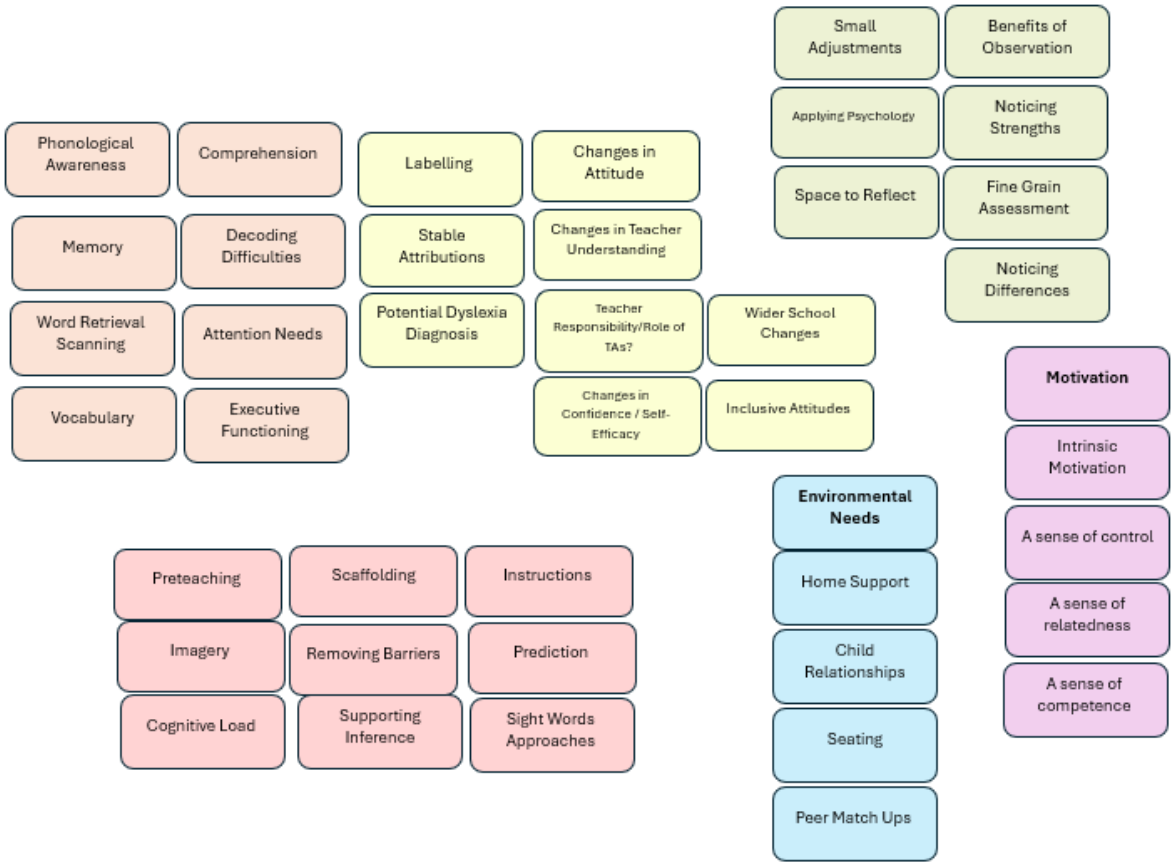
Appendix X – Phase Two Thematic Analysis

Sample of Codebook developed:

	Self-Efficacy	And like it's just it's I suppose it's just a case of finding a different ways in, to overcome their barrier, and you know, the things that we did during the lesson study was just like, I mean, I mean I'm an experienced teacher, but gosh, you know, it was almost like, well, why didn't I think of that. **Annie.** 100% agree, but that sentiment, I think if you've got high-quality teaching then that is going to support everyone, isn't it? But and children with quite a lot of difficulties. **Charlotte.** I suppose pre-teaching is has sometimes been seen as an intervention, but I've I sort of use it more as a part quality first teaching. **Annie.** I think I've been made aware of new interventions that that we could do. **Lily.**
	Stable Attributions	it is it just one of those things like they can't spell you know they can't that's always sort of saying they're never going to be able to. **Rebecca.** It's helped me to sort of see beyond the initial sort of: they struggle to read. **Roy.**
LS and change	**Sharing Psychology**	Trying to research and watch some training of that and understanding that intrinsic motivation is kind of made me think again about, you know, those poor readers that coming into Year 5 have been struggling with reading for a long time. **Charlotte.** And I think it's that confidence to sort of that you know that they've got the, what's that word that you said, you know, where they got the control. So if they want you to take over and then also, then they can then have it back Rebecca,

	Effects of Preteaching / Prereading	Hannah benefited in a different way from the prereading. She knew the text; memory supported her. Not having to decode helped her self-esteem. Both joined in well with the echo reading. **Rob H.** So there are other teachers who use pre-teach, but I think more on a planned intervention basis. So they might have to spelling intervention or something like that. Whereas I think I've been, as I say, a bit more generic about it in terms of reacting to certain things and the guided reading; that's been a non-negotiable anyway like I said, but we're trying to sort of pre-teach most of the core subjects. **Annie.** I found it's been more generic, so I've been able to use it if we've been more reactive, I think rather than proactive. **Annie.** Guess sorry, going back to both of them, something that has worked for both of them is that pre-teach hasn't it and so we are absolutely making sure that when we're on a new text **Charlotte.** Reinforcing the routines – suggest that the pre=read can be something to support. **Review Meeting. School D.**
	Generalised Changes	It seems that how Lily has adapted how she teaches and how she looks to teach reading or support reading within the school and within her classroom. It has definitely impacted on how myself and year four; because there were individuals that when they were picked; I thought well, there's similar children that present similarly in my class. **Roy.**
	Use of Imagery	Now I'll always try and put an image in or if there's a word mat for spellings, I'll put the picture next to the word as well. **Rebecca.** How can we find those structures to support their engagement? I'm using visuals to support alongside the readers, because you often think when you get to a certain age you want visuals to be lessened in the books. **Roy.**

Stage 3 of Braun and Clark, (2006) – Initial Themes

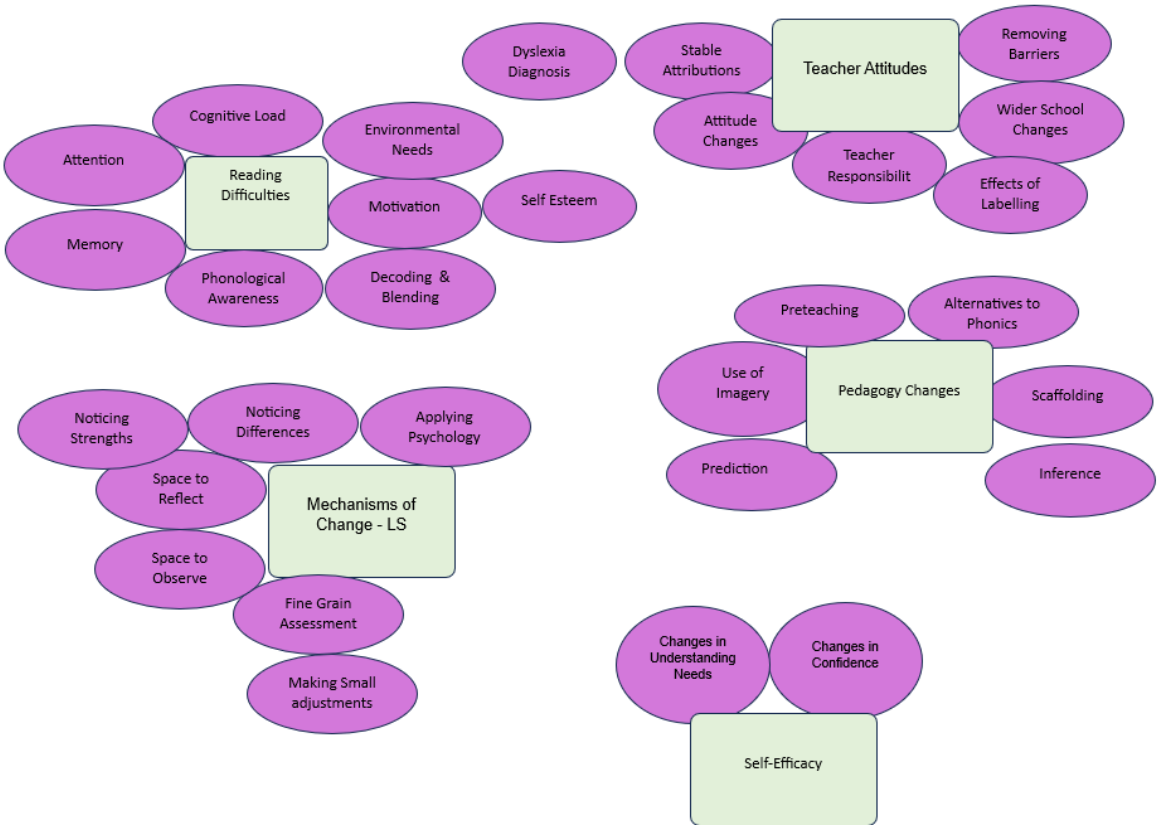


Stage 3. Organising Codes

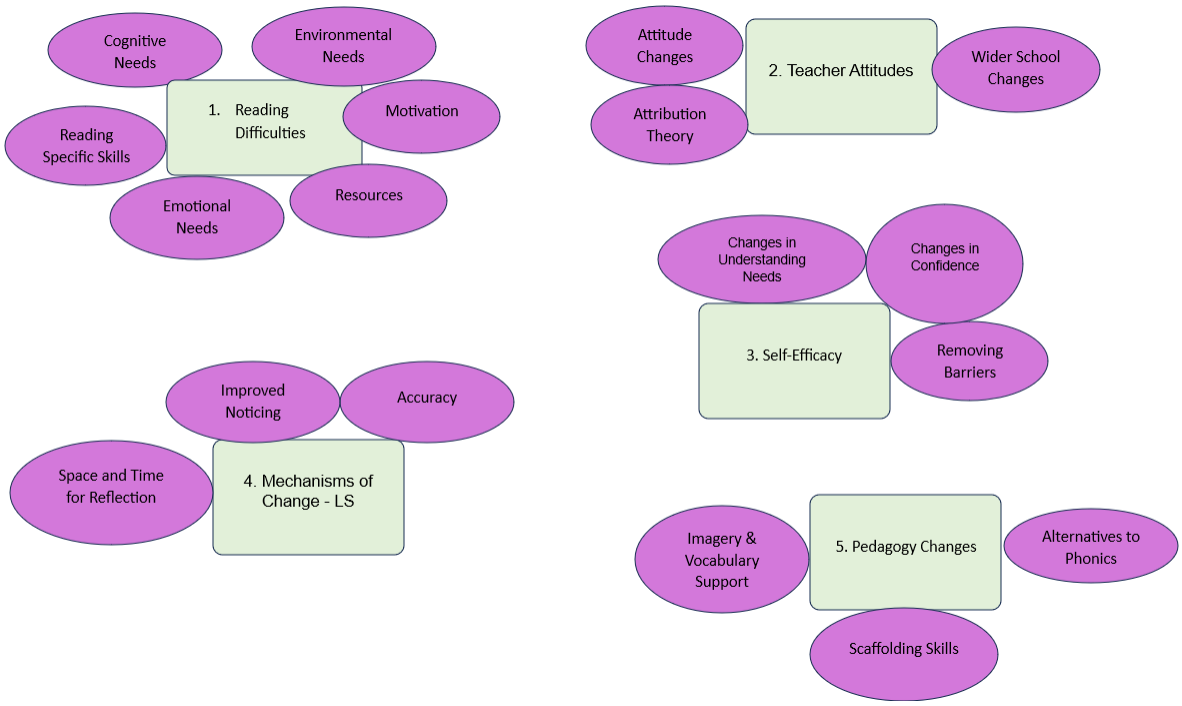
Theme 1: Child Needs *Codes:* Motivation Needs Attention Needs Processing Memory Executive Functioning Cognitive Load Environmental Needs	**Theme 2: Teacher Changes** *Codes:* Attitude Changes Changes in Understanding/Awareness of Barriers? Shifts in Responsibility Wider School Changes Inclusive Attitudes Self-Efficacy
Theme 3: Understand of Reading Difficulties *Codes:* Phonological Awareness Decoding/Blending Difficulties Comprehension Attention Needs/Executive Functioning	**Theme 4: Impacts of LS** *Codes:* Making Small Adjustments Applying Psychology Space to Reflect Fine Grain Assessment Noticing Difference Noticing Strengths Benefits of Observation
Theme 5: Teachers Attitudes *Codes:* Effects of Labelling/Dyslexia Diagnosis Stable Attributions Changes in Attitudes/Understanding Teacher Responsibility Wider School Changes	**Theme 6: Pedagogy:** Preteaching/Prereading Scaffolding Use of Imagery Prediction Alternatives to Phonics Supporting Inference.

Stage 4 of Thematic Analysis. Developing and Reviewing Themes.

A thematic map that represents themes following stage 4.

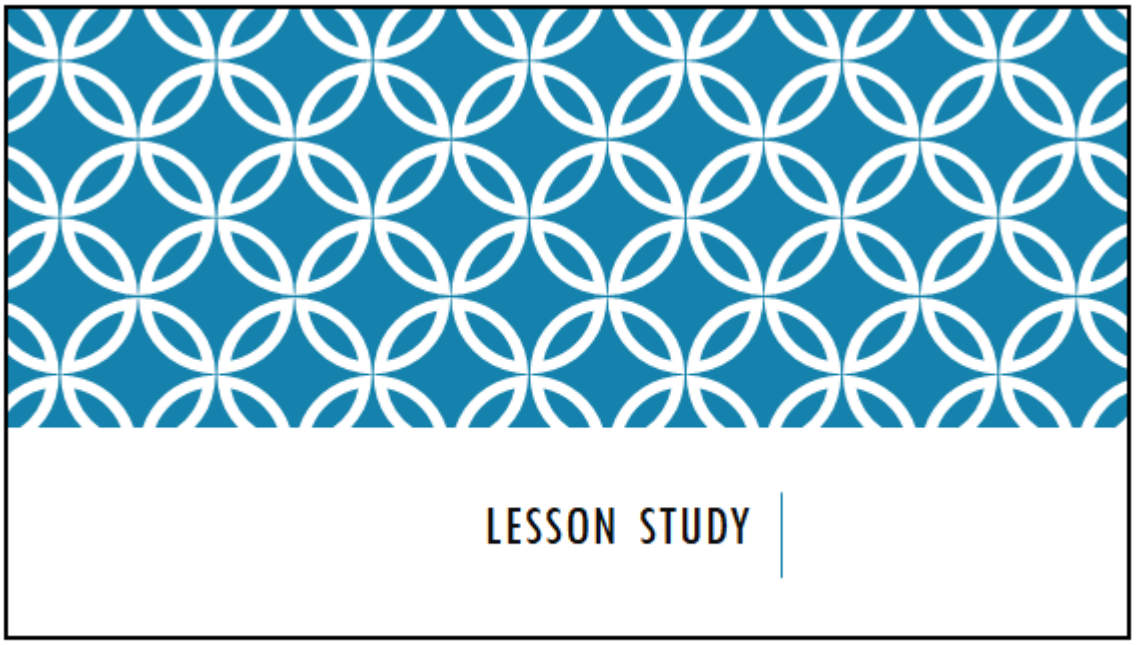


Stage 5 of Thematic Analysis. Naming Themes



Appendix Y– PowerPoint Developed Showing Impact of LS for School A

This PPT was developed by Charlotte & Rebecca in School A, following completion of LS.



1

KEY PRINCIPLES

Before the lesson.

Planning meeting as a team.

What do we think we know?

What do we want to find out?

What do we think will work?

Pupil voice.

During the lesson.

One person delivers the lesson.

Two or more observe the children closely.

Keep the key questions in front of you.

Notice them at each point. How do they respond?

After the lesson

Meet to discuss observations of the children.

What appeared to work?

How did the children respond to what we thought would work?

Pupil voice.

Plan to repeat the study at least once.

WHAT ARE THE BARRIERS? WHAT DO YOU THINK WILL WORK?

Reading ability (to decode words.)

Reading speed and fluency.

Text tracking

The above skills prevented comprehension of the text – we thought that comprehension was otherwise almost in line with age expectation.

Overwhelm – being faced with too much.

Motivation (for Chris).

Writing – recording ideas.

Environment? Partner. Seating position.

Re-reading. Teacher reading and going over something more than once.

Reducing text on the page. (In our lesson asking them to look at one part rather than the whole poem).

Modelling – thinking aloud while teaching.

Scribing answers. Removing what we thought was a main barrier.

Equipment – reading rulers and overlays.

Giving time to work in partners before working independently.

3

WHAT DID WE FIND?

THAT THERE WERE DIFFERENT THINGS WHICH WORKED BUT A LOT OF UNIVERSALLY BENEFICIAL THINGS.

Chris

Difficulties more with executive functioning, attention and motivation.

Whole word reader. Needs to re-read familiar texts and to read lots to increase fluency and confidence.

Needs support with organising equipment, what to do first, getting started.

Benefits from an adult re-focusing him and starting tasks.

Good picture and video memory. Images work better for new vocabulary.

Pre-read gave greater confidence and much greater motivation towards the lesson.

Ellie

Strong motivation and desire to achieve.

Cognitive load needs to be considered for her.

Uses phonic strategies, but stuck at segmenting stage. Also needs to re-read familiar texts to build fluency.

Writing / recording is a major barrier to learning. Using a scribe and using alternative recording such as circling, joining, highlighting etc enabled her to achieve and improved confidence.

UNIVERSAL DISCOVERIES

Children of all abilities found the read aloud fluency section difficult and off-putting. We now do this as a 'read in your head' activity and target specific children to read it aloud.

Images for new vocabulary helped everyone.

Pre-teach appeared to improve attainment. But mostly, it improved motivation and confidence. Children began tasks more quickly, worked more independently, thought they did better and enjoyed the lesson more.

Children with lower reading scores aren't always encountering age appropriate vocabulary outside the guided reading lesson. These children now read 'reading for pleasure books during quiet reading and at home' and I check in and read AR books with Tas or when we can read1:1.

5

WHEN WOULD IT BE USEFUL?

You are lacking confidence in supporting or meeting needs.

If children are making less than expected progress (less than you think and there isn't a clear explanation. E.g absence, known challenges)

If you feel like strategies aren't working or you are frequently changing approaches. E.g it works one day but not the next.

Parents see something different.

To gain information for SEND plans or EP consultation.