

UNDERSTANDING EDUCATIONAL PSYCHOLOGY
SUPPORT FOR INTERVENTION
IMPLEMENTATION IN SECONDARY SCHOOLS: A
CASE STUDY OF THE IMPLEMENTATION OF A
LEARNING-FOCUSSED TARGETED
INTERVENTION OF DIRECT INSTRUCTION FOR
READING.

By

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ABSTRACT

This thesis explores how an Educational Psychology Service EPS in England could optimise support to a secondary school in the implementation of a learning-focused intervention of Direct Instruction for reading. The goal was to explore organisational contexts and uncover change mechanisms by exploring determinants (facilitators and barriers); in order to develop a strategy to support implementation. An ethnographic approach was undertaken, with the author undertaking the role of participant observer and contributing to implementation strategy development. Participant observation, a reflexive log and participant semi-structured interviews captured data which was analysed using the Framework Method of Analysis (Ritchie & Spencer, 1994). The findings concurred with the current literature that organisational context is an important driving factor for implementing interventions. Mechanisms uncovered centred around planned feedback loops such as building trusting relationships within and between organisations, and significant actors creating capacity and resilience within the organisations to enable implementation activities and any necessary organisational change. The role of the Educational Psychologist was identified to be a central mechanism in this process. Key determinants included in-person implementation support for school from a team of Assistant Educational Psychologists and a web-based platform enabling instant data feedback. EPS strategy development was based upon responsiveness and the secondary school demonstrated embedded staff development practices enabling implementation such as peer coaching. A significant implication for the Educational Psychology Service is to consider the role of supporting leadership with decision-making regarding implementation and for Educational Psychologists to engage further in systemic practice such as systemic consultation.

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ACRONYMS

AEP	Assistant Educational Psychologist
AppEdChildPsyD	Applied Educational & Child Psychology Doctorate
CPD	Continuous Professional Development
CR	Critical Realism
CSR	Case Study Research
CSS	Case Study School
DI	Direct Instruction ("big" DI)
EAL	English as an Additional Language
EBP	Evidence-Based Practice
EEF	Education Endowment Fund
EP	Educational Psychologist
EPS	Educational Psychology Service
FMA	Framework Method of Analysis
IF	Implementation Facilitation
IS	Implementation Science
LA	Local Authority
LSA	Learning Support Assistant
OB	Organisational Behaviour
OC	Organisational Change

OD	Organisational Development
PBE	Practice-Based Evidence
PD	Professional Development
PEP	Principal Educational Psychologist
PRISM	Practical, Robust Implementation & Sustainability Model
RQ	Research Question
SATS	Standard Assessment Tests
SENDCO	Special Educational Needs and Disability Co-ordinator
SD	Strategy Development
SEP	Senior Educational Psychologist
SP	Systems Psychodynamics
SSM	Soft-Systems Methodology
TA	Teaching Assistant
TEP	Trainee Educational Psychologist
UoB	University of Birmingham
WBP	Web-Based Platform

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CHAPTER 1: INTRODUCTION

This chapter outlines the background to this thesis explaining my involvement with the intervention and implementation support package, the evolution of the implementation support over time, and the reasons this research captured my interest.

This study was undertaken as part of the Applied Educational and Child Psychology Doctorate (AppEdChildPsyD) at the University of Birmingham (UoB). To achieve competencies Trainee Educational Psychologists (TEPs) are placed with Local Authorities (LAs) to undertake work under supervision. The LA in which I was placed (home LA) along with a partner LA had previously rolled out a learning-focused intervention for Direct Instruction (DI) for reading, referred to as the “EP (Educational Psychologist) Recommended Approach for Reading” (see Appendix i).

The initial support package was designed for online viewing and included three hour-long webinar sessions: an explanation of the evidence base for DI, instructions on intervention delivery and guidance on scoring learners’ progress and set weekly targets based on that progress. The intervention materials could be downloaded and printed by staff.

In 2021 my home LA EPS set up an additional implementation support package, influenced by an evidence base including Chidley and Stringer’s (2020) commentary upon implementation. A team of eight Assistant Educational Psychologists (AEPs) was employed to provide in-person support to schools with a focus on implementing the intervention. A core value of the EPS was equity, reflecting the belief that literacy is a critical life skill. Thus, the aim was to provide a reading intervention that all

schools within the LA could access for free, so that every learner in the county could participate in this intervention if needed, to become a competent reader.

In 2023 a web-based platform (WBP) was developed by the home and partner LA for schools to use digitally, aiming to be as intuitive as possible, enabling school staff to input learner data so that both the EPS and school monitored learners' progress. The EPS aimed to up-scale this intervention to a broader range of schools including secondary schools.

I joined the home LA in September 2022 and became involved with this project due to my previous interest in reading, stemming from my experience teaching phonics as a primary school teacher. Additionally, I had a background in organisational psychology and a professional orientation toward understanding organisational change, which was also encouraged by my research supervisor who held a similar interest. During the 2022-3 academic year, the home EPS invited me to undertake research that would inform the EPS support package to secondary schools. An opportunity had presented itself because of the significant gap between primary and secondary schools, with notably fewer secondary schools selecting the intervention compared to primary schools.

Given my interest in organisational psychology, I was motivated to understand how EPs could contribute to this process in implementation activities. Additionally, I had a long-standing interest in ethnography, and was naturally inclined toward working with organisations to gain a deeper understanding of their dynamics. Therefore, these factors significantly influenced the philosophy of this thesis and the direction that was taken.

This thesis considers the literature in Chapter 2. The methodology undertaken, along with the theoretical context and rationale, are presented in Chapter 3, and Chapter 4 offers findings. Theoretical and research considerations, strengths, limitations, and implications are discussed in Chapter 5, and a conclusion provided in Chapter 6.

CHAPTER 2: LITERATURE REVIEW

2.1 Overview

This thesis explored how an EPS could optimise support to a secondary school's implementation of a learning-focussed targeted intervention of DI for reading. This chapter sets out the theoretical context for this thesis. The EPSs in this study designed an intervention for reading based on DI which was implemented in primary schools using a support package (Appendix i). This thesis aims to understand and improve support provided by the home EPS to a secondary school, using insights from ethnography to examine and enhance implementation processes.

To locate this study in relevant theoretical frameworks, this chapter draws upon the areas of implementation science (IS), implementation improvement, organisational psychology, and educational or school psychology (a term from the US). I explore how recent IS developments can inform educational psychology to enhance EPs' understanding of implementation support to bridge the so-called implementation gap (Hagermoser Sanetti & Collier-Meek, 2019) alongside improvement science and organisational psychology. Drawing upon experiential evidence to illustrate key mechanisms influencing implementation (Astbury & Leeuw, 2010; Ogden & Fixsen, 2014), the unique design of this study aimed to enable a deeper understanding of the interactions between two organisations - the EPS and the secondary school. The role of the EP and AEP is explored to illuminate the support an EPS could provide to enhance implementation. Finally, methodologies are considered, in order to inform this thesis design.

2.2 Narrative Review

A narrative review approach was selected due to the breadth of literature available (Byrne, 2016). The issues relevant to this study were too broad for systematic methods. Narrative reviews select information from numerous sources, synthesizing these to produce conclusions around a field, the strength being the ability to represent greater literature diversity (Nilsen, 2015). A comprehensive literature search was undertaken using the following process:

- Topics were mapped aiming to highlight overlooked issues and identify potential areas for new research (Boland et al., 2013). Initially, topic themes included reading taught by DI in secondary schools, IS, educational psychology and organisational psychology.
- Truncated phrases were used in search engines. Search engines interrogated were Web of Science, PsychInfo, EBSCO, Google Scholar and UoB Library Search engine. Titles and abstracts were reviewed for relevance. The following terms were searched for initially in abstract, title or text: 'Direct Instruction AND reading AND secondary school*'; 'Direct Instruction AND reading AND adolescents'; 'Direct Instruction AND reading AND intervention'; 'instructional psychology'; 'adolescent* AND views AND Direct Instruction'; 'school AND implementation'; 'implementation science'; 'barriers AND reading intervention*'; 'facilitator* AND barrier* AND Direct Instruction'; 'problem solving AND implementation AND educational psychology'; 'problem solving AND organisational psychology AND implementation AND intervention*'; 'role AND assistant educational psychologist'; 'role AND educational psychologist'; 'role AND educational psychology services'; 'role AND teaching assistants; mechanisms AND implementation'; and 'organisational change AND

educational psychology'. The articles suggested by the search engines were scanned by title initially seeking relevance, followed by abstract and full text.

- Over time the search evolved and recent articles citing seminal papers and journal platforms suggesting related articles were included. In addition, articles suggested by my academic supervisor were considered.
- Themes were recorded (main findings, areas of similarities and differences with other research, methodology, implications for educational psychology and identification of any gaps in research) to inform my critical analysis.

2.3 Implementation

This section introduces the language of implementation and provides a conceptual map of IS as a foundational area for the thesis. Conceptualised in various ways using a range of terms, often inter-changeably (Graham et al., 2006; Nilsen, 2015), implementation refers to the various aspects involved in delivery of interventions (Gulliford, 2024). Implementation is conceptualised as a continuum (Table 1) and is considered an active process and involves a deeper level of skill transfer than diffusion or dissemination activities.

Table 1 Terminology used in Implementation after Hagermoser Sanetti and Collier-Meek (2019) and Nilsen (2015)

Term	Conceptualisation Hagermoser Sanetti and Collier-Meek (2019, p. 35)	Conceptualisation Nilsen (2015)
Diffusion	“Letting it happen”	Diffusion as a passive activity.
Dissemination	“Helping it happen”	Dissemination as an active activity.
Implementation	“Making it happen”	Implementation as a process where new practices are actively used and integrated.

Described as “methods to promote the systematic uptake of research findings and other evidence-based practices into routine practice... to improve the quality and effectiveness of... services” (Eccles & Mittman, 2006, p. 1), IS encapsulates a systemic view of organisational behaviour (OB) (Eccles & Mittman, 2006) requiring systematic efforts (Tinkle et al., 2013). This is consistent with EPS implementation support conceptualised in this thesis.

2.3.1 The Implementation Gap

This study explored how an EPS could optimise support to assist a secondary school with implementation of an intervention and aimed to bridge the gap between intervention delivery and embedding it in practice. The lack of success in transferring interventions into practice, or *implementation gap*, is well documented in education (Hagermoser Sanetti & Collier-Meek, 2019; Long et al., 2016). This is under-researched, affecting student outcomes (Forman et al., 2013; Hagermoser Sanetti & Collier-Meek, 2019). Research has called for methods to optimise intervention adoption, particularly at an organisational level (Proctor et al., 2013).

Implementation activities have been separated into two types (Fixsen et al., 2013):

- Intervention level activities focus on delivery (e.g. fidelity).
- Implementation level activities focus upon organisational actions resulting in effective implementation (Forman et al., 2013).

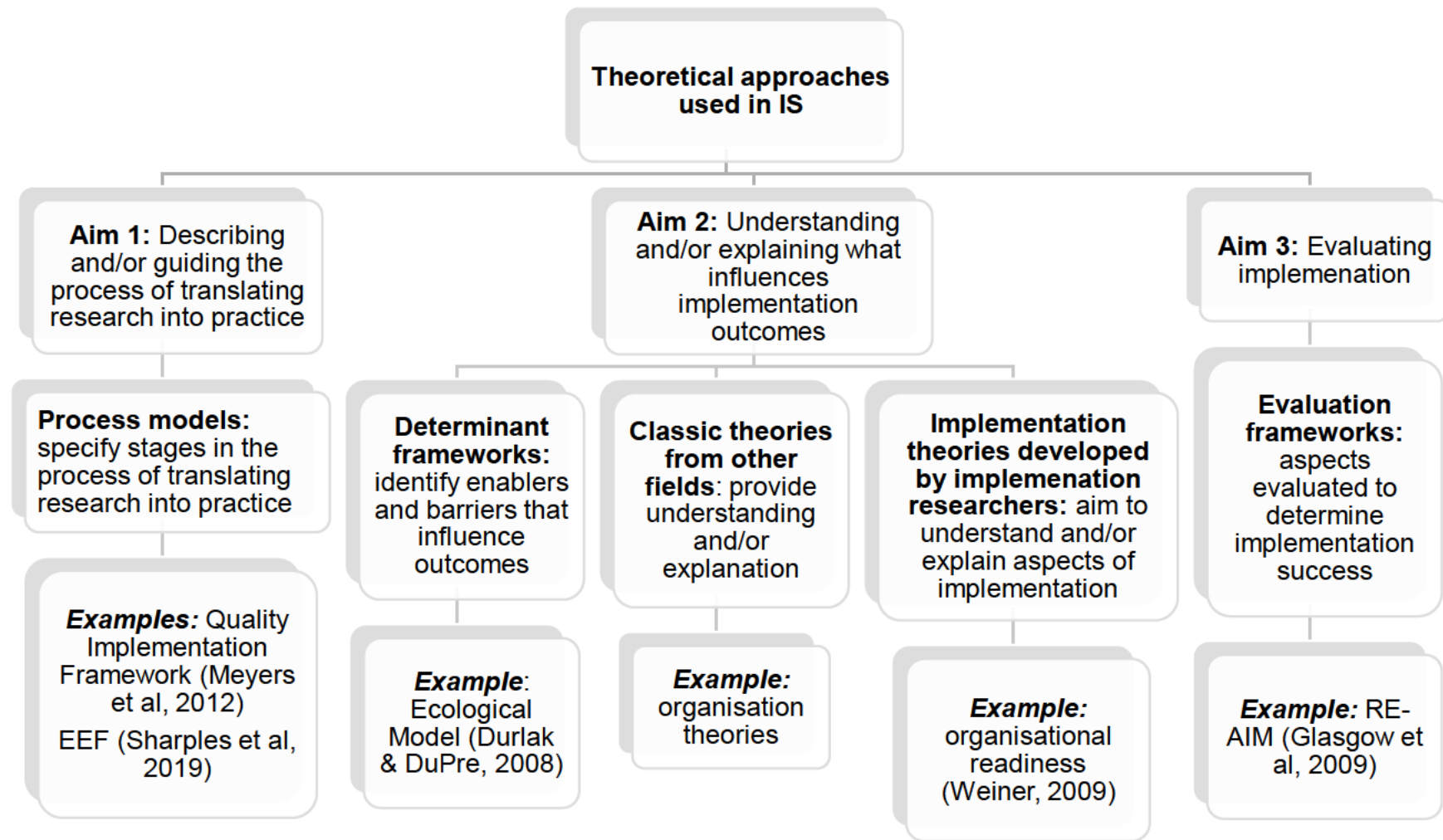
This thesis explores the latter but encapsulates elements of intervention level activities because they are integral to implementation. The field of IS is now explored.

2.3.2 The Field of IS

There are numerous theories, models and frameworks in IS (Nilsen, 2015), researched using eclectic combination of approaches (Rycroft-Malone & Bucknall, 2010). Used interchangeably (Rycroft-Malone & Bucknall, 2010), the terms have three distinct overarching aims (Nilsen, 2015), categorised in Figure 1. This thesis drew from several approaches exploring optimising implementation. Specifically, determinants (facilitators and barriers), classical theories (such as organisational

climate), implementation theories (such as organisational readiness), and process exploration (the setting up and maintenance phases) discussed in section 2.3.3, were considered. Here, aims One and Two (Figure 1) were relevant.

Figure 1 The Three Aims of Approaches in IS after Nilsen (2015, pp. 3-4)



2.3.3 The Process of Translating Research into Practice

Recent research has emphasized the importance of process models which describe and guide the implementation process, focussing on organisational context (Nilsen, 2015). These planned action models typically describe phases of implementation processes, enabling implementers to guide or cause change (Graham & Tetroe, 2009). These “how to” models, such as guidance developed by the Education Endowment Fund (EEF) (Sharples et al., 2019) emphasise implementation planning and management. However, these models are critiqued for their linear, step-wise processes, arguably idealistic (Nilsen, 2015). Some conceptualisations of implementation involve two stages: initial and maintenance/ sustainability stages (Fixsen et al., 2005). Increasing model development and complexity, the EEF identify four stages (explore, prepare, deliver, sustain) (Sharples et al., 2019). Moreover, described as a recursive process, Fixsen et al. (2009) identified six longitudinal stages, with the organisation moving between stages over time in response to events such as staff turnover. Implementation activities have been described as operating on multiple levels (Kilbourne et al., 2007) with numerous variables interacting across multiple tiers (Myers et al., 2011). Thus, implementation is rarely straightforward involving challenges at numerous levels of the system (Aldridge & McLure, 2023).

This thesis conceptualised implementation as a process in the simple form of two stages: initial uptake and maintenance (Fixsen et al., 2005) in order to better focus upon exploring interacting mechanisms between the organisations.

2.3.4 Understanding and Explaining Influences on Implementation: Barriers and Facilitators

Facilitators and barriers (determinants) of an intervention were one aspect of exploration in this thesis, with a view to the home EPS optimising support to the secondary school. A central theme in this research was building capacity in schools, enabling educators to select, adopt, adapt and maintain effective implementation practice (Truscott et al., 2012). Determinant frameworks may assist educators to better understand factors affecting implementation (Nilsen, 2015). This thesis aimed to better understand determinants when implementing DI (McMullen & Madelaine, 2014); alongside understanding how EPs may influence educators (Blase et al., 2012), thus influencing change (Chidley & Stringer, 2020; Fox, 2009).

Conceptualised as variables influencing implementation research (Durlak & Dupre, 2008), determinants may operate at multiple levels (macro, organisational and individual) (Damschroder et al., 2009), and function simultaneously (Fixsen et al., 2009; Long et al., 2016). Data gathered on determinants may be used for implementation strategy development (SD) (Krause et al., 2014; Lyon et al., 2019; Nilsen, 2015). However, determinant frameworks may overlook systemic processes when information gathering (Powell et al., 2017), resulting in a lack of holistic understanding (Nilsen, 2015). Determinant frameworks typically omit exploring interactions, relationships, or mechanisms (Powell et al., 2017), therefore overlook the change process (Hagermoser Sanetti & Collier-Meek, 2019). Thus, there is a need to understand how determinants interact and influence implementation as part of a wider process (Nilsen, 2015). This research explored how determinants contributed to implementation SD, shifting the focus from descriptive determinant

factors towards a holistic understanding of implementation. The conceptualisations of determinants in education are now explored.

2.3.5 Barriers: Factors Affecting Implementation.

Barriers are conceptualised as factors that hinder efforts, or are absent to facilitate (Durlak & Dupre, 2008; Long et al., 2016). Consistent with socioecological frameworks such as Feldstein and Glasgow (2008); Sanetti and Kratochwill (2009) suggested four over-arching areas conceptualising barriers that may affect implementation (Figure 2). This is significant because it demonstrates the multiple layers that influence implementation. However, Nilsen and Bernhardsson (2019); Williams et al. (2015) suggest the barriers are conflated with *context*.

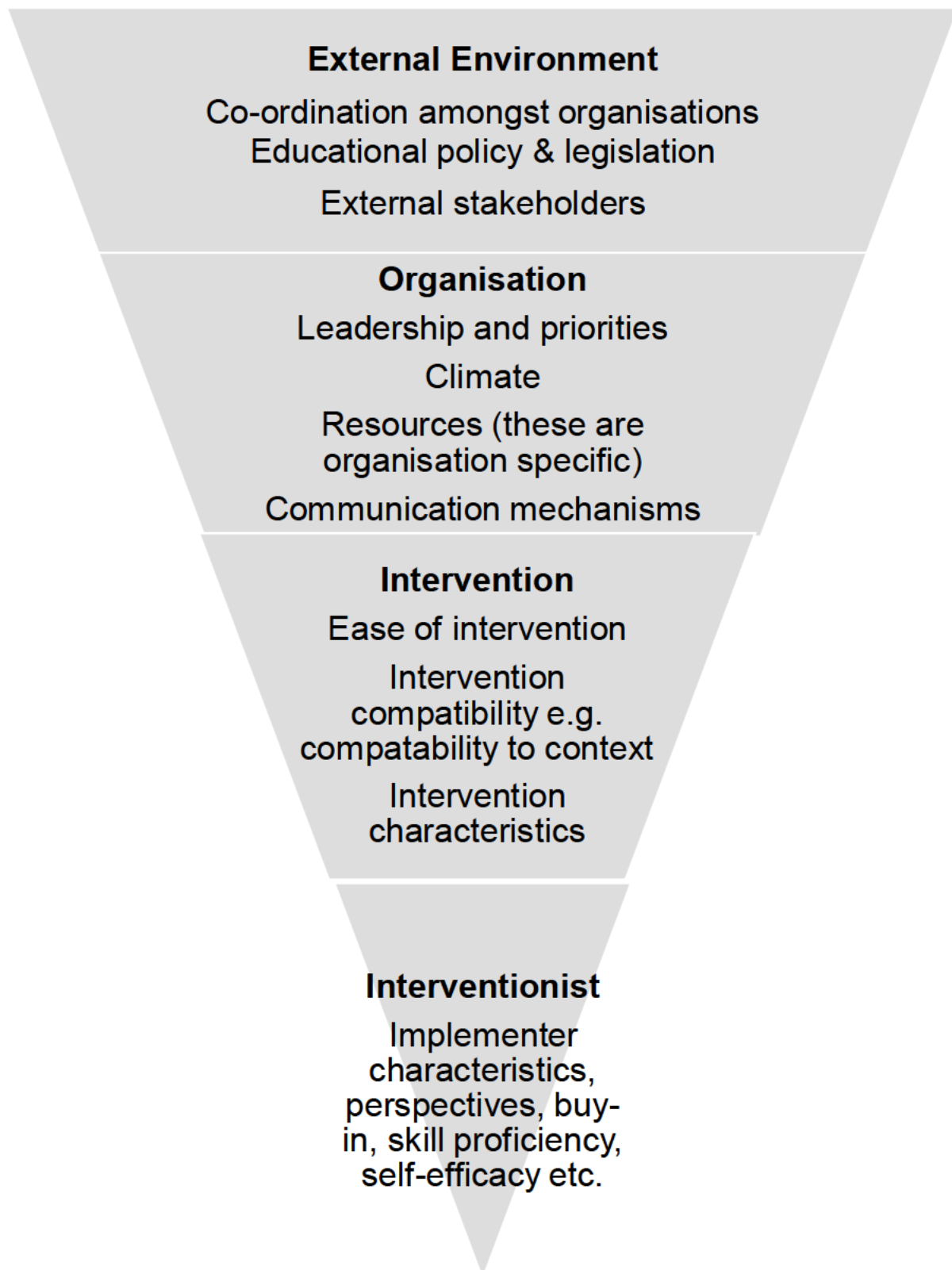
The focus on barriers in IS research has been challenged. Checkland et al. (2007) suggests barriers are explanations for limited success: “the language used betrays the normative assumptions that underlie this model: change is by definition good, and ‘barriers’ can and should be removed” (Checkland et al., 2007, p. 96). The EEF guidance on implementation for schools addressed this by normalising barriers as ‘setbacks’ and as an integral part of the implementation process (Sharples et al., 2019). Checkland et al. (2007) views implementation as an iterative change process, often *context* dependent. Thus, organisations may identify setbacks and act upon them differently.

Barriers are also dependent upon their perceived significance by actors in the implementation process (Nilsen, 2015). Conceptualising barriers as problematic is argued to undermine rational actions by participants (Checkland et al., 2007).

Therefore, understanding social relations that produce organisational contexts are more important to understand than barriers (Checkland et al., 2007).

For this thesis, the term barriers was utilised, on the understanding that decision-making was undertaken by caring actors driven by their values (Checkland et al., 2007), and determined by actors' perceptions of existence and importance of barriers (Nilsen, 2015). Therefore, the overarching areas in Figure 2 were drawn upon, alongside the understanding that barriers may be conceptualised as part of a process, related to organisational context.

Figure 2 Variables Affecting Implementation Fidelity After Sanetti and Kratochwill (2009)



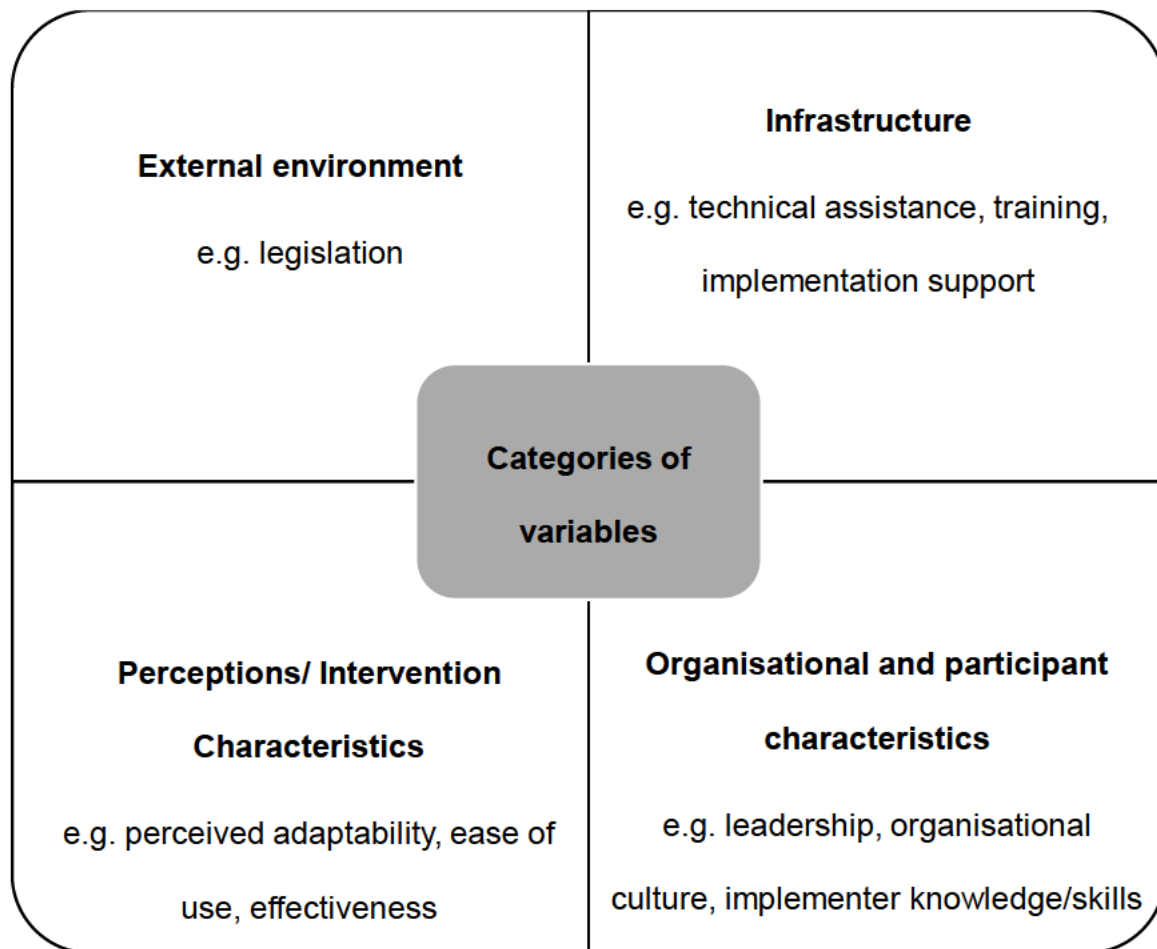
2.3.6 Facilitators: Factors Promoting Implementation Success

A determinant of practice alongside barriers, facilitators *enable* improvements (Flottorp et al., 2013). As for barriers, facilitators also may inform implementation strategies (Hagermoser Sanetti & Collier-Meek, 2019), although Long et al. (2016) queries the concept that they are the inverse of one another. Durlak and Dupre (2008) argue ecological frameworks (Bronfenbrenner, 1979) can be applied to implementation and numerous determinant frameworks span multiple ecological levels. An ecological system interconnects actors and patterns of behaviour over time (Meadows, 2008) and such frameworks are frequently situated in educational psychology (Turner & Bobbitt Nolen, 2015). For example, in systems thinking EPs encourage actors to consider multiple levels and factors (e.g. relationships, feedback loops, context) and facilitate problem solving to achieve optimal functioning (Riley et al., 2017).

Determinant frameworks have attempted to capture contextual factors. The Practical, Robust Implementation and Sustainability model (PRISM) (Feldstein & Glasgow, 2008) considers contextual factors that affect initial implementation and sustainability (Figure 3). Four categories of variables are suggested for implementation success in schools: external environment, infrastructure, intervention characteristics and organisational or participant characteristics (Woodbridge et al., 2014). PRISM was drawn upon in this research because of the contextual nature of the framework. Similar frameworks categorise factors that influence actors' behaviours during implementation (Nilsen, 2015), with overlap between these determinant frameworks (Damschroder et al., 2022; Flottorp et al., 2013). A commonality is a lack of clarity around the complex interactions between determinants and implementation (Hagermoser Sanetti & Collier-Meek, 2019). This again signals the need for research

that better understands mechanisms and context, discussed in section 2.3.6 (Lewis et al., 2022).

Figure 3 Categories of variable when promoting implementation success after Feldstein and Glasgow (2008)



2.3.7 Understanding Context

Context was significant in this research because the EPS aimed to better understand how an intervention was taken up and maintained in one secondary school, compared to a lack of initial uptake and maintenance in others.

Despite being key to determinant frameworks, (Nilsen, 2015), Strifler et al. (2018) suggests context is little understood, with low consensus on how to capture contextual influences upon implementation.

Context “is generally understood as the conditions or surroundings in which something exists or occurs” (Nilsen, 2015, p. 7) or “everything... that is not the intervention” (Ovretveit et al., 2011, p. 605). Underpinning ontological and epistemological variations of context have been noted and are suggested to be operationalised in two key narratives in realist evaluation (Greenhalgh & Manzano, 2022). These are:

- 1) Context is fixed in time and observable (such as employees or buildings) that can facilitate or hinder an intervention, with an assumption that these cause chain reactions.
- 2) Context is the architecture being dynamic and relation-based, operating at numerous levels of the social system, and emerging over time (Greenhalgh & Manzano, 2022).

The first narrative conceptualises context as static, and the second as a dynamic *force* that enables a response (Greenhalgh & Manzano, 2022) which is inextricably involved in the process mechanism (Maxwell, 2004). In organisational behaviour (OB), context is anything external to an individual (Cappelli & Sherer, 1991). In a scoping review, Nilsen and Bernhardsson (2019) found that very little research defined context, instead context was described indirectly through various categories of determinants. Research has evolved from focussing upon the passive (e.g. physical environment) to the dynamic (where active support occurs) (Nilsen & Bernhardsson, 2019) possibly representing a move from positivist to subjectivist

research philosophies in this area (Nilsen & Bernhardsson, 2019). This research conceptualised context as a dynamic force that interacts with mechanisms; drawing from a critical realist philosophy because of my understanding that context is socially construed (Greenhalgh & Manzano, 2022).

A further aspect of this research explored implementation strategies, presented in section 2.3.8.

2.3.8 Implementation Strategies

The aim of the EPS was to be responsive to schools, wishing to develop a bespoke offer of support to secondary schools. The case study school (CSS) in this research was the forerunner for the offer, aiding the EPS's development of the support package. Therefore, the focus here on implementation strategies is most relevant.

Implementation strategies have been identified and promoted in education (Fixsen et al., 2005; Hagermoser Sanetti & Collier-Meek, 2019; Joyce & Showers, 2002). The EEF user-guide for schools (Sharples et al., 2019) and the implementation framework for planning work in educational psychology (Chidley & Stringer, 2020) both informed the EPS offer. However, more insight into actual strategies was needed.

Critics have suggested that rather than being theory driven, implementation is commonly driven by “common sense” (or informal theories) or relies upon research promoting isolated strategies (Nilsen, 2015, p. 9). Implementation strategies are described as “methods or techniques use to enhance the adoption, implementation and sustainability of [an intervention] or practice” (Proctor et al., 2013, p. 2). Leeman et al. (2017) suggests, however, that the single term ‘implementation strategies’ is

flawed, impeding synthesis and advancement of knowledge. Proctor et al. (2013) calls for definitional consistency alongside better descriptions of explicit actions (Hagermoser Sanetti & Collier-Meek, 2019), of strategy justifications, of the role of actors involved and strategy identification when support is delivered (Proctor et al., 2013).

Leeman et al. (2017) developed a framework for strategies which defines the role of actors, linking actors to the level the implementation strategy targets:

- *delivery systems* (individual/ team/ system that adopts and integrates intervention into practice); and
- *support systems* (individual/ team/ system that build capacity to adopt and integrate the intervention).

This expands upon roles identified in previous IS research:

- *purveyor* (individual/ group who focus on dissemination with the goals of implementing with fidelity); and
- *intermediary* (individual/ organisation that has a variety of functions e.g. building capacity in a system to implement and sustain interventions) (Franks & Bory, 2015).

In an educational psychology context, the critical role of actors and their actions could be considered facilitating strategies as outlined by Franks and Bory (2015):

- consultation practices (Gutkin & Curtis, 1999) with organisations,
- development of best practice,
- improvement and quality assurance,
- process and outcome evaluation,

- coaching and training, and
- policy and system development.

This is most relevant to this thesis because the roles of various actors are explored and integral in the research design.

Recent research has focused on systems thinking which explores *improvements* in the context of change Riley et al. (2017). By researching systems, implementation can be viewed holistically, exploring relationships and power dynamics. Suitable research designs may include participatory designs that use data from feedback loops (Riley et al., 2017). Thus, systems thinking enables educators to focus on context and optimising interventions (Chambers et al., 2013). This concurs with conceptualisations in this research and the EP role (section 2.5.2).

Nilsen et al. (2022) suggests IS and improvement science should be used in tandem. There is no specific definition of improvement science. Often referred to as ‘what works’, the aim is for improvement to be founded upon evidence *and* best practice (The Health Foundation, 2011). The core difference between the two terms is the broad aim of IS concerns *generalisation*, whereas the broad aim for improvement science is a *practical application of knowledge for local improvement* (Nilsen et al., 2022). IS research is commonly based upon push factors (Leeman et al., 2017) where organisations are pushed into their implementation, whereas pull models (organisations who have the capacity to select, adapt and implement according to local needs) build practice-level capacity (Flaspohler et al., 2008; Wilson et al., 2010).

Leeman et al. (2021) call for an improvement culture in organisations aligning with the aims of this research. The authors suggest that research and practice

partnerships can be enhanced by strengthening local ownership in implementation, thus building practice-level capacity by developing context-specific implementation strategies. This corresponds with the aims of this research: optimising PBE in a particular context. Therefore, it is important to explore how to identify changes and mechanisms of change which provide insight into the central feature of this thesis.

2.3.9 Mechanisms of Change

A benefit of exploring and uncovering mechanisms is a shared and accumulated knowledge that adds to the body of literature and is portable for other interventions (Astbury & Leeuw, 2010) which aligns with the aims of this research. However, Lewis et al. (2022) argue there is a critical gap in understanding mechanisms for change. Mechanisms are described as the introduction of opportunities and ideas to contexts in successful interventions (Pawson & Tilley, 1997) or the *response* generated by activities in implementation (Weiss, 1997). However, difficulties with terminology remains because of the wide range of conceptualisations in literature, often conflated with intervention activities and variables (Astbury & Leeuw, 2010). Inextricably linked with strategies and determinants, mechanisms have also been conceptualised as “how strategies work... mechanisms... will facilitate identifying the barriers and facilitators that specific strategies effectively address, and the conditions under which strategies work well, poorly or not at all. Implementation strategies... could be optimized by adding or strengthening components that activate mechanisms to influence key barriers while eliminating components that do not” (Lewis et al., 2022, p. 2).

This definition contextualises this research, complementing the aim of optimising implementation support by understanding the determinants relating to a particular intervention when implemented in a particular context. It is suggested there are three characteristics of change mechanisms (Astbury & Leeuw, 2010):

- 1) They are *inextricably linked to context* and work through actors involved in implementation (Astbury & Leeuw, 2010).
- 2) They are *hidden and difficult to identify* (Proctor et al., 2013), and therefore there is little evidence of their existence (Lewis et al., 2022).
- 3) They generate outcomes but can only be *inferred rather than observed* and operate at different layers of reality (Astbury & Leeuw, 2010).

Therefore, this research drew upon these characteristics and considered ways of researching mechanisms. Aside from evaluation research (Renmans, 2023), Astbury and Leeuw (2010) argue mechanisms are overlooked in implementation research, with concerns that research has focussed on linearity and positivist philosophies. Recent changes to the conceptualisation of implementation research has led to calls for alternative research methods (including the use of SSIs) to explore mechanisms, strategies, and barriers (Lewis et al., 2022). This is compatible with the aims of this research, i.e. the EPS sought to optimise their support offer to a secondary school with the aim of developing their support package for other secondary schools. In educational psychology, Ogden and Fixsen (2014, p. 5) refer to the hidden processes or change mechanisms that are essential to supporting sustainable interventions as “opening the black box” and call for further evidence regarding these mechanisms. Isolating individual relationships between determinants at multiple levels is not possible because the variables involve numerous actors and processes, thus a holistic systems approach to understanding mechanisms is needed (May et

al., 2016). Finally, there is a call for qualitative methods to explore mechanisms due to the scarcity of research in this area (Gulliford, 2023; Gulliford et al., 2021). This research contributes to the field of educational psychology through exploration of implementation mechanisms, strategies, context, and determinants through qualitative research.

2.3.10 Implications for IS and Educational Psychology Research

In summary, IS research is moving away from a focus of determinants alone to:

- exploring strategies that enhance adoption, implementation and sustainability (Lyon et al., 2019);
- understanding context (Nilsen & Bernhardsson, 2019); and
- exploring change mechanisms (Lewis et al., 2022).

This research reflected this recent conceptualisation of IS and improvement science and explored how an EPS optimised implementation support with a view to identifying potential mechanisms supporting change in the CSS.

Blase et al. (2012) suggested implementation-focussed agendas were growing in educational psychology, centring upon implementation and organisational change.

Literature indicates the need for EPs to guide the implementation process e.g. EPs suggesting the installation of structures to support implementation, including actors in the process (leadership, purveyor and driver roles) (Fixsen et al., 2009). EPs may provide combined training and coaching, and consideration of implementation teams (Blase et al., 2012). The call for addressing the early stages of planning have begun to be addressed (Chidley & Stringer, 2020; Sharples et al., 2019), consistent with the

literature from IS (Hagermoser Sanetti & Collier-Meek, 2019). However, when exploring recent implementation research in the educational psychology field, research predominantly explores evaluation (Killerby & Dunsmuir, 2018) and determinants, (Atkinson et al., 2014; Barrow & Thomas, 2022; Hagermoser Sanetti & Collier-Meek, 2019; Hoyne & Cunningham, 2019; Kincaid et al., 2007; Law & Woods, 2018; Long et al., 2016; Squires & Dunsmuir, 2011; Sundhu & Kittles, 2016) without the further move towards exploring mechanisms for implementation (Carpenter, 2021). In education-related IS there is a contemporary move towards enhancement of adoption or optimisation (Proctor et al., 2013), acknowledging school contexts are unique (Forman et al., 2013) with more diverse research methodologies exploring strategies (Bunger et al., 2017). Moreover, there is emerging research regarding exploration of mechanisms of change for the purpose of supporting implementation strategies (Lewis et al., 2022; Lewis, Klasnja, et al., 2018; Lewis, Puspitasari, et al., 2018; Williams, 2016). There is also a call to consider organisational context (May et al., 2016; Nilsen & Bernhardsson, 2019). An educationally-based suggestion to enhance implementation of interventions is to build the rich picture in schools (Hagermoser Sanetti & Collier-Meek, 2019), including exploration of mechanisms for change (Lyon et al., 2019). Educational research has responded to this shift by exploring mechanisms, such as:

- transfer of training (Chidley & Stringer, 2020; Fallon et al., 2018);
- planning (Chidley & Stringer, 2020; Sanetti et al., 2015; Sharples et al., 2019);
- exploring interactions between organisations (Kilbourne et al., 2007); and
- peer coaching (Joyce & Showers, 2002).

This research contributes to the emerging body of PBE. This literature review briefly explores organisational theories relevant to contextualising organisational change.

2.4 Organisational Behaviour (OB)

Theories of implementation draw from the fields of organisational change (OC) and OB (Nilsen, 2015). Recent interest has included theories concerning leadership and OC and their influence upon implementation (Nilsen, 2015). However, Nilsen (2015) critiques the of lack of a current implementation evidence base in education compared to other sectors. OB may contribute to better understanding enhancing implementation (Parumasur, 2012). This is relevant in this thesis where an organisation (home EPS) aimed to influence another organisation's implementation of an intervention.

The implementation gap is complex due to the number of implementation processes involved (Hagermoser Sanetti & Collier-Meek, 2019). Fixsen et al. (2013) argues that leadership is critical to the implementation process, including top-down (directive leadership) and bottom-up approaches (distributed leadership), and, combined with implementation support, contributes to OC (Ogden & Fixsen, 2014). Strike and Posner (1982) and Truscott et al. (2012) suggest that educator misperceptions may resist change efforts. Therefore, understanding underlying mechanisms can deepen EPs understanding of implementation processes which could assist them to help generate new teacher behaviours (Truscott et al., 2012).

In a real-world context, schools vary in their change processes and face different challenges (Hallinger & Heck, 2011). Nilsen and Bernhardsson (2019) suggest that the interaction between school context and organisational change is under-

researched. Aldridge and McLure (2023) argue that schools require differentiated supports to ensure their climate is ready for change, calling for research examining barriers, how school culture and staff perceptions impact upon change initiatives; to understand the essential factors that can facilitate and sustain effective implementation. Some determinants known in secondary schools are considered.

2.4.1 Complex Organisations

Described as complex organisations (Newman, 2020), schools are evolving (Hawkins & James, 2016) in response to growing responsibilities (Lazenby et al., 2022), centred in a political context of rapid educational change (Newman, 2020). Secondary school structures find the increasingly complex demands highly challenging, highlighting a potential need for OC, thought to be optimised through distributed leadership (Barnard, 2021). Further, secondary school structures are conceptualised as resistant to change (Barnard, 2022). Some of the ways in which organisations can respond to complexity and change is explored.

2.4.2 Organisational Change (OC) and Organisational Development (OD)

OC is described as the change in an organisation from one state to another, and can be planned or occur in response to environmental changes (Huczynski & Buchanan, 1991). OD is described as changing to a *desired* state (Waddell et al., 2019), being flexible and reversible and focusses on identifying problems and resulting in problem-solving processes (Cummings et al., 2019). Therefore, OD is *systemic improvement* which interacts with the wider environment (Cummings et al., 2019).

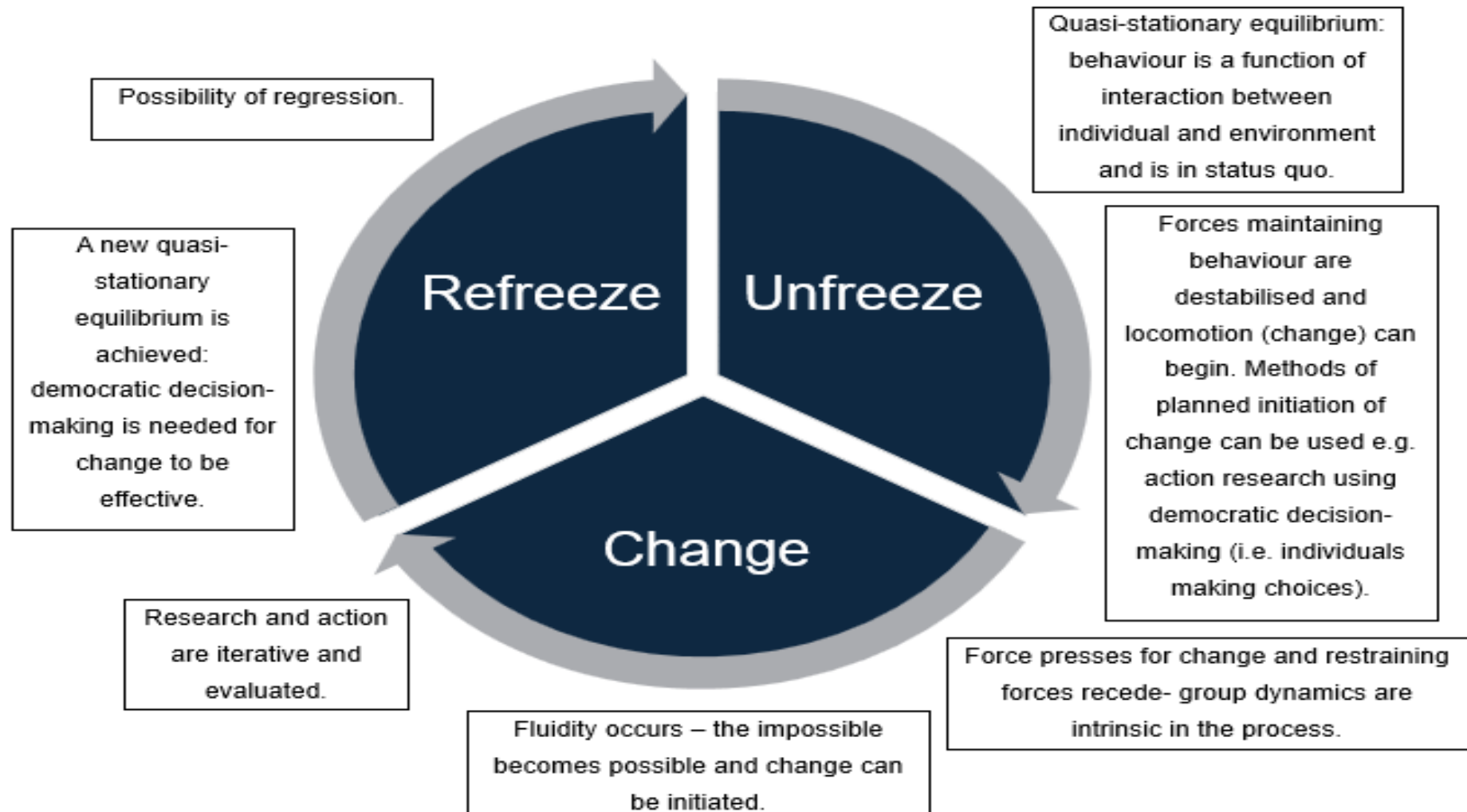
Conceptualised as a process of individual activities interacting with organisational opportunities that collectively change the organisation (Zhao & Goodman, 2019), capacity to change theory (Klarner et al., 2008) suggests that an organisations' capacity to change is dependent upon:

- organisational context;
- the change process (including leadership);
- and organisational learning (Zhao & Goodman, 2019).

The EP can draw upon this with a view to supporting systemic change (National College for Teaching and Leadership et al., 2016) in educational settings (Birch et al., 2024), therefore supporting OD (Apter, 2014).

Whilst some educational psychology implementation literature has focussed on training, development and individual responses (Chidley & Stringer, 2020), some systemic change literature appears to lean towards Lewin's (Lewin, 1947) model of change (Figure 4) (Apter, 2014; Hughes et al., 2018; Morgan, 2016), or both (Ruttledge, 2022). Conversely, other authors focus on systemic change without drawing from OC or organisational psychology (Pellegrini, 2009). However, given that the philosophical orientation of the EP role is argued to be that of problem solver (section 2.5.2), the underpinning change theory (Lewin, 1947) lends itself well to educational psychology research and practice (Apter, 2014), and is drawn upon in this research.

Figure 4 Lewin's Model of Organisational Change after Burnes (2020)



Secondary schools may strive for capacity through ‘unfreezing’ when implementing new developments (Barnard, 2022), with EPs potentially assisting with locomotion (Apter, 2014). Potential mechanisms of change are discussed in section 2.4.3.

2.4.3 Potential Mechanisms for Change

Roffey (2011, p. 193) proposes a definition of school ethos which relates to ‘the beliefs, aspirations, vision, and values that underpin “the way we do things around here”’. School culture has been further described as combining social values with organisational aims, affecting attitudes and movements of educators (Kalkan et al., 2020). A school structure and strong culture encapsulating common values and beliefs has been associated with sustainable development (Cameron, 2012), with quality of relationships described as fundamental (Kalkan et al., 2020). This is pertinent for the EP role in the endeavour to influence an implementation-receptive culture (Warren et al., 2006). Values, beliefs and behaviours are indicated as key foundations of school culture (Aslan et al., 2009) alongside leadership (Kalkan et al., 2020). In terms of EPS’s influencing school culture, Woods et al. (2013) suggested LA leaders were fundamental to successful implementation when committed to maintaining momentum and finding solutions. Additionally, important facilitators included committed LA staff, training, and adaptations to implementation strategy. Barriers were conceptualised as a lack of LA ownership, variability in implementation training sessions and a lack of resources. Therefore, Woods et al. (2013) suggest strategic working between LA and school organisations to influence school culture. This has implications for this thesis in terms of an EPS influencing a school.

2.5 Role of Educational Psychology in Implementation

2.5.1 *The role of EPS*

The role and structure of an EPS may contribute to implementation of interventions because of their decision-making role determining over-arching goals and commissioning. Lee and Woods (2017) identified how socio-political contexts impact upon EPS structures and operations, for example, in a commissioned traded model of purchasing. They suggest relatively less secondary school interest in EPSs. Since funding streams have had a direct impact upon decision-making (Birch et al., 2024), the EPS in this research actively prioritised secondary school engagement.

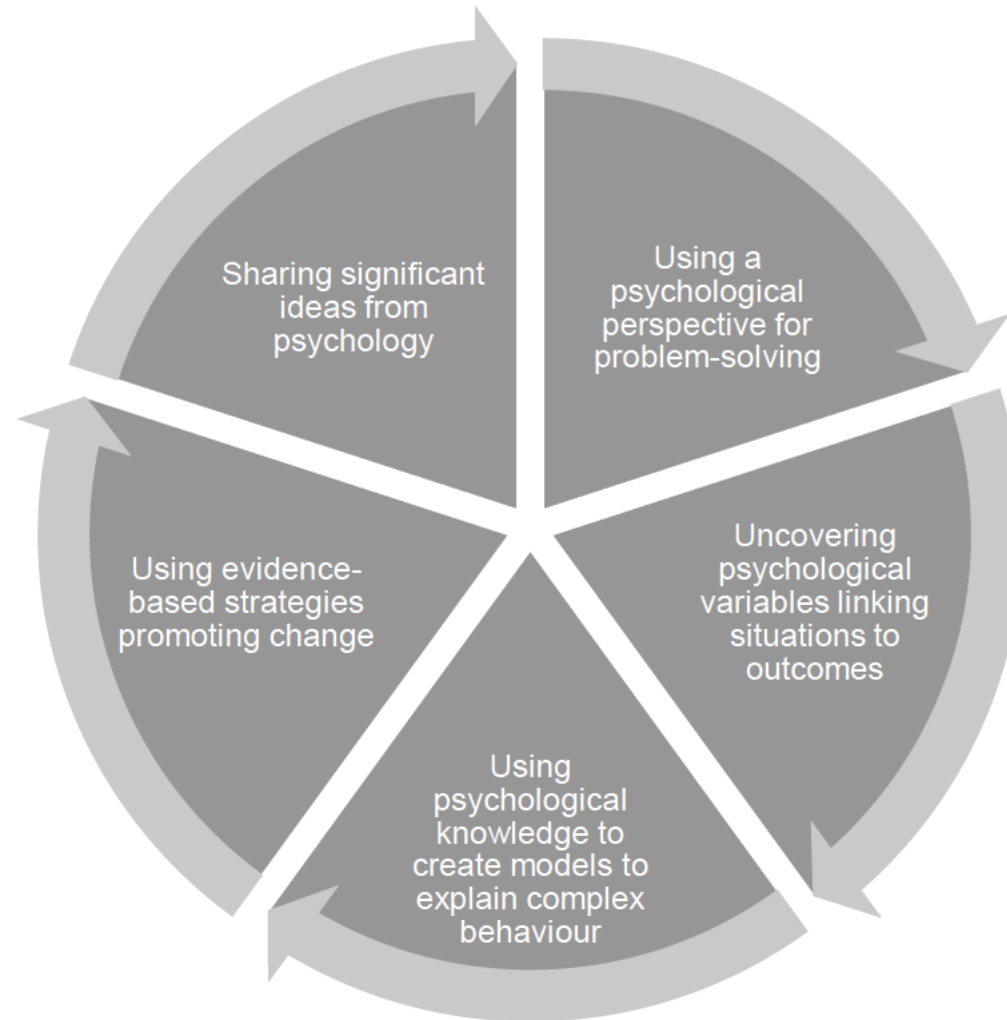
2.5.2 *The EP Role*

EPs provide a distinctive contribution to schools using psychology (Farrell et al., 2006) and promoting evidence-based practices is one of the identified five core activities (Figure 5) (Cameron, 2006). EPs address barriers (Shriberg et al., 2008) and actively listen to all those within a school system (Mercieca & Mercieca, 2022). There has been a well-established call for EPs to use *systemic* processes for planning, monitoring and evaluating interventions (Fox, 2009). This is significant for EPs to consider when research has indicated one third of CYP may not subsequently respond to interventions (Carr, 2000). Van Der Heyden (2018) queried why EPs continue to promote ineffective practice and viewed this as a failure to use evidence-based practice. The EP role should consider empirical evidence for approaches (Birch et al., 2024). This is relevant here because of the need for an evidence-base for the intervention design, alongside the need for PBE regarding implementation. Another perspective for the EP is to consider other variables affecting implementation.

A plethora of variables contribute to translating interventions into an environment (Kratochwill & Stoiber, 2000a), and uncontrollable organisational attributes are a feature of real-world contexts (Birch et al., 2024). Woolfson (2017) suggests EPs need to critically appraise real-world interventions and adapt them to ensure accessibility. An understanding of systemic contexts, including stakeholders involved, and evaluating outcomes is described as essential for the EP (Birch et al., 2024). However, implementing interventions with stakeholders can challenge the EP and individual EPs practice varies regarding implementation (Kratochwill & Stoiber, 2000a). This research captured context and strategies undertaken during an implementation activity conceptualised as successful. Further, understanding the mechanisms for implementation and sharing these with the field of educational psychology may be beneficial.

EPs frequently use training alone in implementation practice (Cameron, 2006), despite research indicating a limited value without additional support such as coaching (Chidley & Stringer, 2020). The “replication crisis [is]...arguably, one of educational psychology’s unspoken problems” (Chidley & Stringer, 2020, pp. 443-444). This refers to the repetition of EPs offering training in schools but subsequent lack of transfer into practice, with evidence suggesting training alone is unlikely to affect practice change or improved outcomes (Chidley & Stringer, 2020). The EPS in this research designed strategies including training and coaching alongside other support mechanisms and therefore this was an exploration of a field previously under-researched.

Figure 5 Five dimensions of the unique contribution of the EP after Cameron (2006)



2.5.3 The AEP Role

The AEP role is significant in this research because the EPS developed an implementation team consisting of a Senior EP (SEP) and several AEPs to support the intervention. There is no known current research regarding the role of AEPs and implementation strategies in educational psychology. Given the high demand for services and increase in EP workloads, alongside EP recruitment difficulties, the role of the AEP has emerged (Monsen et al., 2009). AEPs have been identified as working in diverse ways, and described as enhancing and extending the EPS's offer in response to the need to find alternatives for expansion of service delivery (Woodley-Hume & Woods, 2019). In particular the AEP has been identified as able to deliver recommended interventions (Woodley-Hume & Woods, 2019). However, there have been challenges to the successful deployment of AEPs (Woodley-Hume & Woods, 2019) including:

- under and over expectation (Thornley, 2000);
- the need for clear activities (Rezin & Tucker, 1998);
- the need for guidelines for supervisors (Woodruff & Wang, 2005);
- and lack of guidance from the BPS (Woodley-Hume & Woods, 2019).

Nevertheless, AEPs have been described as providing a valuable contribution by:

- increasing service delivery (Lee & Woods, 2017);
- providing a whole service contribution (including systemic work with schools) (Woodley-Hume & Woods, 2019), and
- bringing new knowledge, excitement and different ways of thinking (with service users reporting increased self-efficacy) (Woodley-Hume & Woods, 2019).

Collyer (2012) suggests there is a need for greater role transparency, function and remit, and clear structures for support, supervision and development when EPSs support AEPs. This thesis captured the role of the AEP in the context of operating within an implementation-focussed support team as part of the wider understanding of organisational context influencing and supporting a secondary school with their implementation.

2.5.4 Summary of Educational Psychology Research into Implementation

Implementation in educational psychology literature has focussed upon logistical issues and determinants (Sundhu & Kittles, 2016). Roberts and Norwich (2010) query the reason EPs appear to have had such limited impact upon intervention. Essentially, there has been a call to consider how EPS professionals can be supported to acquire new skills and draw upon other research e.g. from organisational psychology, in order to enhance skills in the area of implementation (Roberts & Norwich, 2010). The role of the EPS is relevant to this thesis, because the EPS provided enhanced implementation support for a specific intervention based upon DI. Since this study addresses the implementation of a DI-based intervention, DI implementation literature is now considered.

2.6 Direct Instruction

2.6.1 The Current Context for Reading

The implementation of this intervention was being studied, in order to support literacy outcomes for secondary-aged pupils, in a context where this is a concern. In England, 27% of students exited Key Stage 2 (Year 6) without meeting the expected

standard for reading, as assessed by Standard Assessment Tests (SATS) (Department for Education, 2023). Given the life-long risks posed by lower levels of literacy (National Literacy Trust, 2018), educators can valuably focus on how to improve reading in Key Stage 3 and beyond. In this study, an intervention based on DI (Castles et al., 2018) was selected. However, DI is the vehicle to enable study of intervention implementation processes in this research.

2.6.2 Key Features of Direct Instruction (DI)

An initial concept by Englemann in the 1960s and further developed by Englemann and Becker in the DISTAR (Direct Instruction System for Teaching Arithmetic and Reading) programmes in the US (Stockard et al., 2018), DI is based on the analysis of three knowledge systems exploring which teacher-student communications optimised content delivery, organisation, and how the environment influenced learner behaviour (Engelmann & Carnine, 1982). DI involves scripted lessons and is highly structured for sequenced progression, therefore including curricula and instruction (the what, and how, to teach). *Direct instruction* (or “little di”) refers to specific teacher behaviours, whereas DI refers to a specified curriculum (Mason & Otero, 2021).

In contrast to developmental approaches, DI is founded on the assumption that all learners can learn via well-designed instruction, rather than failure to learning being within-child, there is an error with instruction (Stockard et al., 2018). The essential elements of DI are presented in Table 2.

Table 2 Essential elements of DI after Stockard et al. (2018)

Essential Element	Description
Mastery	Pre-requisite skills (and prior knowledge) are mastered before new skills are learned.
Clear Instruction	Teaching is unambiguous.
Preparation	Examples are selected and designed to maximise efficiency of learning e.g. the wording of examples.
Sequencing	Examples are sequenced to ensure correct inference (errorless learning).
Progression	Concepts are broken down into the least number of increments possible. Tracked designs includes discrete skills taught in isolation and practised in materials that is at the optimal skill level.
Delivery	Fast-paced delivery to include consistent reinforcement e.g. daily checking and regular mastery assessment.

The aim of DI is effective and efficient instruction for students to learn the most in the least amount of time and highly structured guidance is provided to teachers (Stockard et al., 2018). However, the approach advocates for teachers to have their own personality and style (Stockard et al., 2018), in return teachers are hypothesized to find the approach rewarding as students make progress (Engelmann, 2014). Additionally, positive student experiences are hypothesized to improve their self-concept and self-esteem (Barbash, 2012; Engelmann, 2014). The evidence regarding secondary schools and implementation of DI is therefore now considered.

2.6.3 DI for Secondary Aged Students

Research considering implementation of DI interventions in secondary education in the UK is very sparse, with the majority of research being evaluative and undertaken in the US (Grossen, 2002a, 2002b; Grossen, 2004; Shippen et al., 2005) and Australia (Konza & Main, 2015; Main et al., 2020). Shippen et al. (2005) provide suggestions for adjustments to the intervention, with (Grossen, 2002a) and (Main et al., 2020) exploring collaborative coaching approaches. Key determinants reported are captured below.

2.6.4 The Barriers of Implementing DI

Implementation of DI in secondary schools reading programmes has been considered, key known barriers to implementation in the literature from the USA and Australia are identified in Table 3 Potential Barriers in Implementing DI Reading Programmes in Secondary Schools.

Table 3 Potential Barriers in Implementing DI Reading Programmes in Secondary Schools

Barrier	Sources
Student attendance.	Grossen (2004); Main et al. (2020)
Lack of teacher knowledge regarding reading instruction.	Main et al. (2020)
Student motivation and engagement.	Main et al. (2020)
Time and knowledge needed to develop materials.	Konza and Main (2015)

However, research provides very little data regarding context, strategies or mechanisms to influence and improve implementation, rather focussing upon evaluation and fidelity activities (Stockard et al., 2018).

2.6.5 The Facilitators of Implementing DI

In US and Australian secondary school DI research, the following facilitators have been identified, and grouped below for the purposes of this study, according to common characteristics (Table 4).

Table 4 Facilitators Identified in Research that Support DI Implementation

Factors for Success	Source
Intervention Design	
<ul style="list-style-type: none"> • Focus on decoding and fluency. • Phonic awareness and phonics to be taught explicitly. • Curricular materials designed around big ideas of the big accommodation model intervention (phonics skills in reading). 	<ul style="list-style-type: none"> • Shippen et al. (2005) • Main et al. (2020) • Grossen (2002a)
Pre-implementation Factors	
<ul style="list-style-type: none"> • Pre-implementation: an application process to begin a relationship between school and supporter [researcher], senior management commitment to change, teacher commitment and acceptance of change. 	<ul style="list-style-type: none"> • Grossen (2004)

Factors for Success	Research
Transfer of New Practice	
<ul style="list-style-type: none"> • TA perceptions that they were supported. • Opportunities for staff to observe DI (i.e. DI being modelled). • Team teaching with teachers who then used this knowledge to respond to student performance. 	<ul style="list-style-type: none"> • Main et al. (2020) • Grossen (2004); Main et al. (2020) • Grossen (2002a); Grossen (2004)

Factors for Success	Research
Training and Coaching	
<ul style="list-style-type: none"> • Training and support for TAs orientated towards success. • A coaching and mentoring model. • Success criteria for coaching: <ul style="list-style-type: none"> a) students recall 90% of previous teaching; b) students are 100% on task; c) 3:1 praise to correction ratio; d) students demonstrate pride and enjoyment. • Use of observation tools to measure delivery against content using a criteria and a co-ordinator responsible for monitoring fidelity and coaching staff. • In class external coaching [from external coach] with modelling of DI and teachers being responsive to students. • Lesson monitoring to ensure fidelity using a rubric. 	<ul style="list-style-type: none"> • (Blatchford et al., 2011; Giangreco, 2013) • Main et al. (2020); Shippen et al. (2005) • Grossen (2002a) • Main et al. (2020) • Grossen (2002a); Grossen (2004) • Grossen (2002a); Main et al. (2020)

<ul style="list-style-type: none"> • Technical assistance for staff meaning specialist instruction for staff teaching a specific DI programme. • High quality support for teachers. 	<ul style="list-style-type: none"> • Shippen et al. (2005) • Shippen et al. (2005)
Factors for Success	Research
Use of Data	
<ul style="list-style-type: none"> • Data: a focus on absolute performance of mastery that changes over time rather than comparisons with peers (normative data) with data shared with staff to inform adjustments for the correct instructional level for pupils. • Electronic progress monitoring. 	<ul style="list-style-type: none"> • Grossen (2002a); Main et al. (2020); Shippen et al. (2005) • Grossen (2002a)

Factors for Success	Research
Pupil Focus Factors	
<ul style="list-style-type: none"> Family engagement including an information session and report on progress (including attendance). 	<ul style="list-style-type: none"> Main et al. (2020)
<ul style="list-style-type: none"> A specialist support team for those CYP who want to achieve to include: attendance, setting up of a parent council, and rewards for student attendance and being on time. 	<ul style="list-style-type: none"> Grossen (2002a); Grossen (2004)
<ul style="list-style-type: none"> Student motivation. 	<ul style="list-style-type: none"> Shippen et al. (2005)
<ul style="list-style-type: none"> Improving implementation fidelity and engagement with DI in secondary settings. Modelling DI and exploring how staff problem-solve implementation issues. 	<ul style="list-style-type: none"> (Main et al., 2020) (Grossen, 2002a)

The studies above highlight the importance of training being supported by subsequent coaching. Research regarding successful implementation of instructional teaching interventions in secondary settings has suggested involving influential staff Joyce and Showers (2002), and involving TAs directly in planning, delivery and evaluation (Roberts & Norwich, 2010).

There is an absence of research in the UK regarding DI reading programmes and implementation, in secondary schools (McMullen & Madelaine, 2014).

This thesis therefore contributes to the knowledge base in terms of how an EPS may optimise implementing DI in a secondary setting in the UK and explores supporting mechanisms.

2.7 Rationale for this Research

This research aimed to explore how an EPS could optimise support to a secondary school in the implementation of a learning-focussed targeted intervention of DI for reading. The research aims were to gain a holistic, and deeper understanding of the interactions between two organisations and to illustrate key mechanisms involved in intervention implementation (Ogden & Fixsen, 2014).

Research typically overlooks implementation level activities in educational contexts (Lewis et al., 2016) and therefore this research responded to calls for exploring implementation at an organisational level (Proctor et al., 2013).

In educational psychology, there is a need to better understand implementation activities: how EPs can have greater impact (Roberts & Norwich, 2010), and influence key actors (Blase et al., 2012) to assist with organisational changes (Chidley & Stringer, 2020). Research into determinants alone may lead to descriptive

research, rather than providing the ‘so what’ and exploring *how* change may occur in implementation (Renmans, 2023). This research seeks to shift the focus from the description of determinants to the contextual factors that are involved in mechanism exploration.

There is a research gap in identifying mechanisms for change (Lewis et al., 2022). This research aims to consider the need to understand conditions for change by exploring context, and how change occurs by exploring mechanisms. Lewis et al. (2022) suggests alternative research methods to explore mechanisms, strategies and determinants, such as participatory research (Riley et al., 2017) that builds the rich picture (Hagermoser Sanetti & Collier-Meek, 2019). This study aimed to utilise participatory research methodology and capture the rich picture.

Overall, this research contributes to the body of literature exploring mechanisms for change between an EPS and secondary school illuminated by a targeted intervention of DI and bespoke implementation approach. The research questions are therefore presented (Section 2.8).

2.8 Research Questions (RQs)

The research questions were as follows:

RQ1: What are the predominant contextual features of each organisation involved in implementing a Direct Instruction learning-focused targeted intervention for reading and how can they contribute to optimising implementation?

RQ2: What are the predominant mechanisms associated with implementing a Direct Instruction learning-focused targeted intervention for reading and how can they contribute to optimising implementation?

RQ3: How can a secondary school be encouraged by an EPS to begin the uptake and implementation of a Direct Instruction learning-focused targeted intervention for reading?

- What are the key facilitators from the perspective of the EPS and the school?
- What are the barriers, and how can they be overcome, from the perspective of the EPS and the school?

RQ4: How can secondary schools be supported by an EPS to maintain a learning-focused targeted intervention of Direct Instruction for reading?

- What are the key facilitators from the perspective of the EPS and school?
- What are the barriers, and how could they be overcome from the perspective of the EPS and school?

RQ5: What are the predominant strategies employed by an EPS and mainstream secondary school when implementing a Direct Instruction learning-focused targeted intervention for reading and how can these contribute to optimising implementation?

The methodology section details the research design.

CHAPTER 3: METHODOLOGY

3.1 Introduction

This chapter outlines the philosophical position of this research and research design, method and analysis developed in response to the research questions (section 2.8). The chapter concludes with considerations regarding ethical dilemmas, and rigour and quality of this research.

3.2 Rationale

In response to the concerns outlined in Chapter 2, the EPS developed an intervention to support reading and an implementation package to support successful implementation in a secondary school. This study explored how the EPS aimed to bridge the gap between implementation and EP practice, building upon research and practice links.

3.2.1 *Research Aims*

Drawing on the rationale in Chapter 2, the purpose of this research was to explore:

- how an EPS engaged a secondary school with the uptake of a reading intervention based on DI; and
- how support to the school was optimised;

to aid intervention implementation and maintenance.

This knowledge added to the body of evidence for bridging the gap between an evidence base and implementation in practice.

3.3 Research Philosophy

Research philosophy considers the overarching beliefs and assumptions regarding knowledge development (Saunders et al., 2019e). These assumptions influence all aspects of this research, e.g., the research questions, methods utilised and interpretation of findings (Crotty, 1998). These theoretical perspectives provide context and guide a logical decision-making research process (Crotty, 1998). Reflecting and setting out the methodological process enables a coherent study (Saunders et al., 2019e). A process of reflexivity is recommended (May & Perry, 2011), i.e., in this case the awareness of my relationship with my philosophical position and how this translated to the research process and subsequent decision-making.

Philosophical assumptions have been conceptualised upon a continua and the four fundamentals (ontology, epistemology, axiology and methodology) (Lincoln & Guba, 1985) are presented.

3.3.1 *Ontological Position*

Ontology is the assumptions made about reality (Saunders et al., 2019e). There is a continua between the position of reality being real and objective (realism) and the position of meaning only created through humans (constructivism). A range of philosophies have been conceptualised over time in response to the need for real world research (Robson & McCartan, 2016). Bhaskar (2013) suggests Critical Realism (CR) is an alternative philosophy to interpretivism and positivism, believing in a real world *and* the possibility of multiple perspectives. Robson and McCartan (2016) suggest CR is an emancipatory approach that promotes social justice. CR

ontology conceptualises reality layered into three domains, nested within each other, and impractical to separate (Wikgren, 2005):

- The **empirical** domain encapsulates events experienced by participants, including the researcher;
- The **actual** domain encapsulates events and entities that actors may or may not be aware;
- The **real** domain encapsulates the causal mechanisms which produce the phenomena (Lauzier-Jobin et al., 2022).

CR ontology encapsulates layers of the world by exploring objective structures and causal mechanisms (Saunders et al., 2019e). Underlying structures and mechanisms can be revealed through experience of causing things to occur (Danermark et al., 2002). Accordingly, CR research provides explanations for organisational events through exploring social structures for underlying causes and mechanisms (May, 2011) and useful for social problem analysis conducive to suggesting solutions (Fletcher, 2017). Therefore, a CR ontology was chosen for this research because of the fit between philosophy and RQs.

3.3.2. Epistemological Position

Epistemology refers to the theory of knowledge and justification, and there are continua of epistemological positions (Audi, 2010). Epistemologically, CR draws from interpretivism and positivism to develop (Lawani, 2021) and *improve* knowledge (Lauzier-Jobin et al., 2022). In CR, subjective knowledge is gained from social actors, and contextualised by the researcher by exploring facilitators and barriers of independent structures supporting the actors (Sayer, 2010). Therefore the CR

researcher can be active in the production of this knowledge (social truth) Bhaskar (2008). In this research implementation practices of an EPS explored the perspectives of different actors and two different organisations. Consequently, CR lent itself to the epistemological position of this thesis because this research explored independent structures alongside social truth.

3.3.3 Rationale for Critical Realism

CR encapsulates interactions between human agency and social structures (Wikgren, 2005) and is therefore credible and useful (Nightingale & Cromby, 2002). Intensive study of a small number of cases is typical methodologically in CR (Lawani, 2021). Based upon retrodution, CR involves a process of observation, and theory development through causal mechanisms (Bygstad & Munkvold, 2011). Further, exploring relationships between social events enables a deeper understanding of an phenomena conducive to proposing strategic recommendations (Fletcher, 2017). The aim of this thesis was to explore how an EPS could support a secondary school to implement an intervention, uncovering causal mechanisms, and providing suggestions for optimising implementation practice. Therefore, CR was selected because of the coherence with the aims of this research.

3.3.4 Axiological Position

Axiology is the role of ethics and values of a researcher (Saunders et al., 2019). Reflexivity is key in CR because the researcher is involved in social transformation (Lauzier-Jobin et al., 2022). Therefore a researcher needs to communicate their values and objectives and understand their researcher position and any power

differentials within the research (Lauzier-Jobin et al., 2022). An interpretivist axiology fitted with my reflexive position, meaning my values were integral to the research process (Saunders et al., 2019e).

Therefore, my personal values statement is presented:

- The experience and interests of my supervisor also aligned with my interest in organisational psychology. Therefore, the importance of systemic practice influenced this research.
- My position as a TEP working within the EPS influenced this research.
- My interest in ethnography and interpretivism influenced my axiological position towards interpretivism.

3.3.5 Methodological Choice

CR research may be situated as close as possible to real-life settings (Robson & McCartan, 2016). An intensive study was selected to enable a deeper understanding of how the EPS could support a secondary school with implementation. The goal was to understand how mechanisms operated within a specific context (Maxwell, 2012). Therefore, a qualitative multi-method design was developed with two main phases.

- exploring the EPS implementation support package;
- exploring how the EPS optimised implementation support for a secondary school.

This was to promote triangulation of data to enable a deeper understanding (Denzin & Lincoln, 2005).

3.4 Research Design

3.4.1 Approach to Theory Development

CR is an appropriate underlying philosophy for abductive reasoning (Eriksson & Svensson, 2015). Abductive research uses rich data to explore phenomena with the goal of constructing a conceptual framework (Saunders et al., 2019e). An abductive approach to research was undertaken due to the fit with CR theory development (Lauzier-Jobin et al., 2022) driven by the RQs. Initially, a literature review was conducted undertaking a deductive approach, meaning, an abundance of sources enabled a hypothesis to be based upon existing theory. Following this, an abductive process was undertaken:

- **Step 1:** The initial phenomenon was explored through themes and patterns derived from the literature review.
- **Step 2:** Research generated ideas which were further explored in the literature. The logic of enquiry was to explore what was known in the research alongside themes located in literature.
- **Step 3:** This informed further exploration.

This iterative approach was consistent with real-life research in organisations (Saunders et al., 2019e).

3.5 Research Method Strategy

3.5.1 Case Study Research (CSR) Design

Following the literature review, a deconstruction of the support provided to secondary schools was required in order to explore the RQs and therefore CSR was considered due to its suggested flexibility and rigour (Baxter & Jack, 2008). CSR lends itself to

contextual research because it allows for phenomena to be revealed and understood through multiple perspectives (Baxter & Jack, 2008). CSR may fit a CR philosophical approach because of the inseparable and abstract nature of the CR domains which may be studied holistically in CSR (Yin, 2009).

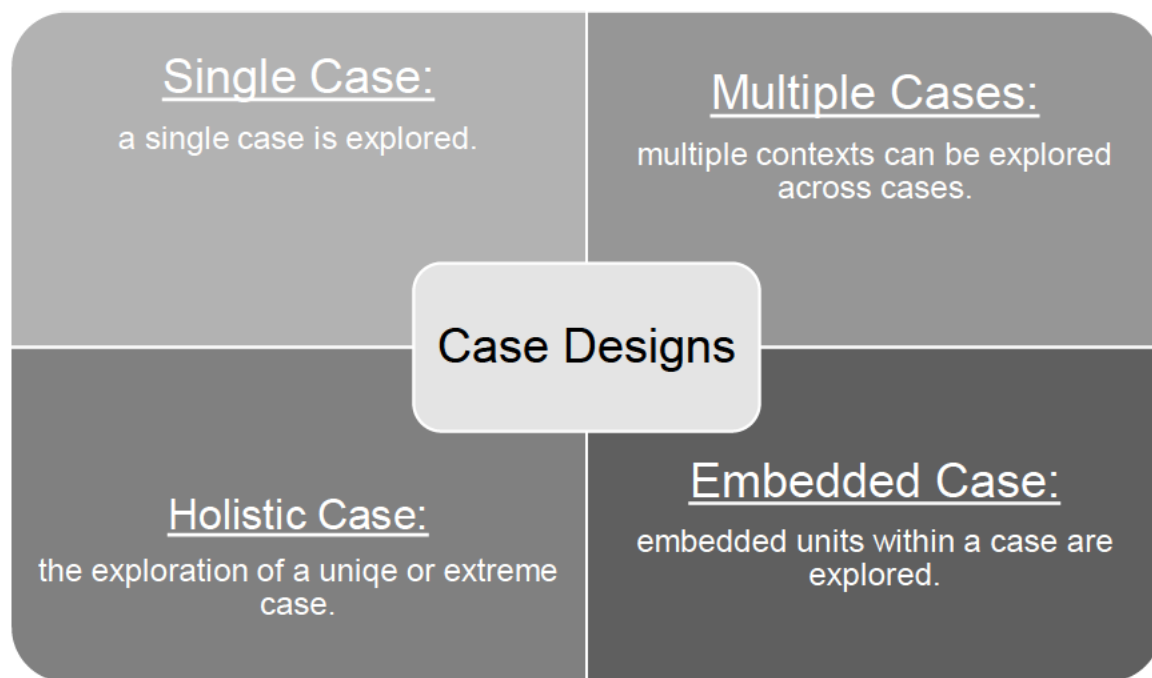
Yin (2018) highlights three CSR approaches and purposes:

- *descriptive* ('storytelling' a phenomenon);
- *exploratory* (used for interventions with no clear outcomes);
- *explanatory* (causal relationships are explored) (Tumele, 2015).

This research provided an *explanatory* account of the mechanisms involved in implementing an intervention with a view to providing recommendations. Yin (2018) also suggested CSR design dimensions (Figure 6). An essential part of the process for CSR is selection of the case (Flyvberg, 2011). Only one secondary school was known to have already successfully implemented and maintained the intervention, therefore, a holistic single-case design based upon a unique case was selected.

CSR design lends itself to studying organisations, gaining a deeper understanding of participants' thinking by the researcher being immersed in an organisation observing interactions and unconscious processes (Woodside, 2010). Therefore, the decision was made to immerse into the EPS organisation as a researcher observer-participant, undertaking a supportive role with the secondary school to better explore perceptions, problem-solving and enactments in both organisations and an ethnographic research approach was selected.

Figure 6 Case Study Design Dimensions after Yin (2018)



3.5.2 Ethnographic Research Approach

Described as ambiguous, there are numerous definitions of ethnography, with definition positions varying between a holistic methodological approach to a methodological strategy (Hammersley, 2018). Hammersley (2018) argued ethnography should be viewed as a method. However, Harrison (2018a) suggested ethnography required a definition providing distinction as a specific approach. Ethnography may be conceptualised as the *intentional engagement* of describing and interpreting cultural behaviour with the goal of understanding culture (ethnographic intent) (Wolcott, 1987). This includes exploration of behaviours and decision-making frameworks (Brannan et al., 2014) resonating with the 'thick description' (Geertz, 1973, p. 6) where layered description is essential to understanding culture. The purpose of ethnographic research is to study groups of

people and their interactions and therefore highly relevant to contemporary organisations (Saunders et al., 2019b).

In organisational ethnography, the researcher is involved in teamwork (Hammersley, 2018). Therefore, Harrison (2018a) suggested that ethnographic researchers require critical self-awareness (*ethnographic comportment*) with a focus on how power dynamics shape ethnographic interactions. The concepts of studying culture, contextualisation, and ethnographic comportment with a goal of seeking a thick description fitted with the direction of research that evolved from the literature review, research goals, CR philosophy and my axiological values. Thus, the positioning of ethnography as methodology was selected.

Harrison (2018a) suggested three primary ethnographic research methods: participant observation; writing field notes; ethnographic interviewing. This framework was utilised for designing the data collection (Table 5). The research was initially planned according to the support package offered by the home EPS in 2023-4 (Appendix i). However, in Autumn Term 2024 the EPS with a partner LA launched the intervention through a WBP which enabled school professionals to use electronic devices with learners to deliver DI and to record data directly into an online platform. The implementation support package changed, and this is captured in Table 6. The two most significant aspects were:

- a WBP was designed by the home LA with input from the SEP from the partner LA;
- a SEP from a partner LA became involved in implementation support decision-making and joining meetings.

The key stakeholders in implementation were the SEP and Principal Educational Psychologist (PEP) roles. I was invited to undertake an active role, for the purpose of feeding into stakeholders' development of the implementation support offer.

Table 5 Research Design and Data Capture

Design Feature	Data Capture
Participant Observation	<ul style="list-style-type: none"> • As a participant-observer I planned to undertake initial support to the CSS. • I was invited to attend monthly meetings with the SEP and AEPs to develop the evolving support package. • The SEP and I decided to undertake monthly reflective meetings to discuss the progress of the research.
Field Notes	<ul style="list-style-type: none"> • I planned a reflexive log informed by Mannay and Morgan (2015) and Vinjamuri et al. (2017) which provided a suggested structure and questions to reflect upon during the research process.
Participant Views	<ul style="list-style-type: none"> • I planned to gather participant and stakeholder views at the end of the project via individual semi-structured interviews (SSI). SSIs were selected because of the flexibility and opportunity for self-reflection (Blake et al., 2021). SSIs provide participants the opportunity to make experiential meaning whilst the interviewer can ask for elaboration or clarification (Kelly, 2010; Rubin & Rubin, 2005). The interview mode selected was one-to-one (Blake et al., 2021) to enhance trust with the researcher in terms of confidentiality.

Table 6 Year on Year Differences in Implementation Support Package

Implementation Support Package 2022-3	Implementation Support Package 2023-4
Three recorded webinars (of approximately 60 minutes each) that could be watched online. These outlined the rationale and research base for the intervention and how to undertake the approach by modelling DI using the materials. A link to download the materials was provided.	Monthly meetings between SEP and AEPs to develop the implementation support package and divide tasks.
AEPs set up initial meetings all schools who showed interest in the intervention.	A partner Local Authority became integral in the implementation support development and started to attend decision-making meetings with the home LA SEP.

Implementation Support Package 2022-3	Implementation Support Package 2023-4
AEPs offered a fidelity visit to all schools undertaking the intervention and used reflection and problem-solving to assist with any fidelity issues.	A WBP that included short (5-20 minute) webinars that could be watched online. These outlined the rationale and research base for the intervention and how to undertake the approach by modelling DI using the materials. The WBP enabled schools to enter learner's data and generated probes for individual learners (or groups) to practise each week. A report function enabled schools to view individual learners' progress.
	An email that was monitored daily by the AEP team, plus EPS Teams Chat where the SEP and AEPs could discuss issues.

Implementation Support Package 2022-3	Implementation Support Package 2023-4
	Monthly network meetings where the SEPs from the home and partner LA provided training/ information and gained feedback either face to face or via the chat function. One bespoke session for secondary schools was developed and undertaken.
	Bespoke secondary school package – AEPs contacted all secondary schools that had contacted the EPS regarding the approach.
	Bespoke secondary school package – AEPs to offer the secondary schools undertaking the intervention a support visit to assist with setting up and the offer of a subsequent fidelity visit.

3.5.3 Researcher Position

Initially, the research design involved an observer-participant role (primarily observation but participating as necessary), with me observing the AEPs interacting with schools thus capturing the support package. The initial ethics application reflected this stance but also included the foresight that I may become a participant during meetings. Conceptualised as improvisational (Malkki, 2007), ethnography enables researchers to respond to change (Koivunen, 2010) in response to ethnographic experience and information gained (Harrison, 2018b). This can include changes in both research position and methods (Harrison, 2018b). Given changes in the support package my observer-participant position changed to participant-observer (participating in the delivery with an observation focus alongside (Saunders et al., 2019e). This is reflected in Table 5.

There were both challenges and benefits of this new participant-observer position. In terms of benefits, I was able to authentically interact with participants and therefore I perceived enhanced validity in my reflections of participant behaviours and perspectives. I was also able to utilise my own knowledge around real problems which I perceived enhanced the rich picture. Challenges presented included the time-consuming nature of the researcher position. There was a need for me to have a good understanding of both DI and the implementation support package and I spent time with EPS staff ensuring that I could undertake a supporting role. Further, I perceived a lack of control over the research process, for example, attending meetings where new staff attended, and I needed to be mindful of my ethical position and ensuring that all ethical requirements and responsibilities were met in full. The change in position also necessitated a longer timeframe than anticipated.

3.5.4 Timeline for the Study

This research commenced during Autumn 2023 and spanned two terms. This timeline was directed by the nature of the research. Initially, this study had been planned to begin at the start of the Autumn Term but was delayed due to the new WBP version of the EP Recommended Approach to Literacy (Table 6). Participant interviews were delayed therefore to enable the embedding of the WBP and development of the bespoke implementation support package.

3.6 Data Collection

3.6.1 Case Selection

3.6.1.1. The Exemplary Case

The case selection for this research was multi-stage non-probability (Saunders et al., 2019d). The EPS in question was where I worked as a TEP; and had been implementing the focus intervention enhanced support. The EPS invited me to discuss this study: the RQs and design were developed in collaboration. The partner LA was selected on this basis also because of their interest and participation in the research. The CSS was again selected on a volunteer self-selection basis but as an exemplary case (Saunders et al., 2019d) as the only known secondary school to take up and implement the intervention. The demographic features of the CSS indicated that the setting caters for pupils aged 11-18 years of mixed gender and is a comparatively small secondary school. Previous Ofsted reports indicate that the majority of pupils are from White British backgrounds, the proportion of pupils from a minoritised ethnic background is average and the proportion of pupils who speak English as an additional language is above average. The proportion of pupils who have special educational needs and/or disabilities was similar to other secondary

schools nationally. Pupils entering the school were noted to have prior attainment below national average. The proportion of pupils supported by pupil premium is higher than typical nationally.

3.6.1.2 Participant Selection

Participants who had a significant role in the implementation of the intervention participated based on volunteer self-selection. Table 7 outlines participants by role.

Table 7 Participants

Organisation	Participant Role
EPS	<p>PEP, SEP, school-link EP and AEPs involved in the implementation support project were included. It was anticipated that there would be a change in personnel and those recruited into the roles were invited to participate if/when this occurred.</p> <p>The stakeholders for the project were the leaders of the EPS and home LA: the PEP for each LA and project leaders (SEPs) who were directly responsible for the intervention and implementation support package from the home and partner LA.</p>
Mainstream Secondary School	Head Teacher, Special Educational Needs and Disability Coordinator (SENDSCO), Deputy SENDSCO, Learning Support Assistant (LSA) Co-ordinator and staff who had implemented the intervention (likely to be Teaching Assistants (TAs)).
Partner LA	SEP who was involved with the decision making with the home LA SEP regarding the implementation support package.
Home LA	The link colleague for Web-Based Development who was involved in the design and implementation of the WBP.

3.6.1.3 Recruitment

Ethical approval was received for the following recruitment process plus ethical amendment. An amendment was undertaken to reflect the additional input from the partner LA (i.e. the same process included partner LA participants) (Appendix iii).

Table 8 Process for Recruitment

Organisation/ Participant	Recruitment Process
EPS (organisation)	<p>Initially, I invited the EPS leaders to an introductory meeting detailing the research. Following this LA participants were contacted directly via my LA email. Details were shared including:</p> <ul style="list-style-type: none"> • information sheet (Appendix iv), for the PEP/ SEP/ AEPs/ Web Developer • consent form for organisations (Appendix v) which will be given to the PEP and SEP • consent form for PEP, SEP, EPs, AEPs and Web Developer (Appendix vi), template for reflective questions (Appendix vii) and interview template (Appendix viii).

Organisation/ Participant	Recruitment Process
Case Study School	<p>In order to recruit a school:</p> <ul style="list-style-type: none"> • I discussed a suitable school with the SEP and AEPs who supported the intervention and link EP. • I approached the school SENDCO directly by email with a copy of the letters used for recruitment (Appendix ix for Head Teacher and Appendix x for staff). • There were no issues with recruitment, but there was a contingency for the SEP to be asked to approach school as a third-party mediator if necessary. • I arranged an introductory meeting with the SEP, Head Teacher and SENDCO. The Head Teacher and SENDCO were aware of the time commitment and need for me to approach staff who were involved in implementing the intervention and for school to allow for participants to have up to one-hour allowed for an interview in a confidential space in school during term-time in addition to recording meetings between the EPS and school. An information sheet for participants (Appendix xi) was shared with them prior to seeking consent. The organisational consent form (Appendix v) was shared with the Head Teacher who provided organisational consent following the introductory meeting.

Organisation/ Participant	Recruitment Process
Support Meeting Observations and Interviews	<p>In order to recruit school staff:</p> <ul style="list-style-type: none"> the Head Teacher and SENDCO were invited to agree to their staff's participation in the first instance (Appendix ix). Staff interviews were outlined e.g. explaining the time commitment and the need for a confidential space within school (unless the participant wishes to have an alternative arrangement using a council building). I liaised with the SENDCO to find out if any of the staff who were involved with implementing the intervention were willing to take part in the research. School participants (TAs/ any other staff delivering the intervention) were sent a letter of recruitment (Appendix x) which I emailed directly to them via their council email or given to them by the SENDCO or Head Teacher. Researcher details were shared so that participants could contact me if they have any questions, queries or concerns before or after the interview. Those interested in taking part in the study provided professional details (work email/ telephone number) details (via the SENDCO or Head Teacher) and were contacted directly via a council email or telephone number. No personal contact details were shared (i.e. home address or phone number of either the

Organisation/ Participant	Recruitment Process
Support Meeting Observations and Interviews (continued)	<p>researcher or participants). Following this contact, prospective participants were given an information sheet (Appendix xi), consent form (Appendix vi), reflective questions template (Appendix vii) and interview schedule (Appendix viii).</p> <p>Guidelines for freely-given, fully-informed consent were followed from the British Psychological Society (BPS, 2021a), the British Educational Research Association (BERA, 2024) and The University of Birmingham Code of Practice for Research (UoB, 2021).</p>

Organisation/ Participant	Recruitment Process
Partner LA	<ul style="list-style-type: none"> • The SEP for the partner LA suggested that it would be beneficial to include the SEP from the partner LA due to their increasing involvement in the implementation support project. Initially, I invited the PEP and SEP to an introductory meeting detailing the research. Following this I contacted EPS participants (PEP, SEP) directly via my local authority email and contact details. Details were shared including: <ul style="list-style-type: none"> • information sheet (Appendix iv), for the PEP/ SEP • consent form for organisations (Appendix v) • consent form for PEP, SEP (Appendix vi), draft interview schedule (Appendix viii).

Organisation/ Participant	Recruitment Process
<p>Procedure for School and EPS Participants Participating in the Case Study</p>	<ul style="list-style-type: none"> • EPS consent was gained first for the home LA. The school and partner LA organisational consent were gained afterwards using the same process as below: <p>I approached the organisational leader and senior leader as gatekeepers (SEP or SENDCO directly for an introductory meeting and provided:</p> <ul style="list-style-type: none"> • recruitment leaflet (Appendix x), • information sheet (Appendix iv, xi, xii), • consent forms (Appendix v and vi), • draft interview schedule (Appendix viii) • reflective template schedule (vii). <p>Confidentiality was assured with any personal or structural references removed from any written summaries/ full reports/ thesis which could identify individuals along with the use of a pseudonyms/anonymisations for the organisations. My LA email address was used data security reasons to reduce risks of data breaches. The school and individual participants had the right to withdraw at any time up to 2 weeks following their last interview. Once organisational consent was gained, participants were recruited.</p>

Organisation/ Participant	Recruitment Process
Local Authority Support and School Support Meetings	<p>I undertook an introductory meeting with senior leaders providing the information above and asked to observe the AEP/ EP or SEP at any meetings that discuss the support to secondary schools (internally – for example, staff handover meetings or when seeking support from the SEP) or sessions where problem-solving with staff implementing the intervention took place. Any parts of the session where the AEP was directly observing practice with young people were not included in this research. No learners were involved in the observations.</p>

Organisation/ Participant	Recruitment Process
Interviews and Support Meetings Consent	<p>Participants provided consent as follows:</p> <ul style="list-style-type: none"> • Senior leaders provided their individual consent and provided staff emails who were interested in the research. I emailed these participants directly using their work contact details and an information sheet (Appendix iv/ xi/ xii) and consent form (Appendix vi) was provided. My council email and telephone number were shared so that participants could contact me if they had any questions, queries or concerns before or after the interview. No personal contact details were be shared (i.e. home address or phone number). Consent was returned to my work email and circle boxes were provided, and participants circled 'yes' to all statements and signed and dated the document. Although participants gave written consent via email, at the beginning of each individual interview or meeting, I talked through the information sheet, which included information about the study, the study's aims, and what participants would be asked to do. There was an opportunity for participants to ask questions. Once all questions had been answered and participants agreed that they understand all information provided, they were asked to confirm oral consent again and consent to audio-recording.

3.6.2 Types of data

The data capture process is presented in Table 9. An overview of the data can be found in Appendix xiii.

Table 9 Data Capture Process

Design Feature	Actual Data Capture
Participant Observation	<ul style="list-style-type: none"> As a participant-observer I provided initial support to the case study school with the link EP and AEP. These were audio-recorded and transcribed and provided the basis for my researcher knowledge to feed into meetings with the EPS. Monthly meetings with the SEP for the home and partner LA and the AEPs. The SEP requested feedback regarding views and experiences of supporting schools in the field. Facilitators and barriers regarding the implementation specifically for secondary schools were shared at these meetings. Knowledge gained fed into these which the SEPs used to inform the implementation support offer. These were audio-recorded and transcribed, and this knowledge was used to support the CSS.

Design Feature	Actual Data Capture
Participant Observation (continued)	<ul style="list-style-type: none"> • Monthly meetings with the SEP explored any further issues that had arisen in this research (from the CSS and the EPS perspective). During these meetings I was able to reflect on new learning (from the literature review and from educational psychology lectures at UoB that were relevant to implementation e.g. leadership style and changing organisational culture. These were audio-recorded and transcribed. • Two support meetings with the CSS were undertaken attended by the link EP, link AEP and members of staff from the school undertaking the intervention. Due to their workload various team members attended for parts of the meetings: Assistant SENDCO, LSA Co-ordinator, and two TAs undertaking the intervention. These were audio-recorded and transcribed.

Design Feature	Actual Data Capture
Field Notes	<ul style="list-style-type: none">• An overview of the data was captured (Appendix xiii). A reflexive researcher diary developed over time according to my reflections (Appendix xv). The structure of this was chronological and included reflection points from literature read, learning points from meetings attended and interviews and any actions taken and the result of these. Reflexivity is the process of reflecting upon practice and exploring the way research is conducted (Saunders et al., 2019a). To promote researcher reflexivity, I used the diary as a process of reflection upon my role and how my role influenced the research.

Design Feature	Actual Data Capture
Participant Views (Home LA and CSS)	<ul style="list-style-type: none"> • LA: SSIs took place with the PEP, SEP, CSS link EP, CSS link AEP, two AEPs who had significant input into the implementation support package over time and Web-Based Development colleague who had significant involvement with the implementation of the WBP. • CSS: Head Teacher, SENDCO, Assistant SENDCO, LSA Co-ordinator, three TAs involved in implementing the intervention. • SSIs were undertaken in February 2024. Questions explored the initial uptake and maintenance of implementation in terms of facilitators, barriers and how these were or could be problem-solved. The questions for interviews (Appendix viii) had been devised using a process (Kallio et al., 2016) from the literature review, researcher experience and in response to the discussion. Questions differed in focus for senior managers and for professionals directly undertaking the intervention or implementation activities. Interviews lasted between approximately 30-60 minutes. There is no definition of a successful interview (Blake et al., 2021), however, establishment of rapport was initiated and exit reflections to ensure that participants were left feeling in a positive emotional state (Blake et al., 2021). To empower interviewees the interview design was flexible (Blake et al., 2021) with a choice of date, time, location, and mode

Design Feature	Actual Data Capture
Participant Views (continued)	<p>(virtual or face to face). These were audio-recorded, transcribed and themes developed as soon as possible. Additional points were raised by participants once recording had ceased (Blake et al., 2021). In these instances, a bullet point was recorded on the interviewer notes and permission requested to include this in the research.</p>
Partner LA	<ul style="list-style-type: none"> • Participant Observation: Initially the partner LA had not been as formally involved with the development of the implementation support package. This became formal in the Autumn Term 2023 and the SEP became increasingly involved and started to attend meetings. Therefore, the initial plan had not been to capture this stakeholder data. Over time, the SEP of the partner LA began to join meetings. Excerpts of relevant parts of meetings were audio-recorded and transcribed. • Participant Views: A joint interview with SEPs from the home LA and partner LA was undertaken. The rationale for change was due to the joint nature of the decision-making of the project managers from both LAs who were both contributing to the decision-making regarding implementation support. An individual interview had been undertaken with the home LA project manager. However, to capture the joint nature of the partnership a joint interview was proposed by the SEPs, necessitating an ethical amendment.

Design Feature	Actual Data Capture
Partner LA (continued)	<p>The joint interview provided triangulation (Blake et al., 2021) alongside a deeper understanding of the project managers' support for each other, and how this had developed over time, including their negotiations, decision-making and their shared co-constructed narrative of the partnership (Cerchiaro, 2023). Essentially, the joint interview offer the opportunity to gather different data and better understand the influence the partnership has upon one another (Cerchiaro, 2023). The joint interview was audio-recorded and transcribed. Confidentiality was considered alongside minimising potential for harm (Blake et al., 2021) by developing an interview schedule like the semi-structured interviews. Interaction between the project managers encouraged via cueing phenomenon (Bjornholt & Farstad, 2014) where the participants prompted each other (Allam, 1980). Questions differed in focus with an orientation for senior managers and joint working practices. The interview lasted between approximately 60 minutes. The interview was audio-recorded, transcribed and themes developed as soon as possible.</p>

3.7 Data Analysis

3.7.1 *Framework Method of Analysis (FMA)*

Sitting within thematic analysis, the FMA was developed (Ritchie & Spencer, 1994) for large-scale policy research producing a holistic summary of the data set (Gale et al., 2013). Data is systematically reduced and analysed by units of analysis appropriate to the research i.e. by organisation (Gale et al., 2013). Individual contexts remain important and data is compared and contrasted both across and within data sets (Gale et al., 2013).

Compatible with CR (Parkinson et al., 2016), a best fit approach epistemological position can be undertaken to match RQs (Ritchie & Spencer, 1994) therefore FMA aligned with this study's philosophical position.

FMA was selected for this research because large data sets can be managed because of the systematic and transparent analysis process enabling new understandings presented in a structured way (Hassan, 2024). FMA has been applied to psychological research contexts and provides an audit trail improving transparency of data and therefore credibility (Parkinson et al., 2016).

Challenges have been associated with FMA in applied psychology due to the experiential-based data focus that is often gathered (Parkinson et al., 2016). Further, FMA has been critiqued for being used too systematically as a data-driven approach therefore I was mindful to engage with my participants' experiences and RQs in order to improve rigour (Parkinson et al., 2016).

Alternative analysis frameworks were considered and discounted as outlined in Table 10.

Table 10 Alternative Analysis Frameworks Considered by the Researcher

Analysis Framework	Description	Reason for Non-Selection
Grounded Theory (Glaser & Strauss, 1967).	Social processes are uncovered.	There is limited applicability to lived experience (Willig, 2001). The experiences of the EPS and CSS were integral to the aims of this research.
Thematic Analysis (Braun & Clarke, 2006)	A qualitative method that can be used for large data sets (Nowell et al., 2017). This method Generates knowledge grounded in lived experience (Sandelowski, 2004).	Disadvantages include the potential for lack of consistency and coherence when developing themes, however, a consistent epistemological position can promote rigour (Holloway & Todres, 2003). In thematic analysis there is a leaning towards a narrative and therefore descriptive focus in the analysis approach (Sparker, 2005). This research focus centred upon exploration of mechanisms and the interpretive nature of FMA was a better fit for the RQs (Gale et al., 2013).

Data management tool NVivo (version 14) (Lumivero, 2023) was selected to undertake the data analysis process because of the audit trail capability which therefore enhanced transparency (Parkinson et al., 2016). The process undertaken is outlined in Table 11.

Table 11 Process of Data Analysis using FMA after Parkinson et al. (2016)

Stage	Description
Familiarization (immersion process)	<ul style="list-style-type: none"> Recordings were listened to in December 2023 and again in March 2024 following a second meeting with the CSS and the SSIs. Data was transcribed at intervals throughout the process and an excerpt of a transcript is presented in Appendix xiv.
Framework Identification	<ul style="list-style-type: none"> Data was sorted and organised into a framework informed by emergent themes from the familiarization stage. A trial-and-error iterative approach was used providing flexibility for the framework which allowed for researcher interests and participants' priorities. Framework categories were based on the RQ and researcher knowledge. Initially a deductive approach, my theoretical knowledge (influenced from Chapter 2 and my ethnographic knowledge), influenced the framework. The process became an inductive and deductive hybrid approach because participants words, phrases and intentions were used to revise the framework (Fereday & Muir-Cochrane, 2006; Naeem et al., 2023). These were tested on data sets before settling on a final framework.

Stage	Description
Coding	<ul style="list-style-type: none"> • Data was uploaded into NVivo and coded using the framework. • Codes were highlighted and dropped into relevant categories. • The coding process significantly influenced the framework, this was an iterative process and undertaken in tandem with the indexing process below. To maintain transparency coding decisions were captured and reflected upon in my Reflexive Diary and discussed with my supervisor. The coding framework was revised at significant points. The final coding framework process is presented in Appendix xvi where key decisions are presented.
Indexing	<ul style="list-style-type: none"> • Data was organised into framework categories influenced by the coding process. The framework was applied to each interview transcript and the coding framework adjusted accordingly.
Charting	<ul style="list-style-type: none"> • Data was organised into a manageable format where indexed data was summarised in chart format. This was achieved by summarising the data that had been indexed (Appendix xvii-xxv).

Stage	Description
Mapping	<ul style="list-style-type: none">• Data combined key characteristics to interpret the data set.• Sense-making of the data took place by finding patterns in relation to the RQs.• Visual presentations were formulated (and presented in Chapter 4). An intuitive and creative stance was taken (Ritchie & Spencer, 1994). Maps were trialled by interpreting selections of the data and then continuing with the data set and revisions made.• Confidence of interpretation was reached at the point of saturation (Glaser & Strauss, 1967) when themes were repeated. The mapping process was the basis for the findings presented in Chapter 4.

3.8 Ethical Considerations

This research was designed in accordance with the following: UoB Code of Practice for Research (UoB, 2021); BPS Code of Ethics and Conduct (BPS, 2021b); HCPC Standards of Performance, Conduct and Ethics (HCPC, 2024) and British Education Research Association's Ethical Guidelines for Educational Research (BERA, 2024).

The research was presented to the UoB ethics committee, and a subsequent amendment submitted (Table 9) enabling all participants to provide informed consent and the opportunity to withdraw their data within a two-week timeframe. Key principles adhered to included: informed consent, confidentiality, right to withdraw, risk to participants, data management, feeding back to participants.

Table 12 explains how ethical considerations were addressed within this research.

The risks were:

- organisational reputation and identity disclosure;
- participant risk of identity disclosure or breach in confidentiality.

Questions were framed positively, pseudonym codes used, and participants characteristics identified homogenously when reported. A risk to participants was recording during meetings and participants were reminded when recording began for relevant sections and when it was stopped. Additionally, any irrelevant details or comments were removed from the data sets using my ethnographic-informed judgment. Compliance of data management for personal data was priority. Data findings upheld my position of responsibility to participants and organisations to ensure anonymity and sensitivity balanced with reporting accurately.

Table 12 Ethical Considerations and How These Were Addressed Within this Research

Ethical Consideration	Actions undertaken to mitigate any concerns in this research
Ethical Approval	<ul style="list-style-type: none"> • Ethical approval was gained from UoB for the initial proposal and following the ethical amendment (Appendix iii). All information regarding informed consent, data storage and security, confidentiality, information for participants and draft interview schedules were included in the application process.
Informed Consent	<ul style="list-style-type: none"> • Informed organisational consent was gained first (Appendix v) from the Head Teacher and PEPs following an introductory meeting and recruitment leaflets and information sheets (Appendix iv, ix, x, xi and xii). • Informed consent for individual participants was gained through participant information sheets (Appendix iv, xi and xii). The aims, process, and ethical considerations of the research were explained in-person prior to involvement also.

Ethical Consideration	Actions undertaken to mitigate any concerns in this research
Confidentiality	<ul style="list-style-type: none"> • Confidentiality was assured by removing names of the organisation and individual. • Participant identities were anonymised using a code and this was stored in a password-protected file using the UoB secure storage system. • Any identifying information was anonymised or redacted. • Participant data was confidential, although there was a confidentiality clause relating to the unlikely event of a safeguarding concern being raised e.g. a disclosure of risk of harm by any of the participants.

Ethical Consideration	Actions undertaken to mitigate any concerns in this research
Right to Withdraw	<ul style="list-style-type: none"> • Right to withdraw was shared through the information sheets (Appendix iv, xi and xii), consent forms (Appendix v and vi). My contact details were shared on the forms in this event and also discussed at the beginning and end of each interview and meeting. No participants requested their data to be withdrawn during this research. • Organisations and participants were able to withdraw consent at any time between completing the consent form and two weeks following their interview/ meeting. Subsequently, the data could not be removed as it would be included in the analysis. • Should participants have withdrawn their data this would have been through the anonymisation process and data would have been destroyed securely followed by notifying the participant.

Ethical Consideration	Actions undertaken to mitigate any concerns in this research
Data Management	A data management plan (available upon request) was written and implemented in accordance with UoB's Research Data Management Policy (UoB, 2024) and Code of Practice for Research (UoB, 2021).
Feedback to Participants	A summary report of findings and implications were planned to be shared with the relevant organisations (LAs and CSS) following completion and external thesis assessment. Participants were planned to be given opportunity to discuss research findings through this report and the organisations notified of any future publications.
Risks to organisations	<p>Participation in this research involved a time commitment for all organisations involved and therefore the benefits of this research to organisations and supporting a broader development of knowledge in this area were important.</p> <p>There was a minimal reputational risk for organisations with the possibility that negative information could be linked to the organisations. Any identifiable information was removed from the final research. Any information that presented a reputational risk was discussed with my supervisor regarding inclusion in this research and how it could be communicated.</p>

Ethical Consideration	Actions undertaken to mitigate any concerns in this research
Risks to individual participants	<p>A time commitment was involved for all participants in this research, and it was important to reflect their commitment in sharing the broader development of knowledge in this area.</p> <p>A minimal reputational risk was associated for participants in terms of reported practice or sharing views. As a participant-researcher this needed to be carefully managed and negotiated to ensure confidentiality in interviews whilst retaining the support focus to participants and organisations. Any concerns were discussed with my academic supervisor.</p>

3.9 Trustworthiness and Quality

Rigour is of paramount importance in qualitative research in order to avoid it being worthless (Morse et al., 2002). Four research design tests for judging CSR quality (Yin, 1994) are not applicable for exploratory research (Yin, 2018), as in this study design because the criteria for success is likely to be dependent upon the purpose of the exploratory research and therefore differ from the research design tests (Yin, 2018). For example, internal validity seeks to establish causal relationships, and this was not the purpose of this research. Therefore, other applicable quality criteria were explored (Yin, 1999) such as the Approaches to Truth developed by Guba (1981).

Houghton et al. (2013) proposed criteria by Lincoln and Guba (1985) could be applied to CSR. In parallel to rigour, *trustworthiness* (Lincoln & Guba, 1985) and *authenticity* (Lincoln & Guba, 1986) are quality criteria that can be applied in qualitative research. Trustworthiness comprises of four constructs: dependability, credibility, confirmability and transferability (Lincoln & Guba, 1986); that promote an acceptable degree of integrity (Enworo, 2023). The concept of trustworthiness (Houghton et al., 2013) fitted with my research because of the criteria of gaining the thick description matching the research philosophy and resultant research design. The constructs and actions undertaken to promote each quality dimension in research are presented in Table 13 alongside how I endeavoured to meet the criteria.

Table 13 Approaches to Trustworthiness and Strategies used in this Research after Houghton et al. (2013, p. 13); Lincoln and Guba (1985)

Approach	Description	Suggested Strategies	Strategies Utilised in this Research
Dependability	Dependability refers to the transparency and logicity of the research process promoting coherence throughout the study (Hanson et al., 2019). The use of triangulation and audit trails can enhance dependability (Guba & Lincoln, 1989).	<ul style="list-style-type: none"> • Audit trail. • Reflexivity. 	<p>For dependability I ensured my methodology was as clear as possible, including the use of a reflective log.</p> <p>The research design incorporated the triangulation of data using semi-structured interviews from the perspective of the EPS, other LA members and case study school. Questions were phrased to member check throughout interviews (Enworo, 2023), the interview preparation and process were reflected upon using the reflexive diary (Appendix xv). Further, support meetings for the CSS and EPS were attended and used for data collection that informed the SSIs alongside the literature review.</p>

Approach	Description	Suggested Strategies	Strategies Utilised in this Research
Credibility	Credibility is whether the findings of the researcher can be trusted (Lincoln & Guba, 1986) to ensure confidence that participants views are represented credibly (Enworo, 2023).	<ul style="list-style-type: none"> • Prolonged engagement and persistent observation. • Triangulation. • Peer debriefing. • Member checking. 	<p>To achieve credibility SSIs were selected with questions devised relevant to the topic being researched following the period of ethnographic data collection to further explore themes found during the first phase of the research. Prolonged engagement and an ethnographic approach (Enworo, 2023) enhanced this area. Further, FMA was utilised to systematically explore the data using a transparent approach.</p> <p>Member checking was utilised in the joint interview process.</p> <p>Peer debriefing was used for the confirmation of interpretation of findings with participants.</p>

Approach	Description	Suggested Strategies	Strategies Utilised in this Research
Confirmability	Confirmability is the researcher ensuring that interpretations are linked to data gathered, again utilising triangulation and audit trails (Guba & Lincoln, 1989).	<ul style="list-style-type: none"> • Audit trail. • Reflexivity. 	For confirmability I undertook an extensive narrative literature review creating a guide for interviews, alongside an iterative approach to the literature and data. The FMA supported this triangulation and ensured that interpretation was auditable and close to participants' data. An ethnographic approach alongside individual and a joint interview from various actors involved enhanced this area via triangulation (Enworo, 2023). Further, I aimed to examine my epistemological assumptions via a reflexive diary (Enworo, 2023). Data saturation was achieved through the researcher finding repeated themes in interviews and ethnographic data (Enworo, 2023).

Approach	Description	Suggested Strategies	Strategies Utilised in this Research
Transferability	Transferability relates to the extent which findings can be transferred to other contexts (Enworo, 2023) via reflexivity, purposive sampling and seeking the thick description (Lincoln & Guba, 1985). The thick description is the adequate description (context accounts, research methods and examples of raw data (Houghton et al., 2013)) of the original context so that judgements are possible (Koch, 1994).	<ul style="list-style-type: none"> Thick descriptions. 	<p>I addressed reflexivity through a reflexive diary, used a purposive sample and sought a design that would enable a thick description. Reflexivity was an integral part of this research. The nature of the data collected was interactional between researcher and participants and the I participated in the produce of knowledge (Blake et al., 2021).</p> <p>The multi-level approach of data collection in this research contributed to a rich picture being captured for this complex area (Blake et al., 2021).</p>

3.10 Positionality

CR seeks “explanations (causal mechanisms) through a focus on what people can achieve (agency) in the social context in which they are operating (structures)” Stutchbury (2022, p. 114). Compared to an iceberg, in CR reality is mostly invisible to observers with *causal mechanisms* enabling events or experiences (Stutchbury, 2022) and sought through a process of inference within a research context (Stutchbury, 2022). In this thesis I explored the phenomena and used a process of inference, drawing out mechanisms.

The underlying assumption of CR is the researcher draws rational judgements (Stutchbury, 2022) by comparing and contrasting theories, choosing a theoretical explanation best representing participants’ realities based on researcher knowledge (Hu, 2018). I used my ethnographic experience and participant voice to make rational judgments during data analysis.

Structures that enable and constrain, leading to actors undertaking actions in a particular context are embedded in gaining a deeper understanding of interactions between structures and human agency (Bhaskar, 1998). Due to the ethnographic approach in this research, I was able to explore and better understand structures that enabled and constrained actors within the organisational contexts of the home LA EPS and CSS. Therefore, CR fitted well with this research and resultant research design, providing research that demonstrated strength using the criteria of trustworthiness (Lincoln & Guba, 1985). The subsequent findings are presented in Chapter 4.

CHAPTER 4: FINDINGS

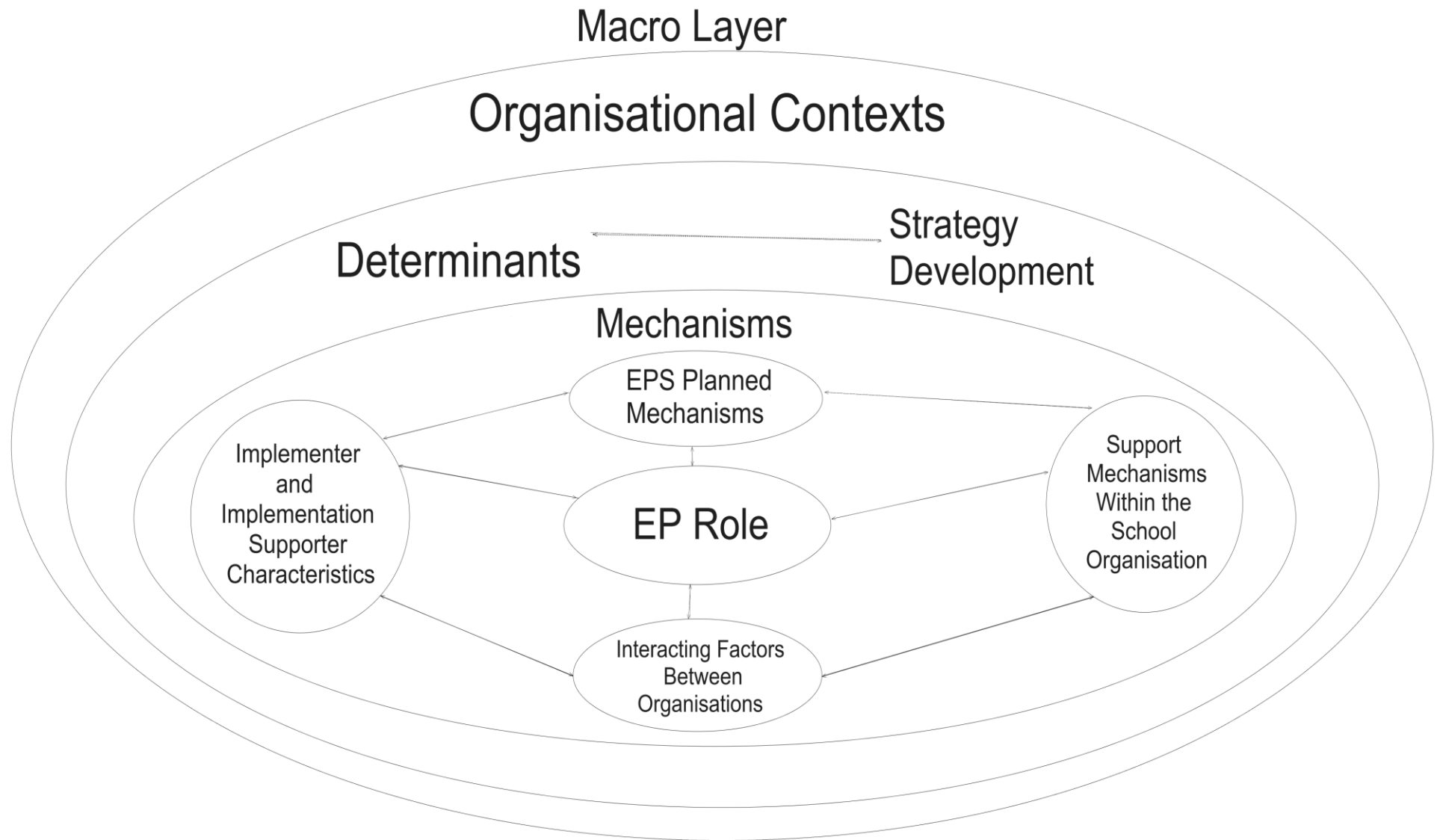
4.1 Introduction

This chapter presents the findings, organised by the RQs. It commences with an account of how the analysis was undertaken, drawing on the information supplied in Section 3.7.

Findings were derived from the reporting summary of charting using the FMA (Ritchie & Spencer, 1994) (Appendix xvii - xxv). The coding framework (Appendix xvi) was applied initially to the data, as noted, influenced by the literature review. The framework of Feldstein and Glasgow (2008) (Figure 3) was initially of particular influence because of their work promoting implementation, and Sanetti and Kratochwill (2009) (Figure 2) who provided an overview of variables affecting intervention implementation (Chapter 1). These frameworks highlighted the influence of the external environment, organisational systems, intervention level influences and implementer influences. Following initial consideration of the data, the initial coding matrix was tested using three interviews. Subsequent changes to the coding matrix were undertaken and revisited after each whole data case e.g. interview or meeting note. The changes to the coding frameworks were captured at key points of analysis and reflected upon (Appendix xvi). The data was then reduced by theme with a summary overview provided, presented in the final charting summaries (Appendix xvii-xxv). Therefore, this transparent process enabled the mapping of the themes which were derived from the charting summary, presented in figure and tabular form and with an overview of each theme. An overall map illustrates how I organised data overall (Figure 7) and conceptualised how each part of the data interacted. I considered context as dynamic, interacting with all areas; mechanisms being central processes; and determinants and SD interacting with one another, and

all other areas. Therefore, I conceptualised an overall interlinked system, consistent with the literature of context dimensions (Nilsen & Bernhardsson, 2019), ecological systems theory (Bronfenbrenner, 1979) (where each part of the system interacts with all other parts), and the core components model (Fixsen et al., 2009).

Figure 7 Overall Map of Findings



There is an inevitable overlap between components identified through analysis, e.g., between facilitators and mechanisms. This overlap has been found elsewhere, leading to conflation of terminology in IS (Hagermoser Sanetti & Collier-Meek, 2019). To promote transparency, I devised my own definition of key terms referred to when data was coded (Appendix ii). Although coding aims to be exclusive, this was challenging, given the conceptual nature of the codes; meaning that many items (such as 'leadership') were coded in multiple sections (facilitators, mechanisms and context), but were then reduced via the charting framework to present the data. I finally judged that leadership was most strongly positioned in 'context' but interacted with a plethora of implementation activities. Therefore, the findings aimed to explain:

- the key components of the EPS organisational support (including the influence of the EPS context), and
- the key components of the CSS

to explain how the EPS helped to optimise implementation support in the CSS. The findings are therefore presented for each RQ.

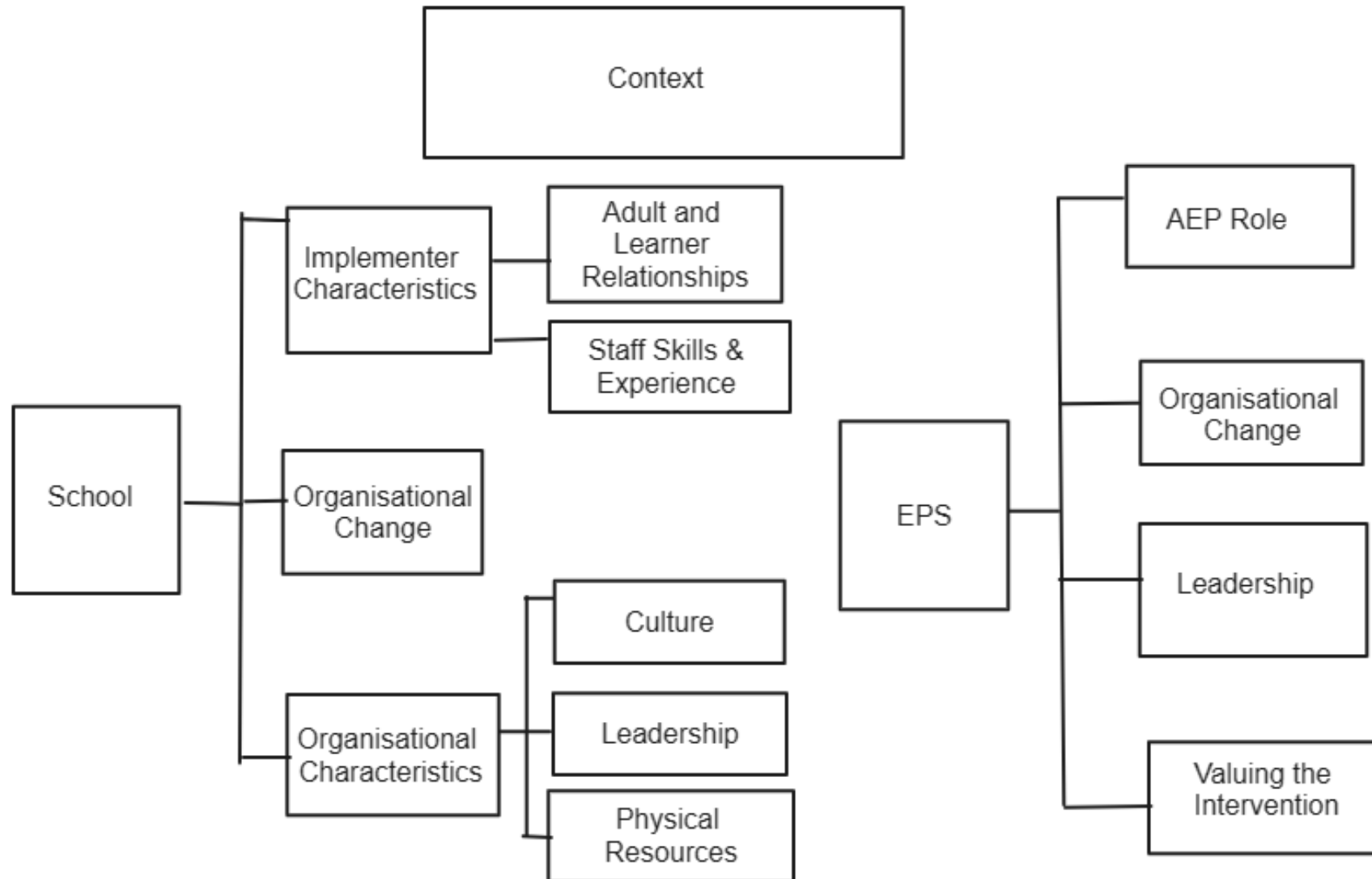
4.2 Research Question 1

What are the predominant contextual features of the EPS and CSS involved in implementing a Direct Instruction learning-focused targeted intervention for reading and how can they contribute to optimising implementation?

4.2.1 Context

Due to the conflation of terminology regarding context I devised my own definition to ensure consistency (Appendix ii). Context was defined as *encompassing the dynamic conditions and unique features of an organisation which interact with determinants, mechanisms and strategies at multiple layers*. The context within both organisations was analysed initially to better understand the interactions between the features of implementation. Figure 8 presents key overarching features. The school and EPS contexts are presented in this section and key themes outlined.

Figure 8 Map of the Overarching Features of the Context in the Organisations



4.2.1.1 School Context

The CSS context was identified to have three overarching characteristics: implementer characteristics, organisational change, and organisational characteristics.

4.2.1.1a Implementer Characteristics

i. Adult and Learner Relationships

Existing relationships between adult and learners within school were identified as constituting a significant theme linking to facilitating interventions.

“I’ve have...a good relationship with... students. So, I didn’t have to ...build anything from the beginning...it was quite nice for them...to come and have that... one-to-one time with me...” (SC1).

Quote 1

The CSS drew attention to the importance of their learner focus, demonstrated by their commitment to help learners to read, and their emphasis upon the importance of holistic development. CSS participants highlighted the significance of the adult learner relationships that they had built over time. One participant shared they extended the intervention for ten minutes so that checking in and building rapport could be undertaken and debriefing time following the intervention enabled relationship-building conversations. Staff reported that learners valued this greatly and liked attending the intervention because of this time spent with the adult. I linked this to being a potential facilitating contextual factor for interventions.

4.2.1.1b Organisational Change

CSS leaders also promoted an open-system approach involving a feedback loop involving staff as the basis for OD that was occurring in the CSS. Leaders perceived school staff were supportive of this change.

“[Leader is a] really big person for ... getting honest feedback from people and... trying to ... act on that where you can.... [Leader] ...[had].... an individual conversation with everybody ... in the school, ...[to get to] know [staff] and ask them what they would [do to] improve ... the school...We can make a change...If we believe it's in the right interests, that's not change for changes sake ...people have bought into that”. (SC5).

Quote 2

There had been a restructuring of the school day, to shorter lessons and an additional break time.

“And we're doing ..[this].. because we want the best outcomes and ... we want to ... deliver an outstanding level of education to children. I think [staff] can... see that the changes that we make have got the right reasons so I have quite a bit of reluctance this year.. [but] it was a really open door to push against.... It's a lot of work but ...every single person is completely convinced that we've done the right thing and that it is going to make a big difference in the future.” (SC5).

Quote 3

This illustrates the push factors from senior leaders to change. A period of unfreeze had occurred in the CSS. This reorganisation was noted as a significant challenge by staff who implemented the intervention. Staff described needing to problem-solve to

find how to fit the intervention into the new timetable. The key finding was that despite significant OD, staff had actively problem-solved to find ways to continue intervention delivery, demonstrating school staff commitment to the intervention and qualities of resilience and self-efficacy.

4.2.1.1c Organisational Characteristics

i. Leadership and Culture

Leadership was identified as supportive throughout the CSS. Leaders aimed to support staff, focussing on staff professional development (PD). Participants perceived leaders were supportive regarding implementation activities and participants' own PD. Leadership team messages were consistent throughout the CSS. Leaders identified a preference for a distributive leadership style built upon an open culture of trust and shared values (such as PD and prioritisation of supporting learners' holistic needs).

“[Leader] want[ed] to bring everybody together...[and] be collaborative and... supportive...to empower other people ... through distributed leadership... com[ing] from a reflection of open[ness] and honesty and ...all... people feeling ...they can trust....We are here to be collegial...[and] support one another”. (SC5)

Quote 4

CSS leaders valued organisational autonomy regarding decision-making without reference to another layer of management.

“Being a school, and ... not [a] Academy Trust... means that those people are accountable to [leader]... because they've ... got that level of trust with ... [leader]”. (SC5)

Quote 5

The CSS was undertaking an OD initiative and acknowledged the change was challenging for staff, despite staff being supportive. School leaders identified trusting relationships contributed to their culture of autonomous working and problem-solving.

“The SENCO is a phenomenal leader in school,... But then [they've] got a team of people that work with [them] to solve [problems]..., [they've] got the capacity ... In terms of the structure that supports it, ...there is you know, [colleagues identified] ... who are ... phenomenal at what they do ... of wanting to find answers and ... solutions and ...[they] work so well [together] and... feel empowered to make those decisions ...We [have a] really good motivated staff, who want to work well, [and] feel trusted and empowered that [leadership] will help them make those decisions work”. (SC5).

Quote 6

The CSS identified with an embedded ‘intervention-culture’, meaning that they were accustomed to selecting interventions, and therefore perceived implementation practices were well-established. The school also identified with an ‘open’ culture, which related to systems theory (Checkland, 1981), whereby organisations are open to others contributing to the system rather than closed to contributions of others. Therefore, the CSS advanced the EPS’s understanding of how to optimise intervention because the school were open to the EPS sharing practice for this research.

“Interventions are part of the school’s cultural norm with many students having booster sessions which are short and sharp.... our culture is very open. It’s always been that case”. (SC3)

Quote 7

“...you want the right people on the bus. And you want people that are bought in and tied into this, ... These are our values.. We are here to be collegial. We are here to support one another... I think ...we could get ...[an] even stronger approach to [reading attainment]... across the whole school than we have at the moment”. (SC5).

Quote 8

In summary, leaders in the CSS identified a culture of openness and trust that they believed promoted staff autonomy. There was also a focus on PD. Shared values were promoted in terms of promoting learners’ holistic development and viewed reading as a life skill.

4.2.1.2 The EPS Context

The EPS context was identified to have four overarching features.

4.2.1.2a The AEP role

The EPS employed a team of AEPs specifically to contribute to supporting the implementation of the intervention as one of their activities and judged here to be a significant contextual factor.

“We need more support ...in implementing it [the intervention] and... I think that face to face contact that [AEPs have] ... allowed it to take off... it's a big ask to get to grips with it [the intervention] and to advise on [the intervention]. So, they are invaluable.” (EPS1).

Quote 9

Analysis suggested the AEP team were trained to be highly skilled with supporting the intervention; AEPs made a significant contribution to supporting schools (including the CSS) with the take up of the intervention, and in-person contact with schools was an important facilitator.

4.2.1.2b Organisational Change

The EPS was undertaking planned OD towards implementation of various aspects of EP practice, having noted that EPs needed to be considering how to better support schools with implementing EP recommendations.

"I think our organizational culture... is still shifting and it goes in fits and starts. And I think we've not yet thought about the best way to support schools. The implementation group are working on that." (EPS4).

Quote 10

This suggested that the EPS was in an organisational phase of unfreeze in response to push factors by senior leaders. The EPS leaders suggested that this was linked to the forming of feedback loops from schools, and part of the process was to a cultural move from a closed to open system. One example was the formation of the development group within the EPS to explore how EPs could undertake practice which would assist with transferring recommendations into practice in schools to improve EBP in schools.

"We need to reorganise ourselves to provide the "what works" [and] support [to schools], and so I think [we've used] a model that is very convenient for us and I'm not sure that is always convenient for schools. And again, we won't know that until we get proper service feedback where schools are able to give us enough feedback that we look at our model [of delivery]." (EPS4).

Quote 11

The EPS recognised that to promote EBP, school leaders were the decision-makers and therefore had the ability to promote push and unfreeze the school organisation to promote change.

“But we’re not doing any work with leadership...in schools... until we’re doing supervision and support for senior leaders in schools, we’re not creating the space for big impact in schools. Basically, whatever interventions we’re choosing...because we know that’s where the power base is.” (EPS4).

Quote 12

This analysis highlighted the EPS’s awareness of a gap between EP recommendations and their implementation, and thus the potential for further implementation strategy work with school leaders.

4.2.1.2c Leadership

The analysis revealed numerous similarities between the EPS and school organisation in terms of preferred style of leadership and values.

“...so distributed leadership is the biggest thing, ... unless [leaders] listen to people and ... feedback... service direction is not gonna be what it needs to be... there’s something... about anti-oppressive practice.... the tension between a hierarchical structure, ... But giving people their own authority to say, actually “This isn’t working” and sometimes that’s hard because ... we’re going in a direction we thought that was a great idea...and then someone goes “Oh, hang on a minute...you haven’t seen this” and [leaders] value those voices.” (EPS4).

Quote 13

Analysis revealed that the EPS leaders recognised that EPs potentially needed to improve their self-efficacy and autonomy in practice and wished to promote an open system.

“[EPS leadership style] is collegiate...[and] ... as collaborative as possible in order to empower people and be involved in decision making... I suppose there's some parallels as well with consultation ...Engaging, how direct or indirect or collaborative things needed to be.” (EPS1).

Quote 14

The EPS leadership valued feedback loops from within the organisation, and external to the organisation, to promote an open collaborative culture, potentially impacting upon EPs’ implementation practice in schools. Leaders drew from psychological skills such as consultation to develop their leadership style and promote collaborative working.

4.2.1.2d Valuing the Intervention

Analysis suggested an important contextual feature in the EPS was valuing the intervention.

“...the more that you as a practitioner value it, the more you give to the school and the more they recognise that it is something that they should be doing and buying into and... putting resources towards because they can see how...someone from an external agency is saying how important it is.”

(EPS3)

Quote 15

EPS staff (leaders, EPs and AEPs) perceived that there was a relationship between those EPs who valued and promoted the intervention with their link schools and a resultant increased take up and maintenance of the intervention. Therefore, this contextual feature appeared closely associated to the mechanisms of changing beliefs (section 4.3.1.2c).

4.2.2 Summary of RQ1 Findings

In summary, CSS and EPS leaders reported that planned OD was being undertaken in both organisations and a period of organisational unfreeze had occurred.

CSS staff were required to be solution-focussed and undertake problem-solving activities, ensuring the intervention continued. Leaders identified with an open-system culture and collegial leadership approach. School leaders promoted self-efficacy and autonomy and therefore organisational resilience which enabled the intervention to continue, despite challenges associated with the OD.

In the EPS, with awareness by leaders of gaps in EP practice regarding schools implementing EP recommendations, a priority focus was how EPs could support schools with implementing their recommendations. EPS leaders were open to being

reflective. They promoted feedback loops within the EPS and stakeholders outside of the EPS. Leaders indicated they valued contributions from staff within and outside of the EPS in terms of promoting EBP and how to support schools to implement EBP. Leaders valued the intervention, a team of AEPs were commissioned to undertake implementation activities alongside an EPS development group aiming to improve implementation practices. The AEP team were trained by leaders to a high level, and in-person support was suggested to be a significant facilitator for the taking up of the intervention.

Overall, analysis revealed that organisational context was highly relevant to implementation practices in both organisations and the associated mechanisms are therefore presented.

4.3 Research Question 2

What are the predominant mechanisms associated with implementing a DI learning-focused targeted intervention for reading and how can they contribute to optimising implementation?

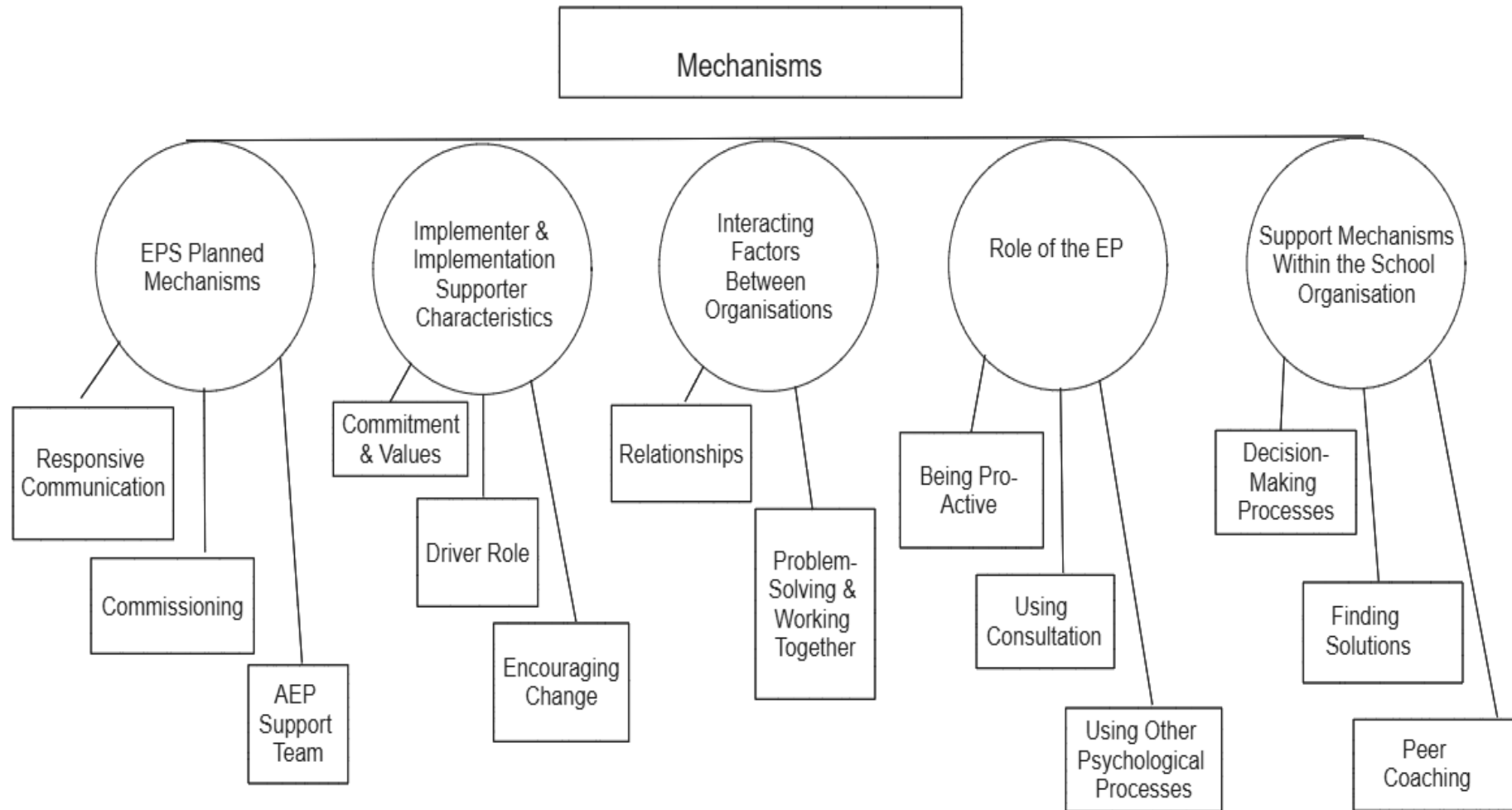
4.3.1 Mechanisms

Potential mechanisms were considered in terms of their contribution to optimising the implementation of the intervention. As described in section 4.1. I defined a mechanism as *a change or transformational process that is based on preconditions or inputs that leads to outcomes which includes stakeholders' perceptions of mechanisms*. During data analysis I explored data that was explicitly identified by participants as a mechanism, considered narratives from participant interviews, used my knowledge of implementation practices from the ethnographic aspect of the research, and explored interactions between the EPS and CSS from meetings. Five overarching mechanisms were identified, with other processes associated with each mechanism, and a map is presented in Figure 9.

4.3.1.1 EPS Planned Mechanisms

The EPS purposefully planned mechanisms specifically to address the intervention's implementation. Analysis uncovered three mechanisms in particular: responsive communication, commissioning and the AEP support team.

Figure 9 Map of Overarching Mechanisms



4.3.1.1a Responsive Communication

The EPS designed communication mechanisms to enable responsiveness, for example, by creating feedback loops. The EPS was committed to drawing on feedback and using this information to design responsive strategies to support secondary schools with intervention take up and maintenance.

“Feedback loops are really important. ... people and organizations who are the absolute best learners ... use every scrap of learning to reflect on, to hone their craft... there is a lovely feedback loop [in the intervention and implementation framework strategy]. You look at the data - you see which schools are struggling and there is then a conversation about the support that they need, and someone comes out to support them. [The EPS leaders] ... had a conversation in the very early stages...that [feedback] needs to be a joint conversation. The data ... must be visible to the schools because then the conversation is "How can we support you and what can we do?", rather than "We've noticed". Yeah, because ... that leads down [a]... very different path. So, ... the implementation framework around this is absolutely... part and parcel of the whole implementation of the whole approach. If you didn't have the implementation framework around it, I don't think it would do what we wanted it to do... it's good implementation practice.” (EPS4).

Quote 16

The EPS designed a feedback loop of responsive communication to gather feedback on the intervention and implementation support to improve the support provided to schools. The EPS perceived that there was a relationship between the feedback gained, the resultant implementation support, and intervention success.

4.3.1.1b Commissioning

Analysis suggested the EPS viewed sourcing annual funding through commissioners as a mechanism, because it enabled flexibility for schools by removing financial barriers. An additional perception was that the intervention and implementation support being free to the user was a mechanism, through removing of a financial barrier, enabling the process of accessing the intervention and support to be more equitable for learners.

“... flexibility... is the mechanism, ... the basic financial barriers have been removed and no costs.” (EPS1).

Quote 17

However, the role of seeking commissioners was also uncovered as a mechanism.

“Every year... we're looking for people who will sponsor it and commission it. [Colleague's] done an amazing job so far and ...hope[fully] ... continues to do so.” (EPS4).

Quote 18

I deliberated upon whether commissioning was a mechanism. I explored the concept of mechanisms (Appendix xvi) and reviewed my own definition (Appendix ii). Overall, I judged that the process of allowing schools flexibility (Quote 17) and therefore seeking commissioning (Quote 18) was a significant process because stakeholders identified commissioning as a mechanism. Commissioning *enabled* financing the AEP support team which the analysis also uncovered as a key mechanism.

4.3.1.1c AEP Support Team

The AEP role was commissioned by the home LA to provide support to schools for the intervention, such as introductory interviews, undertaking in-person fidelity visits and planned problem-solving opportunities. Planned problem-solving included active listening, reflecting together and coaching (see Appendix i). Stakeholders identified the mechanism of working with schools at an organisational level, drawing upon understanding of school contexts and problem-solving with school staff enabling the intervention to be taken up.

“I think the problem solving is around things in the organisation, rather than the approach, so I suppose it's not the approach we're problem solving It would be how to fit the approach into their organisation.” (EPS1).

Quote 19

The SEP co-ordinated group support for AEPs. This was identified as a mechanism enabling the SEP and AEPs to reflect together to develop responsive strategies for supporting schools with the intervention. One example was the conception of the WBP, a strategy conceived by an AEP who was encouraged to pursue this project, taking a lead. This encouragement and autonomy indicated the value of the AEP role and group meetings where ideas could be generated and directly contribute to intervention outcomes.

In-person support by the AEP team was perceived as a significant mechanism to encourage schools to take up the implementation.

“We need more support in implementing [the intervention] and... face to face contact that [has]...allowed it to take off.” (EPS1).

Quote 20

Through analysis I conceptualised that the EPS planned mechanisms were critical to *enabling other* mechanisms in the process. Other mechanisms are presented in the remainder of this section.

4.3.1.2 Implementer and Implementation Supporter Characteristics

I use the term ‘implementer’ and ‘implementation supporter’ to reflect the roles of the school and EPS respectively. Individuals’ characteristics were identified as key mechanisms enabling implementation. In both organisations significant actors purposefully set up processes that enabled implementation. Three main elements were identified: commitment and values, the driver role and encouraging change.

4.3.1.2a Commitment and Values

EPS and the CSS professionals’ commitment to the intervention, and shared value of the importance of young people learning to read, were perceived by stakeholders as being more than a facilitator, and thus a mechanism for change.

“... the gift that keeps on giving... is commitment. I think this whole approach... that's what drives it forward. I think it's that commitment to the cause.... of getting kids to read.” (EPS1).

Quote 21

Implementer commitment to the intervention was identified by on-going and purposeful activities related to professionals' belief in the intervention.

“... [the staff] seem to be ... willing to.... change things around to make it work. Because of that... commitment to the approach ... and the understanding of how important literacy is... because of that...they seemed to just make it work in whatever situation...” (EPS3).

Quote 22

Individual staff behaviours were associated with this commitment and perceived as a mechanistic force within organisations. This linked to the 'driver role'.

4.3.1.2b Driver Role

Key members of staff reported purposeful activities 'driving' the intervention, thus were termed as 'driver roles' as mapped in **Error! Reference source not found.**

Such roles are suggested to be 'driver', 'purveyor' (Fixsen et al., 2009), or 'intermediary' roles (Franks & Bory, 2015). The term 'driver' was selected because of the force that the significant individual applied to the system to ensure the intervention happened with fidelity, see Quotes 23 and 24.

“I'm talking about [leader's] determination and commitment to this area.” (EPS1).

Quote 23

“We've wanted it to work as much as you do.” (SC4).

Quote 24

Table 14 Key Driver Roles Identified as Mechanisms

Organisation	Significant Actors in the Organisation or “Driver Role”
EPS	SEPs from the home and partner LA leading on the intervention and implementation support package.
EPS	AEP who conceived the idea of the WBP and took responsibility for development.
EPS	Link EP who built the relationships within school and introduced the idea of the intervention to school staff.
EPS	Link AEP who initially assisted the set-up of the intervention and supported the transition to the WBP to maintain the intervention.
CSS	SENDCO who had overall responsibility for the SEND department.
CSS	Learning Support Assistant Co-ordinator who had responsibility for co-ordinating the SEND team.
CSS	Learning Support Assistant who took responsibility for setting up the intervention.

Key staff with ‘driver’ roles also identified leaders’ support as an important part of the process, thus driver roles were inter-linked and formed a mechanistic process.

“...we were given the time and the SENDCO... said ...we could have what we needed to make sure... [the intervention] could run and... give [staff] enough time to plan it [the intervention] and spend the time to make sure it was implemented properly, which I think was important.” (SC7).

Quote 25

Therefore, these roles were significant for driving the process of implementing, enabling and maintaining the intervention.

4.3.1.2c Encouraging Change

The process of changing adults' beliefs and behaviours regarding teaching reading was identified as an important mechanism, here influenced the take-up of the intervention and subsequent fidelity.

"...the literacy approach is about changing the way [schools] deliver the teaching of reading for the... if someone doesn't believe in it, they can shut you down straight away...if you go back with some more information or more support - you pick people up on the way that maybe wouldn't have been there at the beginning." (EPS1).

Quote 26

Participants in this research reported practices they used to change beliefs, and these are outlined in section 4.3.1.4.

Another aspect of encouraging change was related to wider EP practice regarding implementation of the intervention.

"... the biggest issue is that it [the intervention and implementation package] doesn't affect the practice of the EPs in the service. You would expect [practice] would be the best possible. You would go into a school, you'd set... [the intervention] up, you'd have... [the intervention] all running...we're finding is that's not what the EP's are doing in...that's the biggest implication. And there are plans to address it." (EPS4).

Quote 27

Therefore, the EPS was attending to the need to change beliefs and practices of EPs within the EPS.

4.3.1.3 Interacting Factors Between the Organisations

Two significant processes were identified by stakeholders and participants as influencing their decision-making and subsequent implementation of the intervention: relationship building and problem-solving and working together.

4.3.1.3a Relationships

A relationship building process was identified by all stakeholders and participants as significant. From the CSS perspective this directly impacted upon school's decision-making when taking up the intervention and activities that supported the process included the EPS being approachable, accessible, assisting with queries, and in-person visits.

“... it's ... important thing [to] have a really good relationship with the staff...a lot of the teaching assistants know who I am...some of the staff now, ... in school ... I'll have a chat with...and the teachers... I'll say “Hello”. [They've] asked me questions about young people before and had a chat when needed to...it is definitely about building relationships.” (EPS2).

Quote 28

“I'd say it [the relationship between the EPS and school] was a big impact because we felt so supported. And because [the EPS] was so accessible so ... if there was ever anything we needed or anything we weren't sure on, we knew that we could get in touch we would get the answers. Or if we want the support for them to come in and observe..., we knew that was ... going to happen...it was definitely a confidence boost.” (SC7).

Quote 29

Participants linked the process of relationship building (Quotes 28 and 29) with the EPS providing implementation support activities (e.g. visits) and increasing staff confidence and therefore self-efficacy.

The process of relationship building and its importance upon influencing decision-making was described by the EPS with the process of building trust within relationships identified as a mechanism (Quotes 30 and 31).

“[The intervention] comes from...people ...[the CSS] trust, which is the EP service, which they have worked with in the past and currently work with, and from what I've seen, [link EP colleague] has a really good relationship with the staff in school, which means that... [school staff are] more likely to buy into something that [the EPS recommend, from] someone that you have a relationship with is ... not necessarily pushing but ... backing...” (EPS3).

Quote 30

“...enabling staff to ... use their professional judgement...we've really encouraged them to do that. ...We trust that the staff know the children, they know their profession, and they know how best to kind of implement the approach, the approach that works best in their setting.” (EPS7).

Quote 31

Quotes 30 and 31 demonstrated that trust was a two-way process with the CSS trusting the EPS but also the EPS trusting CSS staff. Also, analysis suggested the process of relationship building was a mechanism which was also related to enabling problem solving (Quote 32).

“... [from a] service perspective, I think that's good to get the trust in... schools and we've tried to make the email support responsive and any feedback we've taken seriously because it is a learning process for all of us and we want to make it... bespoke...we need to be and responsive...we've got complex school organizations and we're trying to infiltrate them all on our way.” (EPS1).

Quote 32

Overall, the EPS process of building relationships was related to gaining trust and being responsive to feedback from schools, alongside trusting school staff.

4.3.1.3b Problem-Solving and Working Together

A key mechanism was the EPS working with school staff and undertaking problem-solving activities. EPS staff identified that having a good relationship enabled better insight into school staff's problem-solving processes.

"In schools, ... you've got to get to know them...once you do that ... [you can] find out what the decision making is in that particular sphere and what would move it." (EPS4).

Quote 33

In-person problem solving processes were suggested to better enable the CSS to take up and maintain the intervention.

"In... meetings, [staff] seemed to be quite willing to... work around issues." (EPS3).

Quote 34

Analysis revealed that the collaborative working process mechanism was also linked to gaining feedback and acting upon information gathered.

"... [schools] giving us feedback...that's where the co-worker element does come in, in terms of us leaning on them for feedback and us adapting. And... based on what they say, that's ... the collaboration element." (EPS7).

Quote 35

Therefore, analysis suggested that interacting factors such as building trusting relationships, collaborative working and problem-solving were mechanisms that *enabled* the intervention to be taken up, implemented and maintained. The process

of building relationships was suggested to rely upon responsive feedback and contact over time.

4.3.1.4 EP Role

The EP role was identified as a significant mechanism, and three main processes were identified through the analysis undertaken by EPs or AEPs under the supervision of an EP: being proactive, using consultation, using other psychological processes.

4.3.1.4a Being Pro-Active

The persistent and pro-active approach of the link EP and AEP to the CSS was identified as a mechanism that led to the initial take up of the intervention. This process also involved providing encouragement.

AEP colleagues who had contact with the CSS were also reported by CSS staff and EPS colleagues to be proactive (Quote 36). The CSS identified both the EP and AEP's proactive support as a key enabler for them in the process of taking up the

intervention. Therefore, this indicated that EP and AEP support was an important mechanism that enabled the implementation of the intervention.

“...the initial relationship... going in and ... repeating, ...and saying it's there and that bit of word-of-mouth marketing...which can be so effective? ... And I... spoke often with them, [about] schools that were already implementing it... [AEP colleague has] been really proactive...I've watched it...that they're doing it consistently and [with] fidelity to the programme. ... And if they don't take it up straight away, you don't give up...” (EPS2).

Quote 36

4.3.1.4b Using Consultation

Analysis highlighted the process of consultation (Gutkin & Curtis, 1999) was used by EPs when supporting schools in-person. The EP supporting the CSS used the process of professional curiosity and asking staff questions, to explore their context, and promote thinking around reading and the intervention. The process of consultation was used with school professionals in meetings. Specifically, the EP drew upon their knowledge base relating to the intervention, the learners, and the school context. Additionally, the EP used reflecting together as a process using active listening (Quotes 37 and 38), questioning (Quote 37), re-framing (Quote 39) and promoting self-efficacy (Quotes 38 and 39) to enable school professionals to think creatively.

“So, it's all those connections and networking and just thinking outside the box and how they might be appropriate to join together and have a look at together...I like to hand over, so they run with it, and they take it on board...I often ask questions...Or ... encouragement. ‘Do you try new things...think outside the box?’” (EPS2).

Quote 37

“The checking in with [staff] confidence, development ... all the...things that come with that in time, .so you look at it holistically as well as just specifically. ‘I'm just wondering...’ that's what [I do].” (EPS2).

Quote 38

“... it's just encouraging them [staff] and getting them [staff] to see it from a different way as well and that's because you've got a good relationship with them. And knowing the program...[and] how good it is, and being able to promote it in a very genuine and psychological need-based way.” (EPS2).

Quote 39

Thus, analysis revealed that professional curiosity and asking questions promoted school staff's thinking regarding learners' reading and regarding implementation activities. The EP used a process of reflecting together including being an active listener, encouraging self-efficacy and re-framing, which enabled school staff to think more creatively regarding implementation barriers.

Analysis suggested that EPs used consultation in much of their work regarding implementation and EPS staff suggested that these processes and associated skills were embedded into their practice.

“With this implementation ... it's the ... relational aspect of our job and our understanding and attribution theory and consultation and ...modelling ...what it is we should be thinking of, how we're doing it and why we're doing it.” (EPS1).

Quote 40

EPS colleagues also noted that they used other psychological processes presented in section 4.3.1.4c.

4.3.1.4c Using Other Psychological Processes

EPS colleagues identified using a range of psychological processes during implementation support activities. These were reported to be commonly used to change school professionals' beliefs and behaviours. The processes described are tabulated in Table 15 with examples. EPS colleagues described using relational approaches to build relationships. Processes included support to engage in reflective conversations. EPs explored staff attributions and personal constructs to find out school professionals' reasons for holding beliefs with a view to driving change. EPs also used a strengths-based approach of building upon good practice.

Table 15 Interpretative Analysis of Psychological Process Utilised in Implementation

Psychology Identified	How the Process Was Applied	Example
Social Psychology: Attachment Theory	The participant developed a relational-based process drawing upon attachment theory by reinforcing the importance of their relationships with learners and building relationships with staff and thinking about how to provide feedback.	<p><i>“I suppose being that supportive and reflective friend... that colleague, ... you can go in and you can reflect with them, you can help to problem solve with them... Developing it together and knowing how to give that feedback... in terms of naming the psychology... just, ... allowing staff to ask questions..., hopefully providing that kind of open space. And to feel comfortable to ask any questions that they've got. And ... providing that sensitive feedback and encouragement, I think that's the main thing for me... letting them know that even just being with that child or providing that space or reading together and doing some practise will be making so much difference and will be having a really good impact. So, I think just that...cheerleader in the background.” (EPS7).</i></p> <p><i>Quote 41</i></p>

Psychology Identified	How the Process Was Applied	Example
Social Psychology: Attribution Theory	In developing implementation strategies, a process was developed drawing upon attribution theory, where the EPS explored with staff conceptualisations regarding implementation behaviours.	<i>“...what we need to do is ...go back to our psychology and we need to look at our attributions for change and really find out from people ... where their intention to help comes in and what affects that.” (EPS1).</i> Quote 42
Positive Psychology	The participant described their process of encouraging implementation using positive psychology to empower, by focusing on strengths within the school and individual staff members.	<i>“...positive psychology...so loads of encouragement, loads of recognition that they're actually doing it ... to the best of their ability and trying sorts of things out and acknowledging that you know what they're doing is great for the young people even when they find it difficult even and letting them know that they can talk to me about any issues that they have.” (EPS2).</i> Quote 43

Psychology Identified	How the Process Was Applied	Example
Personal Construct Psychology (PCP)	In developing implementation strategies, a suggestion was to develop a process with leaders, using PCP, to find out how they understand the world, reflecting upon this with them in terms of making decisions, including implementing the intervention.	<p><i>"I think there's a little bit of PCP in there to find out what the decision making is in that particular sphere and what would move it [forward]."</i></p> <p><i>(EPS4).</i></p> <p><i>Quote 44</i></p>

Psychology Identified	How the Process Was Applied	Example
Solution- Focussed Psychology	The EPS planned a strategy based on a process of aiming to change school staff beliefs to motivate them to implement the intervention.	<p><i>"... it's more about how do we deliver psychology to people. People are massively technologically based these days, ...so actually I think we will reach a lot more people if we adopt educational technology. ...So, if you want to harness people's motivation for change and belief that they can do things differently, ... we use our miracle question...[there's] big potential there." (EPS4).</i></p> <p><i>Quote 45</i></p>

Psychology Identified	How the Process Was Applied	Example
Marketing Psychology	The EPS planned a process of creating motivation by offering the web-based app for free for a time limited 6-month period to create the behaviour change of taking up the WBP.	<p><i>“...even down to the implementation, there's a lot of psychology going on in respect to the implementation. [The] majority of that is behavioural because we are requesting that behavioural change and so lots of the strings that we were pulling were strings that any marketing psychology would give you. We need to motivate schools. How do we do that? We motivate them by confirming it's free...But we also confirm it's only free for a limited period. So that created urgency. So, it stopped SENDCOs to a large part saying, “I'll look at that next term”. It became important. So, in their priority list, it was a now.” (EPS5).</i></p> <p><i>Quote 46</i></p>

Therefore, EP colleagues drew upon a range of psychological processes to promote change in school staff beliefs and behaviours regarding the intervention and implementation, both in the context of planned mechanisms specific to the intervention and those that were embedded in EPS colleague's practice.

Overall, the mechanisms in the EPS centred upon feedback loops involved in changing beliefs, behaviours, and motivations; empowering staff, and drawing upon psychological processes to promote change. The mechanisms associated with support in school are presented in section 4.3.1.5.

4.3.1.5 Support Mechanisms in Schools

School staff identified several school-based support mechanisms they considered lead to implementing the intervention: decision-making processes, finding solutions, and peer coaching.

4.3.1.5a Decision-Making Processes

School had embedded decision-making processes with key staff and purposefully selected and de-selected interventions. Analysis suggested that school leaders encouraged a process that empowered staff to make decisions about the intervention (Quote 47). Also, a review process was built-in where staff made decisions regarding maintenance or de-selection (Quote 48).

"... after that initial conversation with [Link EP], TAs and [colleague], we have a conversation...we all agreed it looked like a good programme that would be useful to us as a school. And then really, that's where... I asked ... the questions if we [had] got the resources, if we [had] got the time [to]... run it ..." (SC3).

Quote 47

This illustrated team involvement in driving the implementation process forwards in schools which related to the open culture within the school.

"And [staff are] honest, they'll ...say, '..these results [are] rubbish. Like, what's the point of doing this?' Yeah, that's an openness..." (SC3).

Quote 48

The problem-solving process was also linked to a process of finding solutions.

4.3.1.5b Finding Solutions

A process of solution finding was linked to a process of CSS staff empowerment and self-efficacy. Leaders encouraged CSS staff to take responsibility for the intervention and implementation.

"... we like to know what's going on, but ... nobody's micromanaged ... we try and empower people to run with it [the intervention] ... because ...staff [know] that we trust them." (SC3).

Quote 49

"I've taken on more responsibility, which is nice. And my confidence to be able to deliver interventions is improved." (SC1).

Quote 50

Quotes 49 and 50 demonstrated the internal processes involved in solution finding was linked to leaders encouraging CSS staff to feel empowered, and for staff to perceive they had the capability (self-efficacy) to lead on the intervention and the power to make decisions regarding implementation.

4.3.1.5c Coaching

CSS staff utilised a peer coaching process to enable them to set up the intervention, including when new staff joined the intervention.

"...you definitely need succession planning...And they [CSS] were still committed to [the intervention] They sorted it all out." (EPS2).

Quote 51

The CSS explained the process of watching the on-line videos and devising the implementation package around the EPS recommendations.

"I liked that ...they [EPS project managers] worked through it on the video, so you could see exactly what they were doing...So having been able to actually see somebody do it really helped me." (SC1).

Quote 52

The coaching process provided confidence for staff to then implement the intervention (Quotes 53 and 54).

“[colleagues] went through it with me, taught me how to do it. For about two or three weeks, they ...sat in with me while I did it until I was comfortable...I shadowed and ...they watched me, [and] I liked being able to watch them [colleagues] first so that I had a good understanding of what was expected.” (SC1).

Quote 53

“I had a go delivering it ...[colleague] watched me and then [colleague] had a go so that we could...watch somebody else do it and then put it into practice by watching each other. So ... we just felt confident.” (SC7).

Quote 54

During analysis the exploration of coaching revealed the extent that the CSS undertook peer coaching practices as part of a wider primary focus on staff PD, building capacity and resilience in staff. The initiative was ‘putting staff first’ with the conceptualisation that if staff were well and feeling confident these improved outcomes for learners. Therefore, CSS leaders promoted staff PD as a primary goal and provided the structure and processes to enable staff to develop. For example, a coaching and mentoring scheme was available, and staff were encouraged to lead on interventions. Also, staff PD was based upon evidence and the science of learning.

“... the whole idea behind the science of learning, ... our CPD follows that as well.”
(SC5).

Quote 55

The analysis indicated that the CSS was an open-system organisation in terms of taking on new ideas from EBP.

In summary, the support mechanisms within the CSS were perceived to inform the implementation of the intervention and its maintenance. These mechanisms centred upon:

- staff empowerment and self-efficacy, focussing upon staff making decisions and finding solutions;
- a process of a peer-based supportive network that focused on intervention delivery and implementation activities.

4.3.1.6 Summary of Mechanisms

In summary, the EPS mechanisms were hypothesized to enable other processes involved with taking up and maintaining the intervention. A central process were the AEP and EP roles using consultative skills enabling relationships and positive interactions with the CSS. The EP role was an unplanned mechanism in the CSS, but this could be utilised to become a planned mechanism. The CSS had processes that enabled the take up and maintenance of the intervention, most notably peer coaching and problem-solving processes. An underlying key process was enhancing staff self-efficacy regarding implementation skills.

4.4 Research Questions 3 and 4

RQ 3: How can a secondary school be encouraged by an EPS to begin the uptake and implementation of a Direct Instruction learning-focused targeted intervention for reading?

- *What are the key facilitators from the perspective of the EPS and the school?*
- *What are the barriers, and how can they be overcome, from the perspective of the EPS and the school?*

RQ4: How can secondary schools be supported by an EPS to maintain a learning-focused targeted intervention of Direct Instruction for reading?

- *What are the key facilitators from the perspective of the EPS and school?*
- *What are the barriers, and how could they be overcome from the perspective of the EPS and school?*

RQs 3 and 4 explored determinants (facilitators and barriers) and the subsequent strategies that could be put in place by the EPS enhancing facilitating aspects and removing barriers. I defined determinants as *barriers and facilitators which are aspects of practice found at multiple levels of the organisation which can enable or hinder implementation of a specific intervention. There are inextricably linked with context but have been differentiated by participants' views i.e. context discussed by participants in the abstract and determinants discussed when directly referring to the intervention and implementation.* Therefore, there was much overlap between determinants and other aspects of implementation, particularly relating to context and some of the data relating to the determinant research questions is presented in section 4.2.1.

The determinants relating to the intervention and implementation support were explored in the SSIs (Appendix viii). Despite direct questions regarding determinants for each phase, participants discussed issues according to their own conceptualisations. It became clear that participants had differing conceptualisations of the implementation phases. Therefore, through analysis of the data, general facilitators and barriers to implementation were gathered alongside the specific set up and maintenance stage determinants (Table 16 and Table 17). There is a lack of data in some of the set-up and maintenance stages, but this does not necessarily indicate that there were no determinants in this area, rather that this research did not capture them.

4.4.1 Key Facilitators

I extrapolated key facilitators, and an overview is presented in Table 16. Facilitators not identified in Table 16 are presented in the charting summary (Appendix xix, xx and xxi).

Table 16 Key Facilitators

Facilitator Characteristics	General Facilitators	Facilitators Specific to the Set-Up Phase	Facilitators Specific to the Maintenance Phase
EPS Characteristics	Co-Working	Pull Factors: Learners Requiring Phonics	None identified
	WBP		
Implementation Supporter Characteristics	Encouragement, Knowledge & Skills	EP & AEP Support	On-going In-Person Support
Implementer Characteristics	Knowledge of the Learner	Driver Role	Embedded Problem-Solving Practices
	Building Relationships		
	Motivation		
Intervention Characteristics	Flexibility	Appealing: Flexibility & Sharing Research Base	Ease of Scaling Up
	Learners' positive experiences and motivation		
	Ease of Use		
	Free of Charge		

Facilitator Characteristics	General Facilitators	Facilitators Specific to the Set-Up Phase	Facilitators Specific to the Maintenance Phase
School	Resources	None identified	Leadership
Organisation	Staff Capacity		Support & Review
Characteristics			

4.4.1.1a Pull Factors

From the CSS perspective, a pull factor to take up the intervention and maintain it, was the increasing level of learners' reading needs.

"...we needed to take a step back from just the [existing] reading intervention because [students] weren't accessing that.... we needed something that was ... more basic for a secondary school." (SC3).

Quote 56

The CSS identified greater learner reading needs following the Covid-19 pandemic and identified a skill gap for teaching early reading skills in the CSS.

4.4.1.1b School Staff Implementer characteristics

4.4.1.1bi Knowledge of the Learner

CSS staff knowledge of individual learners was an important facilitator. LSAs reported flexible responses to individual learners' needs e.g. giving them an intervention time which suited the learner best and being mindful of not taking learners out of their preferred lessons.

“My slot varies for the students themselves. Some ...are better ... in the morning, some ...are better in the evening. So, trying to manage which students in my slots worked better [gaining]... better results.” (SC7).

Quote 57

Knowledge of the learner encompassed identifying learner needs, and being able to adapt the intervention to the learners' needs promoting a more favourable learning environment.

This significant facilitator was wide-reaching, overlapping numerous facilitators, and related to the mechanisms of building relationships and problem-solving.

4.4.1.1c Intervention Characteristics

4.4.1.1ci Learners' Positive Experiences

CSS staff reported learners looked forward to weekly assessments because they enjoyed viewing their progress. The EPS also noted this perspective, linking this to positive psychology and a personal feedback loop.

"...This intervention [is]... positive psychology. [It] allows the [learner] to ... see that they're succeeding.... And that's what... powers the adults, because [adults]... can see the [learner] is improving...what motivates that young person ...[is]... that [learner] has to feel that this is a powerful intervention...the graphs show the [learner] their own progression, ...that's what powers progress." (EPS5).

Quote 58

School and EPS staff thus viewed positive experiences of the learner as a key facilitator, linked to the mechanism of building relationships, and the learners' sense of achievement and motivation.

4.4.1.2 Facilitators Relating to the Set-Up Phase

4.4.1.2a Implementation Supporter Characteristics

4.4.1.2ai EP and AEP Support

The support offered by the EP and AEP roles were perceived by the CSS and EPS staff as a significant facilitator in the early stages of the intervention. It is not clear whether school staff understood the difference between the EP, TEP and AEP roles, but valued the support provided by all EPS professionals. This facilitator was

strongly linked with the responsive nature of the support activities, the CSS's trust in regarding recommending the intervention, and the ease of use of materials provided.

Facilitators were thus interacting with the school's contextual factors, mechanisms and EPS planned strategies.

4.4.1.3 Facilitators Relating to the Maintenance Phase

4.4.1.3a Implementation Supporter Characteristics

4.4.1.3ai In-Person Support

School reported that they valued in-person support, and this was apparent during the support meetings where issues could be addressed swiftly. This demonstrates the link between the relationship building mechanism and the relational strategy of the EPS.

4.4.1.3b School Organisation Characteristics

4.4.1.3bi Leadership Support & Review

From CSS staff perspective, the maintenance of the intervention was attributed to the support from the EPS and CSS leadership, alongside the commitment to helping learners to read.

4.4.1.4 Overview of Facilitators

Overall, the 'intervention culture' and purposeful selection and de-selection decision-making by the CSS were key facilitators. The implementation barriers and suggestions for how they could be overcome are presented in section 4.4.2.

4.4.2 Key Barriers

As per section 4.4.1, I selected salient barriers from analysis which are presented in this section with further details available in the charting summary in Appendix xxii, xxiii and xxiv).

Although there were commonalities, analysis suggested the reported facilitators and barriers were not necessarily the inverse of one another. General key barriers and those identified during the set up and maintenance phases are presented in Table 17.

Table 17 Key Barriers

Barrier Characteristics	General Barriers	Barriers Specific to the Set-Up Phase	Barriers Specific to the Maintenance Phase
EPS Characteristics	Finding Funding	Push Factors:	None identified
	Delays	Tribunal Rate	
	Competing Priorities & Variations Between LAs		
Implementation	AEP Role	Non identified	Non identified
Supporter Characteristics	EP Role		

Barrier Characteristics	General Barriers	Barriers Specific to the Set-Up Phase	Barriers Specific to the Maintenance Phase
Implementer Characteristics	Confidence	Perceptions of Intervention Difficulty	Perceptions of Progress
	Perceptions & Beliefs		
	Lack of Agency		
	Resistance to Change		Lack of Screening Knowledge & Materials
	Forgetting		Generalisation
Intervention Characteristics	Comprehension	None identified	None identified
	New Technology		
School Organisation Characteristics	Lack of Staff Capacity	None identified	Staff Availability
	Curriculum		
	Campus		
	Resources		
Learner Characteristics	Complex Needs	None identified	Attendance
	Engagement, Motivation & Peer Judgement		

4.4.2a Implementation Supporter Characteristics

4.4.2ai AEP Role

Potential barriers were identified by EPS leaders. A barrier was AEP staff turnover, meaning that skilled staff were potentially lost each year, and new staff would require training. The training took approximately 4 months, with AEPs reporting complex tasks which initially needed clarity. The EPS responded by undertaking a directive leadership approach during the initial training period of new staff starting the role.

4.4.2aii EP Role

In this research the EP role was interpreted as a mechanism that contributed to the outcome of implementation. However, from the EPS perspective there was a lack of implementation practice embedded within the EP role. There was also a perception that more systemic psychology could be used in practice. Multiple competing demands and associated time constraints were barriers reported by EPS leaders and EPs. The EPS responded by setting up a development group to promote implementation practice.

4.4.2b Implementer Characteristics

4.42bi Perceptions & Beliefs

A barrier reported by the CSS and EPS indicated that TAs with reading experience may adapt the content of the intervention according to prior beliefs regarding teaching reading. In response the EPS set up monthly network meetings to share school experiences and training for secondary school staff on teaching reading, to

assist with deepening understanding and changing beliefs; alongside offering fidelity visits to secondary schools.

4.4.2c Intervention Characteristics

4.4.2ci New Technology

A barrier from the perspective of the CSS was changing from the paper-based version of the intervention (practice which was embedded) to using the WBP. A barrier involved staff needing time to understand the WBP and technological issues. This was overcome with in-person support from an AEP and the email support function. Any specific difficulties were passed to web-based development colleagues who swiftly made changes to the technology where needed.

4.4.2d School Organisation Characteristics

4.4.2di Curriculum

A key barrier for CSS staff were perceptions around the curriculum. School teaching staff (e.g. English teachers) were not involved in the intervention and may therefore not have known the learners' phonics needs. The EPS and CSS reported an embedded perception in many secondary schools that learners may not be withdrawn from curriculum time making it difficult for LSAs to find times they could deliver the intervention. CSS leaders overcame this barrier by encouraging an intervention-based culture, and providing support to the SEND department, meaning LSAs had agency to undertake the intervention and set personal intervention timetables for learners.

4.4.2e Barriers at the Set-Up Phase

4.4.2ei Implementer Characteristics: Perceptions of Intervention Difficulty

From the CSS perspective, LSAs initially perceived that the intervention was difficult to undertake and experienced feelings of apprehension. In response the EPS developed enhanced in-person support for secondary schools.

4.4.2f Barriers at the Maintenance Phase

4.4.2fi Implementer Characteristics: Generalisation

The CSS perceived assessing learners' generalisation of reading as a barrier. CSS staff were unclear about whether they should be teaching comprehension. Difficulties using real books were identified. In response, the EPS planned further input on the generalisation element of the intervention via the network meetings.

4.4.3 Summary of Barriers

Barriers and facilitators were found to be different and not inverse. Key barriers included AEP turnover, lack of EP implementation practice, and school staff adapting the intervention according to their beliefs about teaching reading, and a perception that learners could not be withdrawn from lessons. Barriers in this research are reported dynamically, due to the study being part of the implementation support itself. Barriers and how they could be overcome were discussed by senior leadership and the resultant strategies are presented in Table 18 (general barriers), Table 19 (set-up phase barriers), and Table 20 (maintenance phase barriers). The report of analysis for RQ5 considers barriers further and resultant strategy planning is outlined in section 4.5.

Table 18 General Barriers and SLT Reflections on How These Could Be Overcome

Overarching Theme	General Barriers	How This Barrier Could Be Overcome
EPS Organisation	Finding Funding	No suggestions.
	Delays	Co-working with LA colleagues was able to resolve this area.
	Competing Priorities and Variations Between LAs	The SEPs from each area are committed to trying to ensure that priorities regarding the intervention and implementation strategies align.
Implementation Supporter Characteristics	AEP Role	Consideration of a different type of role which could be permanent and directly supporting implementation alone.
	EP Role	Need for reflection, direct feedback from schools, using systemic psychology, CPD, supervision and providing time for EPs to become familiar with the intervention.

Overarching Theme	General Barriers	How This Barrier Could Be Overcome
Implementer Characteristics	Confidence	Encourage fidelity visits, using a different language than 'fidelity', providing sensitive feedback.
Implementer Characteristics	Perceptions and Beliefs	Training for secondary school staff to teach phonics and how to identify learners who need support with phonics (often conflated with comprehension). Sharing experience via word-of-mouth opportunities from other secondary schools (via the network meetings) and via head teacher forums. Communicating the wider role of the EP to schools.
Implementer Characteristics	Lack of Agency	Sharing this thesis research, demonstrating the practice and strategies of a school that had undertaken the intervention.
Implementer Characteristics	Resistance to Change	The EPS continuing to promote the approach and data.

Overarching Theme	General Barriers	How This Barrier Could Be Overcome
Implementer Characteristics	Forgetting	It is suggested that there is a review time to re-watch and re-launch the intervention if needed.
Implementer Characteristics	Variations in Fidelity	Interrogating school data to explore whether the learners are making progress and offering support. Encouraging fidelity visits. These may need to be packaged differently in terms of language used (e.g. 'fidelity') and providing another service whilst on site, making the visits more appealing. The use of peer coaching provided by schools who undertake the intervention may be explored, for example, the case study school use a peer coaching model.

Overarching Theme	General Barriers	How This Barrier Could Be Overcome
Intervention Characteristics	Comprehension	Reassurance that concentrating upon the mechanics of learning and making progress in this area is appropriate for a short period. The development of a follow-on comprehension intervention would be of benefit.
	New Technology	These issues were resolved by an in-person meeting initially and the email helpdesk.

Overarching Theme	General Barriers	How This Barrier Could Be Overcome
Learner Characteristics	Complex Needs	Link EP to work with the school for learners identified to be complex and not making progress. The EPS may consider a higher-level support package for these learners.
	Engagement, motivation and peer judgement.	An intervention culture being embedded alongside individual delivery of the intervention were perceived to support this area.
	Lack of Staff Capacity	Encouraging schools to build in capacity.
School Organisation Characteristics	Curriculum	English teachers to be trained in the approach. Schools to have the confidence to withdraw learners to prioritise learning to read, selecting lessons carefully.
	Campus	School had a weekly meeting to problem-solve these issues.
	Resources	No suggestions identified.

Overarching Theme	General Barriers	How This Barrier Could Be Overcome
Push Factors	Tribunal Rate	EPS leaders are planning to engage with school senior leaders to encourage the prioritisation of the intervention.

Table 19 Set-Up Phase Barriers and SLT Reflections on How These Could Be Overcome

Overarching Theme	Set Up Barriers	How This Barrier Could Be Overcome
Implementer Characteristics	Perceptions of Intervention Difficulty	Providing more training on what progress rates might typically look like and AEPs and EPs providing support for learners making significantly slower rates of progress,

Table 20 Maintenance-Phase Barriers and SLT Reflection on How These Could Be Overcome

Overarching Theme	Maintenance Barriers	How This Barrier Could Be Overcome
Implementer Characteristics	Lack of Screening Knowledge & Materials	A more explicit selection criteria and suggestions for screening materials would be of benefit.
	Perceptions Regarding Progress	Screening materials would be of benefit.
	Generalisation	Consideration of books that could be loaded onto the WBP.
Intervention Characteristics	Staff Availability	No suggestions identified.
School Organisation Characteristics	Non identified	

Overarching Theme	Maintenance Barriers	How This Barrier Could Be Overcome
Learner Characteristics	Attendance	Consideration of a home-based login.

4.5 Research Question 5

RQ5: What are the predominant strategies employed by an EPS and mainstream secondary school when implementing a Direct Instruction learning-focused targeted intervention for reading and how can these contribute to optimising implementation?

Strategies were identified through analysis and a charting summary is presented in Appendix xxv. Following analysis, I selected key strategies from the charting summary which appeared significant to both the EPS stakeholders and CSS in the implementation of the intervention. Strategies differed by organisation because they were linked to each organisation's context, and were thus conceptualised and driven by the leaders of each organisation *according to context*. Table 21 summarises key implementation support strategies developed by the home LA for secondary schools. Table 22 provides key strategies that the CSS had in place to ensure that the intervention was implemented in the school setting. Key findings were selected and are presented below.

Table 21: A Summary of the Intervention Support Strategies for Secondary Schools by the Educational Psychology Service (EPS) for Year 2023-4

Overall Strategy	Strategy Details
Leadership	<p>Senior leaders engaged with school leaders at head teacher forums to raise awareness.</p> <p>Webinar sessions for EPs to practice the virtual platform, explain the approach and answer questions led by SEPs was offered to the home LA EPS.</p> <p>Financing of the approach was commissioned through the Virtual School and Home LA.</p>
Raising Awareness	<p>EPs, AEPs and senior leaders raised awareness of the free support offer through their professional contacts and via formal channels to schools such as newsletters and EP recommendations.</p>
Monthly Network Meetings	<p>Training on the approach was developed by the project leaders in response to previous feedback requests.</p> <p>Group discussion for school was offered at twilight and afternoon sessions. Input was provided by the project leaders and schools had the opportunity to speak with other schools to share practice.</p>

Overall Strategy	Strategy Details
Web-Based Platform	<p>Training/ CPD videos were available to view to model to users how to use the platform, the intervention and how to assess learners.</p> <p>Reports and graphs were available for monitoring progress of individual learners, a direct message function with the EPS and a feedback form for users was available.</p> <p>A Padlet with resources for schools including question and answer function and leaflet for parents was available.</p>
Link AEP Support	<p>An AEP was available daily for technological support or intervention queries via email.</p> <p>An AEP was available for a one hour-long face to face TEAMS implementation session for schools signing up to the intervention.</p> <p>A 3 hour in-school fidelity visit was available for schools signing up to the intervention.</p> <p>Weekly targeting of schools through assessment reports from the WBP took place using the message function.</p>
Back Office Support	<p>LA IT back-office support was provided for developing the web-based programme and any subsequent technological issues.</p> <p>A legal team to assist with issues e.g. data compliance was available to the LA.</p>

Overall Strategy	Strategy Details
Emerging Strategies	<p>Leadership supervision - EPS leaders could provide reflective spaces with school senior leaders to explore decision-making processes</p> <p>EPS time could be allocated as a service to support EPs with learning about the intervention and time to explore the WBP.</p> <p>Comprehension and spellings interventions for learners who completed the intervention and needed to progress to the next stage of reading and writing were considered by the EPS project leaders.</p> <p>A Home LA EPS development group considering improving implementation of EP recommendations had been set up and shared findings with EPs in a service day in Autumn 2024.</p> <p>An annual conference to promote the intervention, present the research base, and gather further ideas for strategies to support schools and optimise implementation was considered by the project leaders.</p>

Table 22 Summary of the Case Study School Implementation Support Strategies used by School Staff

Overall Strategy	Strategy Details
Capacity Building	A SEND department was in place with a SENDCO (non-teaching role), Deputy SENDCO, LSA Co-ordinator supporting at least 2 LSAs available to undertake the intervention.
Decision-Making Structure	A decision-making structure was in place where SEND staff were involved in deciding upon the selection and de-selection of interventions. Interventions were re-started if staff felt that there was a loss of learner mastery. Decisions were made about intervention timings i.e. when learners missed lessons.
SEND Team Meetings	Staff had weekly team meetings to discuss the progress of students. Time was allocated to problem-solve any barriers regarding the intervention.
Resources	<p>Resources were available to staff in order to implement interventions: a dedicated room, library resources, assessments for selection (Accelerated Reader, Salford Reading Test), whiteboard, student iPads, phonics display.</p> <p>Time was provided to staff to watch the EPS videos and to undertake peer coaching (2 days). Time was provided for staff handovers i.e. if a member of staff decided they no longer wished to undertake the intervention.</p>

Overall Strategy	Strategy Details
Peer Coaching	<p>Staff watched each other approximately 2-3 times per week over a period of 2-3 weeks. They modelled to one another and discussed whether they were meeting the fidelity criteria.</p> <p>Shadowing, modelling and drop-ins by staff continued over the academic year.</p>
Individual Strategies	<p>A trial was undertaken using one learner initially.</p> <p>Postcards were sent home to learners with their achievements regarding their progress. A report for learners was sent home for each learner for intervention progress.</p> <p>Five minutes before and after the intervention were protected for relationship building with the learner.</p> <p>LSAs checked- in with learners each morning and provided a slip with a reminder of the intervention time.</p>

4.5.1 EPS Strategy Development (SD)

SD was overseen by the project leaders for the home and partner LA. The leaders worked closely together and had strategy discussions with senior leaders following feedback and input from the AEP team (through monthly meetings) and schools (through the monthly webinars and WBP message function). Feedback was also gained from EPs, AEPs and project leaders' daily practice with schools. The key strategies identified through analysis were: using evidence, the AEP support team, the WBP, and responsiveness and reflection.

4.5.1a Using Evidence

The EPS were conscious to include both PBE and EBP sources to develop implementation strategies. Both the home and partner LA project leaders conceptualised SD in terms of being responsive to opportunities. As a core strategy the project leaders identified their embedded use of implementation knowledge from PBE and their active strategy of exploring evidence-bases.

"... we've taken opportunities that have come up... [we had a] ...knowledge base to know that we need[ed] those opportunities. ...we got some result[s] ...[that's] more PBE... then we looked at the implementation research." (LA2).

Quote 59

SD was therefore responsive to opportunities, linking to the driver role of both project leaders, meaning project leaders were able to identify opportunities and create strategy using data, mostly from data relating to *determinants*. Also, both empirical

evidence and PBE provided a valuable contribution to SD. Further, analysis suggested the role of PBE, and research-bases were inextricably linked in the resultant process of SD. Research evidence (such as Chidley and Stringer (2020)) was identified as one of the core considerations for SD. Also, the project leaders were revealed to be process driven, for example, strategies were reviewed and revised by the project leaders to ensure that implementation support met the needs of schools.

4.5.1b AEP Support Team

The AEP support team provided the core role for implementation support presented in Table 21.

SD evolved over time in response to feedback and the ability to access data from the WBP. The AEP team were able to provide valuable feedback regarding *determinants* to project leaders who used this data to develop further strategies. Leaders were receptive to ideas and allowed the AEP role to expand in response. For example, an AEP conceived the development of the WBP and collaborated with the project leader, web-based development and legal team in the home LA to design and implement the WBP.

5.4.1c Web-Based Platform (WBP)

The WBP was developed to enhance ease of use and enable evaluation. The WBP allowed the EPS to access data and view which schools were undertaking the intervention, the frequency, and progress of individual learners. This enabled the

EPS to target schools who had stalled with the intervention, or to provide enhanced support to schools who had learners who were not making progress.

In summary, the constructions from the data uncovered the primary SD by the EPS was the employment of an AEP support team to undertake in-person support. The EPS also responded to AEP ideas and subsequently the WBP was developed as an implementation strategy. Analysis suggested the *underlying nature* of SD was *EPS responsiveness* in response to opportunities and learning from other colleagues (e.g. school, EPS and LA colleagues).

4.5.1d Responsivity and Reflection (Learning from Colleagues)

Strategies for secondary schools were planned on a termly basis in accordance with the feedback the EPS were receiving. This feedback was from a variety of sources:

- this research (literature review and involvement with the CSS);
- AEP feedback of their experiences via monthly AEP meetings and TEAMS chat;
- co-working with the partner LA;
- feedback from the email support function from schools;
- feedback from schools and EPS staff attending the monthly network meetings;
- feedback from EPS and other LA colleagues e.g. legal team.

SEPs encouraged open discussion and feedback, with the primary function of being responsive to schools. This was purposeful, to gain feedback to make decisions regarding the optimal strategies for encouraging schools to take up and maintain the intervention.

Overall, the EPS strategy was based upon a reflective approach of *responding* to opportunities and feedback, and consideration of determinants. Strategy was developed and the impact reviewed by gaining feedback from a cycle of analysing data (e.g. how many schools had signed up and learner progress) and reviewing feedback from professionals (as detailed above).

4.6 Overall Conceptualisation of Findings

Figure 7 presents my overall conceptualisation of the data. Through analysis and synthesis of findings I conceptualised the implementation of the targeted learning-focused intervention of DI for reading as a system. Following analysis, I placed mechanisms at the centre of the system. Five overarching mechanisms were uncovered relating to interactions between the EPS, school and learners (Figure 9). Synthesis of the data suggested that these mechanisms were inter-linking and were underpinned by the EPS planned mechanisms that *enabled* other processes. The processes involved in these interactions included:

- Building trusting relationships (as part of the mechanism of interacting factors between organisations (section 4.3.1.3));
- Changing beliefs and behaviours of staff in both organisations relating to teaching reading and implementing recommended practice (as part of implementer and implementation supporter characteristics (section 4.3.1.2));
- EPS significant actors who used psychological processes such as consultation (section 4.3.1.4 EP role); and

- CSS significant actors who enabled reflective and problem-solving processes (overlap between implementer and implementation supporter characteristics (section 4.3.1.2) and support mechanisms within the CSS (section 4.3.1.5)).

The EP Role was conceptualised as separate to EPS planned mechanisms, because the link EP was acting autonomously as part of embedded practice rather than as a planned EPS strategy. A potential underlying mechanism related to enhancing self-efficacy of professionals regarding implementation activities appeared to be integral to many of the five identified mechanisms. I perceived the mechanisms as significant because they were the *enablers* for implementation. I suggest that these enablers were critical to implementation activities.

Supporting the mechanisms were the determinants (facilitators and barriers) for both organisations and the resultant SD. Determinants were not necessarily the inverse of one another and were considered separately. Key facilitators related to:

- the intervention culture of the CSS including their selection process,
- the relationship between the link EP and CSS,
- AEP support, and
- the motivation of the CSS.

Key barriers included:

- the secondary school curriculum (intervention staff perceiving learners could not miss lessons);
- perceptions and beliefs of staff regarding reading (meaning that staff may need to change their beliefs regarding teaching reading to deliver with fidelity).

Determinants appeared to be utilised as a *key source* for SD in both organisations.

EPS SD for intervention implementation activities followed a review cycle that emerged from being responsive to schools. Project leaders used PBE, empirical evidence, and feedback loops to inform strategies which were then reviewed.

Following analysis, I perceived organisational context was *critical* to determining facilitators, barriers, SD and supporting the mechanisms. Context was conceptualised as a dynamic force, with analysis revealing the organisational changes and culture of each organisation was led by leaders who valued feedback loops as part of an open-system culture. Both organisations aimed to increase capacity by focussing upon PD and improving practice.

A macro layer was also conceptualised. There was a lack of data in this layer in comparison to the other conceptual layers of the system. However, leaders identified push factors, such as sourcing funding that shaped organisational contexts in education. Overall, I conceived that the system worked together to implement activities over time, with each element of the system interacting with all other elements and layers, making a holistic implementation system.

The findings are discussed in Chapter 5.

CHAPTER 5: DISCUSSION

5.1 Introduction

This study explored how an EPS could optimise support for a secondary school with a targeted learning-focused intervention for DI. A summary of findings is presented followed by a critical review considering findings. A review of the methods including strengths and limitations is presented, followed by implications for future research, for education and educational psychology professionals and for EPSs.

5.1.1 *Summary of Findings*

The implementation activities surrounding the intervention can be conceptualised as a holistic system (section 4.6). The organisations responded to a macro layer which contained push factors such as seeking funding and responding to curriculum demands. The context of each organisation was conceptualised as significant, as a supporting factor to the implementation system (section 4.2.1). Five key mechanisms were identified (section 4.3):

- EPS planned mechanisms,
- implementer and implementation supporter characteristics,
- interacting factors between organisations,
- EP role, and
- support mechanisms within the school organisation.

I conceptualised mechanisms within the system as critical processes that enabled implementation of the intervention (Ogden & Fixsen, 2014), with actors in the process responding to determinants (Franks & Bory, 2015) to develop strategies

(Powell et al., 2015). Feedback loops were used by the organisations (section 4.2) to enable reflection and review around interventions and their implementation (Riley et al., 2017). Therefore, this research aligns with prior literature (Chapter 2). A simplified diagram of the findings of this research illustrates predominant themes, (Figure 9).

Determinants (section 4.4) were gathered by the organisations through numerous feedback loops. EPS SD (section 4.5) was based upon the EPS being responsive to these factors. A key finding was that systems supporting implementation interacted together, producing the whole, or rich picture (section 4.6). Therefore, every aspect of the organisation and everyone within the organisation had an influence upon the whole. It is hypothesized here that the impact of change, through introduction of an intervention may be on the one hand perceived by a school as manageable, with the organisation making familiar adjustments to accommodate the intervention.

However, the impact of change when implementing an intervention may contrastingly involve substantial and significant structural adjustments perceived by school staff to be required to accommodate implementation activities. In the case of the CSS the intervention's implementation was undertaken with relative ease. This was perceived to be associated with a trusting relationship with the link EP (4.3.1.3a), further implementation support from the EPS (4.3.1.1), alongside autonomous school staff who experienced implementation activity self-efficacy (4.2.1.1) and problem-solving activities (section 4.3.1.5b). I suggest the trusting relationship with EP, autonomous school staff who had self-efficacy with implementation activities, and problem-solving activities were factors assisting CSS staff to make changes to accommodate the intervention. These factors were familiar and relatively routine because of the context's 'intervention culture' (section 4.4.1.3b). However, in other settings, these

factors may not be as embedded. Therefore, changes to accommodate an intervention may be too great for the school's contextual capacity. Thus, I propose that implementation is a holistic system which supports implementation processes and activities. This is key for an EPS and school when considering selecting an intervention and planning associated implementation activities.

A critical review of findings follows, organised by each RQ.

5.2 A Critical Review of Findings

5.2.1 A Critical Review of RQ1: Contextual Features of Organisations

The context of organisations is conceptualised here as a critical driving force in implementation activities (Greenhalgh & Manzano, 2022; Schein, 1990). In both the EPS and CSS, the organisations strived for capacity-building through OD with a view to being able to support interventions, by being skilled in implementation activities and open to change (section 4.2.1.1c). Environmental readiness (organisational factors that can hinder or support an intervention) has been explored in the health sector (Smith & Donze, 2010) with indications that leaders first consider interactions between different levels of an organisation when developing an EBP implementation culture. The EPS and CSS had leaders who created and supported an implementation-based culture and sought resources (including skilled staff) to enable implementation activities. Therefore, organisational context could be considered to contribute to optimising implementation.

Research into the context of educational organisations has called for greater understanding relating to multidimensional factors (Castro-Villarreal & Rodriguez, 2017), for example cultural needs (Frisby, 1999). There is a need to gain a holistic

picture of educational contexts by exploration of processes and interactions (Kratochwill & Stoiber, 2000b). Critically, this research identifies, that the organisational context drove the implementation culture, and was linked with leadership (section 4.2.1). I found leaders' goals were to be creative and supportive regarding implementation activities. Here, planned decision-making regarding the selection and de-selection of interventions was key to implementation support (section 4.3.1.5a), concurring with Aarons et al. (2014). Therefore, an EPS could potentially engage with school leaders to reflect upon and support their selection deliberations.

Williams et al. (2019) indicate organisational climate and culture are essential to implementation in schools. Definitions of *organisational climate* note how employees derive meaning from management values, supportive actions by leaders, and underpinning associated policies and procedures (Aarons et al., 2014). However, a *strategic climate* supports a particular focus, such as implementation, leading to improved performance in that area (Ehrhart et al., 2014). Therefore, it is possible I found evidence relating to organisational *strategic* climate with both organisations' values and strategic interests aligned. Schein (2010) suggested three levels of organisational climate, namely:

- artefacts,
- espoused values, and
- basic underlying assumptions.

It is possible that I observed climate artefacts, uncovered shared organisational espoused values, and underlying assumptions. Therefore, the alignment of organisational climates may be considered a critical finding for this RQ, regarding

context. Thus, deeper exploration and aligning of organisational climates may be an important factor for the EPS to consider when considering optimising implementation.

In this research, leadership was conceptualised as critical to implementation activities. Schein (2010) argued leadership plays a key role in embedding mechanisms, e.g. allocation of resources, deliberate modelling and coaching. Leaders in the EPS and CSS were found to value and promote these activities (sections 4.2.1.1c and 4.2.1.2c). Aarons et al. (2014) suggested that transformational leadership supports EBP implementation. Here, leaders identified that their leadership preference was collegial or delegated. However, at times they identified their leadership style was linked to strategic objectives, and therefore needed to adapt their style to a more directive approach to ensure the desired OD was enacted by staff. This related to the literature regarding OD and Lewin's model of change (Lewin, 1947), with leaders unfreezing and freezing the organisation. Recent research into transformational leadership and organisational change efforts is varied. In a large-scale survey, Yasir et al. (2016) concurred with Schein (2010), indicating transformational leadership was crucial during phases of OC. Further, employee *trust* in leadership was critical for developing OC: something not uncovered in this research, a potential limitation. In contrast to Yasir et al. (2016), Mansaray (2019) argued that a range of leadership styles may promote change in organisations. Mansaray (2019) agreed leadership was a key factor in OC initiatives, however, highlighted that planned OD and unplanned OC can be understood as *different* processes. When considering optimising implementation, an EPS could consider leadership styles of the EPS *and* schools as part of a planned change (OD), and the building of employee trust.

The organisations in this research were undertaking OD and moving towards open systems with a goal of improving organisational performance in response to stakeholder feedback (sections 4.2.1.1b and 4.2.1.2b). Soft systems methodology (SSM) (Checkland, 1981) is relevant here because it uses a multi-dimensional approach to organisational understanding that can potentially improve organisational performance (Sciarelli et al., 2020). Soft Systems Methodology (SSM) suggests that the organisation operates as a system, focusing on Human Activity Systems.

Leaders play a key role regarding what is allowed in and out of the organisation (system) and define the tasks that the organisation needs to undertake to continue performing (Roberts, 1994), critically determining the scope of the organisation (Aarons et al., 2014). Augustsson et al. (2019) argued that SSM is a process that assists leaders to manage such numerous inter-linking factors that influence implementation, through a structured yet flexible approach.

Further, employees' responses to change can be viewed as resistance rather than as a human response to uncertainty (Yılmaz & Kılıçoğlu, 2013). Here, EPS leaders' concerns were for EPs to further align with agreed strategic goals (section 4.3.1.2c). Since, the epistemology of SSM is based upon constructionism it can assist organisations to redress a power imbalance between leaders and employees during OC (Stowell, 2021). The use of SSM could be considered, for planning implementation activities with schools to gain a richer picture and redress the power imbalance with a view to encourage employee change within the EPS.

Finally, whilst the CSS undertook the intervention, other secondary schools remained resistant to the take up of the intervention. Shared values between and within the organisations involved here were found to be critical to the success of the implementation focus (section 4.2.1.1c). Values have been linked with leadership

and have been described as integral to school contexts (Montgomery & Kehoe, 2010). Schools are not passive systems and EPs could have a role in exploring organisational values within schools, for example by using systems psychodynamics (SP) (Eloquin, 2016). However, arguably there is little evidence that EPs routinely work with senior school leaders (Eloquin, 2016). This was a direction of practice the EPS were considering (section 4.2.1.2b). It is important to note that leaders in both organisations considered that there was a lack of reflective spaces available for school senior leaders. Overall, context has been conceptualised as the driver of organisations, including mechanisms (Renmans et al., 2020). In this research, I have conceptualised context as critical to the processes underlying implementation. Mechanisms are suggested to be triggered by context (Wong et al., 2016) and are discussed in section 5.2.2.

5.2.2 A Critical Review of RQ2: Mechanisms

A primary focus of this research was to uncover mechanisms and better understand the change processes that enabled implementation activities to occur. I found that both organisations had planned mechanisms. The EPS's planned responsiveness through feedback loops was a key mechanism (section 4.3.1.1a), supported by the AEP role of undertaking planned problem-solving activities (section 4.3.1.1.c). Significant actors (Fixsen et al., 2009), which I conceptualised as the 'driver role' (section 4.3.1.2b), were critical to enabling implementation activities in both organisations. The focus of the EPS was on changing school staff's beliefs regarding reading instruction (section 4.3.1.2c), encouraging organisational change, and encouraging peer support (Leclercq et al., 2023). Interactions were a key mechanism in this process. EPS professionals built trusting relationships (section 4.3.1.3a) with

the CSS and provided opportunities to collaborate and problem-solve together (section 4.3.1.3b). The EP role was revealed to be pro-active (section 4.3.1.4a) and drew upon the critical skill of consultation (4.3.1.4b). A mechanism in the CSS related to staff empowerment and a peer-based supportive network (Joyce & Showers, 2002). Purposeful decision-making on the part of school staff (section 4.3.1.5a) was supported by solution-focussed discussion (section 4.3.1.5b) and peer coaching (section 4.3.1.5c).

Mechanisms have been suggested to be *self-organising* in response to complex adaptive social systems, and vary between organisations, and over time (May et al., 2016). May et al., (2016) suggested that mechanisms provide structure and motivation for individuals and can promote *collective action* for implementation activities based on feedback loops. Feedback loops have been identified as intrinsic to resilience in social systems (Rodriguez-Gonzalez et al., 2020), echoing the conceptualisation of systems change being a system of interconnected processes. Research has suggested each mechanism may respond to a dynamic environment and therefore may change in strength and form over time (Kim et al., 2023). This fits with the finding in this research where organisational context was seen to interact with mechanisms. Further, the *sequencing* of mechanisms is suggested to be important, for example, one mechanism may need to be in place for other mechanisms to be activated (Kim et al., 2023). Indeed, I suggested that the EPS planned mechanisms appeared to *enable* some of the other mechanisms (examples noted in section 4.6). The implementation ‘drivers’ (significant actors in the organisation) appeared necessary to support initial and sustained implementation activities. For example, the ‘drivers’ organised support, implementation activities and

feedback loops. Therefore, I considered that 'driver roles' enabled processes with the goal of optimising implementation.

Authors identify how EPs need to build relationships with schools (Farrell & Woods, 2015) in order to gain organisational access (Castro-Villarreal & Rodriguez, 2017). In this research, *building relationships* (section 4.3.1.3a) between organisations was identified as critical to the mechanism of enabling problem-solving. The relationship between the EPS and CSS appeared to be founded upon a process of building trust. I perceived trusting relationships between the EPS and school staff facilitated the decision-making processes in school in terms of selecting the intervention. I also conceptualised in this research, that the EP role (and building relationships) had been part of the link EP's embedded consultation practice (rather than a strategic planned mechanism directed by the EPS). Similarly, Farrell and Woods (2015) found that EPs could build mutually trusting relationships through consultation practices. Trusting relationships are important because they have been suggested to enhance *equitable* implementation (EI) (Collier-Meek et al., 2023). EI is an emerging perspective from IS that has been used by EPs in consultation practices (Collier-Meek et al., 2023). EI is suggested to occur when equity components (such as trusting relationships) are used within the implementation process (Collier-Meek et al., 2023) to address disparities (Sander & Bibbs, 2020). Using consultation, EPs can address a targeted issue (e.g. implementation), with the aim of building staff skills and capacity in schools (Kratochwill et al., 2014). Therefore, consultation may potentially change a system and promote equity (Sander & Bibbs, 2020).

One key mechanism related to EPS and CSS staff commitment to the intervention (section 4.3.1.2a) which may have increased professionals' engagement with implementation activities. Research has suggested that there is a link between

employee commitment, engagement and self-efficacy (Agu, 2015). Self-efficacy was found to be an underlying factor throughout the research relating to context and mechanisms (sections 4.2.1.1.b, 4.2.1.2c, 4.2.1.2d, 4.3.1.1.c, 4.3.1.5b, 4.3.1.5c). High levels of self-efficacy have been linked to employee's *implementation intentions* (Wieber et al., 2010). EPs may enhance the self-efficacy of school professionals using a strengths-based approach (Castro-Villarreal & Rodriguez, 2017). Here, a strengths-based approach was being used by AEPs and EPs. Additionally, PD for LSAs supporting mastery through coaching has been identified as having a strong effect on self-efficacy for teaching reading and implementing new interventions (Tschannen-Moran & McMaster, 2009). Peer coaching was found to be a mechanism that was used by the CSS (section 4.3.1.5c). Turner and Gulliford (2020) found a group problem-solving approach in secondary schools was perceived to enhance staff self-efficacy, enabling intention to deliver actions. Therefore, the encouragement of self-efficacy and intentions to deliver may be mechanisms that have not been fully understood in this research. EPS professionals could reflect upon processes that better uncover mechanisms, such as SSM or SP with schools and school leaders. Also, consideration of promoting mastery of the intervention through coaching using video enhanced technology (Hung, 2016) may contribute to optimising implementation. The facilitators and barriers (determinants) found in this research are presented in section 5.2.3.

5.2.3 A Critical Review of RQs 3 and 4: Determinants

Determinants (section 2.3) have been conceptualised as the variables that influence outcomes in research (Durlak & Dupre, 2008), and data gathered on determinants may be used for implementation SD (Lyon et al., 2019). This research aimed to better understand determinants when implementing a reading intervention based upon DI (McMullen & Madelaine, 2014) and how EPs could influence actors in implementation activities (Blase et al., 2012) by exploring determinants at the take up and maintenance phases of the intervention in a secondary school environment.

I conceptualised that key facilitators (section 4.4.1) were found to *support mechanisms* and both facilitators and barriers were used by the EPS to develop strategy (section 5.2.4). Determinants were not necessarily the inverse of one another. Key facilitators (Table 16) related to the positive relationship between the link EP and school, AEP support, the training materials provided by the EPS, and the staff capacity and motivation of the CSS. Key barriers (Table 17) included the secondary school curriculum (staff perceiving learners could not miss lessons), the campus and timings of lessons (staff needing to physically be on the same site as learners at the same time), and perceptions and beliefs of staff regarding reading (meaning that staff may need to change their beliefs regarding teaching reading to deliver with fidelity). Overall, I found that *determinants* were the critical source of data used by the EPS for SD. Thus, the EPS conceptualised determinants as a useful feedback loop where strategies could be devised to support implementation activities.

Research has suggested that *implementation facilitation (IF) skills* assist implementation of EBP (Ritchie et al., 2020). IF skills identified include:

- building relationships and creating a supportive environment,
- changing structures and processes to support interventions,
- transferring knowledge and creating a structure for on-going learning,
- planning and leading change efforts, and
- assisting stakeholders to monitor implementation and outcomes (Ritchie et al., 2020).

Therefore training on IF is suggested to assist implementation of EBP (Ritchie et al., 2017). Therefore, the EPS could consider reviewing IF skills and training for EPs and school professionals.

Ritchie et al. (2015) note that barriers can be ameliorated if identified. A perceived pervasive barrier in the CSS was that curriculum teaching staff were reluctant for learners to miss any lessons for interventions. Support for reading interventions in secondary schools has received support from macro layer agencies, for example OFSTED (2022). Despite this, the perception regarding missing curriculum time persists. This is an area the EPS could investigate further with a potential for EPs to build relationships with curriculum teaching staff with a view to encouraging change.

The development of strategies is presented.

5.2.4 A Critical Review of RQ5: Strategy Development (SD)

5.2.4 a Strategy Development and Determinants

Implementation strategies are used to assist adoption of practices (Proctor et al., 2013). In the EPS I found that determinants, for example, PBE, empirical evidence, and feedback loops, were utilised as a key source for SD (section 4.5). EPS SD for implementation activities evolved with a goal of being responsive to schools.

The central strategy undertaken by the EPS to the CSS was one of *responsivity* (section 4.5.1d). Other key strategies included providing knowledge and skills regarding the evidence-base for the intervention and implementation (section 4.5.1). The use of technology in the form of the WBP was also a significant strategy for the EPS. This was to enable ease of use for practitioners but also enabled data to be viewed easily by learner, school and the EPS. The CSS central strategies for implementation were peer coaching and an individual learner focus based upon relationships.

SD has been described as critical for implementation but does not yet have a body of evidence to support particular strategies for implementation (Powell et al., 2017). However, research suggests that strategies tailored to specific determinants were found to improve implementation compared to either no implementation guidance or dissemination guidance alone (Baker et al., 2015). Mittman (2012) and Sridhar et al. (2023) suggested strategies for implementation need to be selected and tailored to the *contextual* needs of organisations. This point concurs with this research, but while determinants were useful, richer data was uncovered when related to context and mechanisms. Also, *systematic methods* of determinant identification have been suggested as being key for SD (Sridhar et al., 2023). The identification of determinants were not systematically gathered in the EPS or CSS contexts. Bosch et al. (2007) cautions theoretical mismatch where individual focussed strategies are attempted to be applied at a systemic level in response to determinants. Therefore, the EPS would need to consider at what level the strategies were and seek a process to assess their impact in organisations.

5.2.4b Strategy Development Processes and Evaluation

SD has been suggested to require evidence from research and PBE, stakeholder participation and feedback (Powell et al., 2017). As a participant-observer during SD meetings, I found the EPS used an assess, plan, do review process strategy based on responsivity to stakeholders. Powell et al. (2017) identified commonalities between the SD processes and strengths: an emphasis on participatory practice, engagement of a diverse range of stakeholders, and processes for facilitating communication. The EPS placed stakeholder participation and communication processes at the centre of their SD in later phases (Table 21). However, a criticism is that stakeholders may choose support methods that lack an evidence base (Powell et al., 2017). Therefore, evaluation of implementation is called for (Sridhar et al., 2023) with structured processes for SD *alongside* increased stakeholder participation (Powell et al., 2017). The implementation strategies identified for transfer of EBP in the CSS are briefly discussed.

5.2.4c Strategy Peer Coaching

The CSS self-identified as having culture of interventions (4.2.1.1c). There were many factors associated with this, including peer coaching. Peer coaching has been identified as a significant factor in PD and an effective implementation strategy (Joyce & Showers, 2002). The process included:

- exploring the culture and climate of the school,
- identifying gaps using pull factors,
- shifting staff beliefs,
- collective staff decision-making,

- using a strengths-based approach, and
- collaborative peer coaching.

This research echoed the values and approaches found within the CSS. Peer coaching is suggested to be a key theme in this thesis. Peer coaching was conceptualised here as:

- staff learning to learn,
- enhancing metacognitions to enable self-teaching (therefore staff being more resilient when elements in training are missing),
- changing the workplace to implement the intervention selected, and
- developing knowledge and skills within the companionship of a supportive peer relationship.

Structured peer interactions were reported by the CSS, echoing Joyce and Showers (2002). Flexibility in the curriculum allowed incorporation of new ideas or teaching approaches, and teams undertaking active planning and collaboration of how to implement the intervention and *monitor their implementation*: including the effect of the intervention upon learners. Therefore, peer coaching is akin to democratic decision making. The coach is the teacher being observed and the observer is the professional being coached. Collegial relationships appeared to be significant within the CSS. There is a move towards collaborative planning, e.g. the use of frameworks in educational psychology, to support planning with schools (Chidley & Stringer, 2020). However, despite peer coaching being adopted for in-service teacher PD there appears to be relatively little research or practice in this area over recent years (Lu, 2010) and is underutilised in education (Britton & Anderson, 2010). Lofthouse and Leat (2013) suggest that peer coaching has faltered in the English education

system because of the mismatch between the current performance culture which is arguably a different goal to that of peer coaching. Peer coaching may be effective for staff development when built upon trusting relationships amongst teachers (Yee, 2016). EPs could be well-placed to facilitate peer coaching, as part of their strengths-based skill set, including using video to reflect upon practice (Suh et al., 2021).

5.2.4d The Relationship Between Strategies and Mechanisms

Implementation strategies have been critiqued for lacking precision and consistency and requiring better ways of capturing data (such as barriers) that inform them (Bunger et al., 2017; Sridhar et al., 2023). Since collective sensemaking activities may inform strategies that enable collective action (Stensaker et al., 2008), the EPS could consider seeking methods that improve SD, for example, exploring mechanisms of change (Powell et al., 2019). Mechanisms may enable the EPS to focus on how specific strategies enable outcomes, connecting open-systems contexts with exploration of determinants (Luke et al., 2024). Systems and mechanisms can change frequently because they may be conceptualised as dynamic and interlinking (Kim et al., 2023). This view concurs with my conceptualisation of the implementation system in this research (section 4.6). Further, mechanisms and strategies may be closely integrated, for example, a mechanism being activated by a strategy (Kim et al., 2023). I hypothesized that this may have occurred in this research, with the EPS planned mechanisms enabling the other mechanisms found (section 4.3.1.1). An implication for the EPS may be to focus upon seeking mechanisms, using a process of exploring causal steps and mechanisms through a logic model (Kilbourne et al., 2024).

5.2.5 A Critical Review of Findings Overview

Overall, this research illuminated the complexity of optimising support to a secondary school when implementing a targeted learning-focused intervention. The findings were consistent with much of the research found in the fields of IS, improvement science, organisational psychology, educational psychology and education. EPs can assist with the development of implementation strategies using skills and processes that are embedded within the EP role, such as consultation. This study guides EPSs to shifting the focus towards systemic consultation with schools when supporting the implementation of initiatives, alongside reflexivity when planning and evaluating strategies. A review of this research in terms of a review of the methods, strengths, limitations and implications for the EPS, EPs and education follows.

5.3 Review of Methods

Kearney et al. (2019) argued that ethnography provides valuable contributions to organisational research because of the focus on social organisation of work. Ethnography may enable researchers to uncover the unseen aspects of how organisations are socially organised and enable meaningful and authentic social change (Kearney et al., 2019). Ethnography may be viewed as a pragmatic approach that empowers individuals to contribute to organisational change (Kearney et al., 2019). This pragmatic view fitted with the aims and objectives of this research, with the EPS aiming to optimise support for a secondary school, and a realisation that organisational change may occur in both organisations.

A critical reflection is whether the research is trustworthy (Guba, 1981). I selected the trustworthiness criteria by Lincoln and Guba (1986) because contemporary literature using trustworthiness criteria for CSR (Malmqvist et al., 2024; Younas et al., 2023) suggests a fit with CR ontological positioning. This research sought to build in practices to enhance trustworthiness in terms of credibility, dependability, confirmability, and transferability (Lincoln & Guba, 1986). The criteria and practices were focused upon *throughout* in order to promote trustworthiness in this research, rather than an activity critiqued for often being reflected upon at the close of research (Malmqvist et al., 2024). The position of being both an insider and outsider (Stutchbury, 2022) needed managing sensitively and reflected upon any issues in my Reflexive Diary (Appendix xv) to aid transparency and the chain of evidence. Therefore, I would suggest that this focus on trustworthiness throughout promoted the rigour of this research.

For credibility, prolonged engagement was undertaken to enhance trustworthiness alongside triangulation (Lincoln & Guba, 1986). Single case studies may provide

richer insight into the complexity of schools (Kratochwill & Stoiber, 2000b). Previous research had explored consultation processes in one school setting, linking context, culture and intervention implementation (Castro-Villarreal & Rodriguez, 2017) and these authors suggested that triangulated data was beneficial for credibility. There is a precedent of utilising reflexivity as a method of improving triangulation (Pellegrini, 2010). This thesis sought to enhance data triangulation using participant observation, reflexivity and participant views with peer debriefing built into the SSIs (Harrison, 2018a). A critique is that feedback to stakeholders as a member check, although planned, was not undertaken in time to be included in this write up.

Dependability and confirmability may be considered together and external checks advised (Lincoln & Guba, 1986). An external check was completed by my supervisor in terms of the way that I conducted the research, analysed findings, and drew conclusions.

In terms of the FMA used in this research (Ritchie & Spencer, 1994), a critique concerns the mapping and interpretation stage because of the lack of published guidance for this step of the process (Parkinson et al., 2016). I concur with this, finding that a lack of guidance meant that I required additional supervision from my supervisor (who was experienced in this part of the process). I was required to take a creative stance in interpretation (Parkinson et al., 2016). I found referring back to original transcripts (Parkinson et al., 2016) and using the test of perceived usefulness and interest (Denzin, 1989) assisted analysis. I discussed findings with my supervisor, and leaders at the home LA EPS. These actions demonstrated EPS stakeholder interest and use. Therefore, the goals of this research were met, in terms of providing an interpretation of how an EPS can support secondary schools

with implementation of a targeted intervention of DI, and potential implications for the EPS, EPs, and education.

5.3.1 Strengths

This research aimed to undertake a holistic view of how an EPS could optimise support to a secondary school for a learning focussed intervention of DI. The use of ethnography enabled me to view the rich picture through the lens of multiple participant views through observation and gathering views (Harrison, 2018a). A strength of the ethnographic approach was my ability to view team interactions and view whole group behaviour (Eloquin, 2016) which may not have been possible with other research designs. The ethnographic nature of the design enabled me to reflect upon and contribute to SD alongside stakeholders. Stakeholder engagement was therefore built into the research process and may be considered a strength (Dalkin et al., 2018). Ethnography is flexible (Harrison, 2018a) and this research was adapted as the implementation project progressed. For example, undertaking the ethical amendment to enable the joint interview with the partner LA. I considered this flexibility and triangulation a strength.

Solution-focussed practice has been identified through case studies in an educational psychology context as a potential approach to organisational change that has been described as inclusive, motivating and empowering (Lewis, 2020). I was able to undertake solution-focussed practice, with the CSS, thus a strength in this research.

This research aimed to explore the maintenance phase of implementation, to contest the critique that much implementation research is skewed towards the initial stages

of implementation (May et al., 2016). A strength is the timeline of this research because longer studies in implementation are rare (May et al., 2016).

Conflation between terms in IS has been a recurrent problem with terms often not defined by authors (May et al., 2016). In this research I clearly defined the terms. This research also considered context, which is often overlooked in research and described as critical when exploring implementation practices and organisational change (Aarons et al., 2014), and thus can be considered a strength. This research also included exploring practices undertaken by the EP as a major change agent which could help to illuminate mechanisms (Han & Weiss, 2005). I considered the focus on mechanisms a strength because much implementation research explores solely determinants. I looked beyond determinants and explored normal conditions of practice aiming to uncover mechanisms typically overlooked in determinant research (May et al., 2016).

5.3.2 Limitations

There are several critiques for this research as outlined below.

The case was a successful school in terms of implementation of the target intervention. Gaining access to schools has been identified as a potential barrier to research (Troman, 1996). In this research, the critique concerns the transferability of the data, because the CSS was a unique case. Therefore, other secondary schools cannot be known, particularly in terms of their contexts. It is possible that other secondary schools who could have met the selection criteria existed, or schools had selected and de-selected the intervention. This is the nature of the case study, but

every effort was made to improve rigour to meet the transferability criteria (Lincoln & Guba, 1986).

A potential limitation was my observation of group work. Group dynamics could have been studied in greater depth to contribute to the rich picture (Eloquin, 2016). This research did not capture the fidelity meetings that were initially planned because of the project changing focus, and fidelity visits taking place later than planned.

However, this research explored patterns of interpersonal action i.e. exploring theory in use (observing what people do) and espoused theory (participants explanations of behaviour) (Argyris & Schon, 1974). I suggest that behaviour observed was consistent with espoused theory in this research. This was gained through my attendance at numerous meetings over time, where I was able to observe and ask relevant questions to group work and for the purposes of this study, enhancing credibility of the data.

An artificial boundary was placed on this research (Cabrera et al., 2008) because of the completion of professional training. The boundary could have led to important features being omitted (Cilliers, 1998). However, having been involved with fidelity visits the previous year, the knowledge gained was intrinsically embedded within my conscious and contributed to my reflexive thinking regarding group work and problem-solving activities. Therefore, I suggest that this element of the research did contribute to the findings in this way.

One approach that I could have used to co-construct perspectives from multiple stakeholders was that of SSM (Dalkin et al., 2018). This approach could have provided valuable insight and potentially enhanced stakeholder empowerment and could be considered as an approach in future research. Another approach that could

have been explored was observing the SD process undertaken by the EPS in greater depth (Powell et al., 2015). However, I attended and participated in SD meetings, and this was directly referred to in the joint interview with the project leaders. Therefore, my view is that for the purposes of this research, the data collected, and research design were sufficient to understand EPS SD.

In terms of triangulation of views (Mowbray et al., 2003) the lack of pupil contribution to this research is a potential limitation (Fletcher & Nicholas, 2016). However, Schultes (2023) suggests that decisions regarding limiting some triangulation can be justified. A conscious decision not to gather pupil views was made at the beginning of this research, due to the ethical risks associated with observing the learners. This was for the benefit of learners because of the potential stress of being observed and interviewed was deemed to outweigh direct benefit to learners. Further, teaching staff were not interviewed about their views. Staff could have been invited through the gatekeeper, but the gatekeeper did not view that staff (e.g. curriculum teachers) would be able to contribute because teaching staff did not have intervention knowledge. Teaching staff views would have made a valuable contribution e.g. exploring generalisation of learner skills.

Finally, the scope of this research did not extend to exploring the CSS demography and cultural features in relation to teaching methods using DI. Research has indicated that students from a minoritised ethnic background and low-income background are at higher risk of dropping out of school compared to more privileged students, but that teaching methods using highly structured programmes such as DI are highly beneficial for students at risk (Butler, 2020). The CSS has a higher proportion of learners who were from a minoritised ethnic background and who had English as an additional language. The CSS were successfully implementing a

highly structured reading programme based on DI. Given the demographics of the CSS, the lack of exploration of implementation for pupils with particular equality, diversity and inclusion characteristics may be considered a missed opportunity. Future research might explore equitable implementation in secondary schools in more depth than would have been possible in this research study.

5.4 Implications

Key implications are considered: future research, implications for education, implications for educational psychology professionals, and implications for EPS services.

5.4.1 Future Research

This thesis conceptualised implementation as a system, driven by organisational contexts. I suggest that further research is undertaken exploring this conceptualisation, and specifically the role of context linked with implementation.

This thesis uncovered five mechanisms and an underlying theme of the EPS promoting self-efficacy in school staff and EPS professionals regarding implementation activities. Given that mechanisms and context appear to be so interlinked, further research is needed to explore how to uncover mechanisms and context, and their function and contribution to outcomes regarding implementation activities. As noted, an example would be future research into the use of SSM (Dalkin et al., 2018) when undertaking implementation activities.

This thesis identified that encouraging change was a mechanism, with the EPS professionals identifying and aiming to change adults' beliefs regarding the teaching

of early reading skills in a secondary school context. Further research regarding educational professionals' (EPS and a variety of school professionals) beliefs into early reading instruction in secondary school contexts would illuminate teaching beliefs, practices and the potential for change when implementing interventions such as a learning focussed targeting intervention for reading using DI.

This research identified that the CSS appeared to be using a PD approach akin to peer coaching (Joyce & Showers, 2002). Further research could aim to better understand how the practice links to enhancing implementation activities, including translating into current school contexts (Lofthouse & Leat, 2013), and using video technology (Suh et al., 2021).

5.4.2 Implications for education and educational psychology

This research indicated that stakeholder participation is essential to orientating school organisations towards effective implementation practices. EPs may consider the use of SSM as an approach to participatory stakeholder learning with a view to co-producing implementation (Dalkin et al., 2018). A gap was identified by the EPS and CSS in terms of supervision and support mechanisms for senior leaders in schools. The EPS may consider developing reflective supervision spaces for school leaders, this also promoting systemic practices required for supporting implementation, possibly supported by EPs using collective sensemaking activities such as Organisation in Mind (Armstrong, 2005).

Building capacity to orientate the organisation to an implementation ready environment has been identified as a key feature in this research. Consideration of schools introducing an implementation framework and building capacity by creating

implementation teams may be of benefit. EPs may be well-placed to provide knowledge of interventions, IS and policy. Capacity building using peer coaching and video technology to increase self-efficacy of staff may be considered with EPs supporting this process.

This research has identified that mechanisms were essential to implementation practices. Mechanisms are located in context. The implication is that EPs need to be able to transfer this knowledge to school staff and assist with the identification of mechanisms that support their unique system. EPs therefore need to have the skills to identify mechanisms and may require further input alongside consideration of practical application. Embedding mechanisms are therefore critical and understanding leadership strategies are required for EBP to be embedded (Aarons et al., 2014). The implications for leaders and the EPS are presented.

5.4.3 Implications for Educational Psychology Services

Implications are noted for EP Services considering implementation practices.

The EP role was a key mechanism here, in transferring implementation activities into a school setting. EPSs could move towards practices more closely and consciously aligned with consultation, potentially involving a culture shift and possibly encouraging the use of recommended consultation frameworks (Feldman & Kratochwill, 2003) and focussing upon the impact for example, encouraging evaluation of practice. Further, a peer coaching approach could be utilised (Joyce & Showers, 2002), with EPSs considering introducing peer coaching groups. Self-efficacy of EPs could be promoted using a cascade model, and possibly utilised in implementation practice in schools, with promoting self-efficacy in teaching

professionals. The use of video supported reflected learning (VSRL) could be utilised to support this, the implication being the EPS would need infrastructure in place alongside a plan for promoting this ideological shift with professionals.

CHAPTER 6: CONCLUSION

This thesis explored how an EPS could optimise support to a secondary school in their implementation of a learning-focused targeted intervention of DI for reading. The findings were often consistent with literature available. Organisational context was significant in selecting interventions and supporting implementation activities. Mechanisms were uncovered and identified relationship building as a critical process. The roles of significant actors were also identified as key mechanisms with the role of the EP and their embedded skills of consultation being an essential part of the process of implementation. Implementation activities within the secondary school that supported implementation were consistent with peer coaching. The EPS undertook a responsive approach to SD informed by determinants. Implications for the EPS include the consideration of promoting a systemic approach to implementation, supporting leaders with decision-making, and raising the self-efficacy of EPs with systemic consultation.

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APPENDICES

Appendix i: A Summary of the Reading Intervention “EP Recommended Approach to Literacy” and renamed “EP Assessment Through Teaching” (EPATT) in the academic year 2023-4

Baseline Assessments	<ul style="list-style-type: none"> • Adult assesses the learner's accuracy and fluency and the EPATT will generate word lists for adults to teach the following week. • Generalisation test recording the learner reading an age-appropriate book chosen by the learner. • Reading age measured using a standardised assessment of choice.
Daily Intervention	<ul style="list-style-type: none"> • An adult teaches words or skills automatically generated from the baseline assessment. This is using DI (my turn (teaching accuracy), together, your turn (teaching fluency and practice retrieval)). • Shared reading between the adult and learner is undertaken for 10 minutes - the learner chooses a text.
Weekly Checks	<ul style="list-style-type: none"> • Weekly checks are undertaken for synthesis skills or phonics blending ("c-a-t cat") and common words as generated by the EPATT previously.
Termly Assessments	<ul style="list-style-type: none"> • Generalisation assessment using the text used previously. • Reading age using the standardised measure of choice. • Generate the Pupil Progress Report through the EPATT.

Appendix ii: Definitions

The following definitions were considered and agreed with my supervisor in order to assist coding and development of the framework for analysis.

Concept	Definition
Mechanism	A change and transformation process that is based on preconditions or inputs that leads to outcomes which includes stakeholders' perceptions of mechanisms.
Context	The dynamic conditions and unique feature of the organisation which interact with mechanisms, strategies and determinants at multiple layers.
Strategies	Techniques and activities that are purposefully used by actors within the organisation for the purpose of implementing an intervention.
Determinants	Barriers and facilitators which are aspects of practice found at multiple levels of the organisation which can enable or hinder implementation of a specific intervention. These are inextricably linked with context but have been differentiated by participants' views i.e. context discussed by participants in the abstract and determinants discussed when directly referring to the intervention and implementation. A key distinction between context and determinant is that a) the focus tightens for the latter and b) I give

	<i>a valence (value) to how those context features operate in this case, thus some become determinants.</i>
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Appendix iii: Ethical Approval



UNIVERSITY OF
BIRMINGHAM

Dear Anthea Gulliford, Victoria Andrews

RE: How can secondary schools be supported by an EPS in their implementation of a learning-focused universal intervention of Direct Instruction for reading?

Application for Ethical Review: ERN_1190-May2023

Thank you for your application for ethical review for the above project, which was reviewed by the Humanities and Social Sciences Committee.

On behalf of the Committee, I confirm that this study now has ethical approval.

Any adverse events occurring during the study should be promptly brought to the Committee's attention by the Principal Investigator and may necessitate further ethical review.

Please ensure that the relevant requirements within the University's Code of Practice for Research and the information and guidance provided on the University's ethics webpages (available at <https://intranet.birmingham.ac.uk/finance/accounting/Research-Support-Group/Research-Ethics/Links-and-Resources.aspx>) are adhered to.

Please be aware that whilst Health and Safety (H&S) issues may be considered during the ethical review process, you are still required to follow the University's guidance on H&S and to ensure that H&S risk assessments have been carried out as appropriate. For further information about this, please contact your School H&S representative or the University's H&S Unit at healthandsafety@contacts.bham.ac.uk.

Kind regards,

The Co-Chairs of the Humanities and Social Sciences Committee

E-mail: ethics-queries@contacts.bham.ac.uk

Appendix iv: Information Sheet for EPs and AEPs

Information sheet for Partner Organisation/ member of Senior Leadership

Team in [Home LA] and [Partner LA] EPS

Information sheet for Assistant/Educational Psychologists (Page 1 of 3)



[Home LA] Educational Psychology Service (EPS)

- *Are you involved in the 'EP Recommended Approach to Literacy'?*
- *Are you helping schools with solving any barriers that they might face with keeping the intervention going?*

If you answered yes this research is for you...

The EPS has expressed an interest in evaluating the 'EP Recommended Approach to Literacy' and one of the areas of interest is how the support provided by the EPS helps schools to take up and maintain the intervention.

Aims

- To find out your views about the EP Recommended Approach to Literacy and current support
- To find out about how your school implements the EP Recommended Approach to Literacy and learn how the Educational Psychology Service can better support your school

We would like to invite you to work with [Home LA] EPS and University of Birmingham to find out how the EPS can better support the embedding of the intervention in Secondary Schools to make it a success.

The research will include:

- the researcher (Trainee Educational Psychologist – Victoria) accompanying you at support meetings to find out how the EPS supports schools
- Victoria to interview you to find out your views on the programme and its implementation.

Your Involvement

- An introductory meeting which will last approximately fifteen minutes where I can introduce myself and answer any questions

Appendix 3a: Information sheet for Assistant/Educational Psychologists (Page 2 of 3)

- Victoria to accompany you with support visits (this will not include observing your practice but joining the discussion afterwards with the member of staff you are supporting) to reflect on any successes and challenges the school are facing and how the EPS can help. Victoria will attend any meetings regarding support such as handover meetings if you hand over your role to another member of staff. This will be audio-recorded
- One 45 minutes audio-recorded interview in your place of work asking about the successes and barriers you faced with the intervention.
- A follow up meeting in December 2023 to feedback initial findings to you and provide you the opportunity to confirm you are happy the findings reflect your views

Findings

The findings will be published in:

- A summary (full report if preferred) will be provided to you and other professionals who are interested in the approach
- A research report for the Local Authority
- Doctoral thesis for the University of Birmingham published in full online in the University e-theses database.
- Shorter papers summarising the research may be written for submission to a peer-reviewed journal for publication or disseminated at professional conferences.
- Your name, school and any other identifying information will not be included in any of the reports.

What will happen to the data that is collected?

- The audio-recorded data will be transferred from the devices to a password-protected folder on the University of Birmingham's secure electronic data storage system, BEAR DataShare and then erased from the recording devices. Electronic transcripts and notes will also be held in a password-protected folder on BEAR DataShare. Any written notes and forms will be scanned in and also stored on BEAR DataShare in a password protected folder. Original paper notes and forms will be shredded. In accordance with university research policy, data will be stored on BEAR DataShare for 10 years after completion of the project. A 10-year expiry date will be set for the electronic data stored on BEAR DataShare.

If I change my mind, can I withdraw from the study?

- You can decline any parts of the research
- You can ask me to redact any part of the notes I have taken during the support meeting. You can choose to exclude specific comments and these will not be analysed.
- You have a right to stop the interview (and the recording) any time, without having to give a reason.
- You can ask me to redact any part of your interview transcription but it will not be possible to erase excerpts from the audio recording.
- If you choose to withdraw completely from the study during or immediately after the interview, the recording will be deleted from the recording devices immediately.
- Following Victoria attending the support session or your interview, you can withdraw your data from the research, for a period of up to fourteen days, by contacting the researcher (see contact details below).

Will my information be kept confidential in the study?

- Yes! Anything that you say will be treated as confidential, which means that it cannot be identified as yours.
- Pseudonyms will be used throughout the transcript and research report.
- Every care will be taken to minimise the reporting of specific or unique case details that may reveal your identity. Please contact me if there is anything that you would like to be left out.
- If, in the unlikely event, I become seriously concerned about your own or others' safety and/or well-being, I have a responsibility to pass on this information to the university tutor or placement supervisor, in order to decide how to offer support. This would be fully discussed with you first.

If you are interested in knowing
more or taking part please contact:

(Supervisor Anthea
Gulliford, University
of Birmingham)

Work mobile: ...

Appendix v: Consent Form for Organisations

I _____ would like this organisation to take part in the study looking at how an EPS can support a secondary school implement the EP Recommended Approach to Literacy. This study is being carried out by Victoria Andrews, Trainee Educational Psychologist, as part of a Professional Doctorate in Educational Psychology at the University of Birmingham.

Please read and complete the participant consent form.

I have read and understood the project information sheet.	Y	N
I have had an opportunity to ask questions about the project.	Y	N
I confirm this organisation has been involved with the EP Recommended Approach to Literacy and implemented this approach.	Y	N
I understand that sessions with the EPS regarding the approach will be observed and reflected upon with participating staff. This will not include the direct intervention with a child. No names or identifying features of children will be disclosed.	Y	N
I understand that staff interviews will last approximately up to one hour.	Y	N
I agree to meeting the researcher at a later date, to discuss initial findings and share my thoughts on these.	Y	N
Right to withdraw: I understand this organisation's participation in the study is voluntary. I understand I can withdraw the organisation from the research at any point without explanation up to two weeks following the first contact with the researcher. I can also ask for organisational information not to be used in the study up until two weeks after the observation or interview date. If I decide to withdraw the organisation	Y	N

from the study during or up to two weeks after the observation or interview, all observation or interview data will also be destroyed.		
Confidentiality: Staff views and identity will be kept confidential unless anything is identified that suggests participants or others are at risk from harm, in which case Victoria would seek guidance from her research supervisor and follow the necessary safeguarding procedures.	Y	N
<p>Privacy:</p> <p>I understand that notes and voice recordings will be taken of the session/s that are undertaken between the EPS and secondary school. I understand that these will be used in an analysis.</p> <p>I understand that staff voices will be recorded during the interview and Victoria may also take some hand-written notes. I understand that the voice recordings will be transcribed.</p> <p>I understand that some excerpts from interviews/ support sessions may be used in reports. These will be chosen for illustration and I understand I will not be identifiable.</p> <p>I know that individual names nor the name of the school/organisation, will be included in these reports. I understand that basic details about the school (ie. General size and SEND/ reading data) will be summarised in the methodology section. I give permission for observation notes and interview recordings to be typed up with a different name and for this to be used in this research. I agree to anonymised quotes being used as part of the study.</p>	Y	N
Data storage: All hand-written notes and audio recordings will be typed-up using pseudo-names, the original recordings and notes will be	Y	N

<p>deleted or destroyed. The notes and recorder will be kept locked in a filing cabinet that only Victoria Andrews has access to. The anonymised transcripts will only be available to Victoria, her University Supervisor and University assessors. In adherence to the Data Protection Act (2018), all electronic versions of anonymous documents will be stored on the University of Birmingham secure network for a period of 10 years, after which point, they will be destroyed.</p>		
<p>Data usage: I understand that the results of this study:</p> <ul style="list-style-type: none"> • Will be used for Victoria's Doctoral Thesis • Will be shared with professionals from the Educational Psychology Service • Will be made available to other professionals working in children's services in [Home LA] and [Partner LA] Local Authority • Will be make available to the secondary school • May be written up for professional journals or shared at conferences for people working in education ([Home LA] and [Partner LA] will not be named when reporting outside of the area). 	Y	N

Staff Name:

Researcher: Victoria Andrews

Signature:

Signature:

Date:

Date:

Appendix vi: Consent Form for Participants

I _____ would like to take part in the study looking at how an EPS can support a secondary school implement the EP Recommended Approach to Literacy. This study is being carried out by Victoria Andrews, Trainee Educational Psychologist, as part of a Professional Doctorate in Educational Psychology at the University of Birmingham.

Please read and complete the participant consent form.

I have read and understood the project information sheet.	Y	N
I have had an opportunity to ask questions about the project.	Y	N
I confirm that, as part of my professional role, I have been involved with the EP Recommended Approach to Literacy in either an overarching, organisational or direct implementation capacity.	Y	N
I understand that sessions between the EPS and school regarding the approach will be observed and reflected upon afterwards together with participating staff. This will not include the direct intervention with a child.	Y	N
I understand that meetings within the EPS regarding the approach will be observed, for example, hand over sessions as members of staff leave and others take up this role.	Y	N
I understand that the interview will last approximately up to one hour.	Y	N
I agree to meeting the researcher at a later date, to discuss initial findings and share my thoughts on these.	Y	N
Right to withdraw: I understand my participation in the study is voluntary. I understand I can withdraw from the at any point without explanation. I can also ask for my interview information not to be used in	Y	N

the study up until two weeks after the observation or interview date. If I decide to withdraw from the study during or after the observation or interview, all observation or interview data will also be destroyed.		
Confidentiality: My views and identity will be kept confidential unless I say anything that suggests I or another are at risk from harm, in which case Victoria would seek guidance from her research supervisor and follow the necessary safeguarding procedures.	Y	N
<p>Privacy:</p> <p>I understand that notes/ voice recording will be taken of the session/s that are undertaken between the EPS and secondary school. I understand that these will be used in an analysis.</p> <p>I understand that my voice will be recorded during the interview and Victoria may also take some hand-written notes. I understand that the voice recordings will be transcribed.</p> <p>I understand that some excerpts from interviews/ support sessions may be used in reports. These will be chosen for illustration and I understand I will not be identifiable.</p> <p>I know that neither my name, nor the name of the school/organisation, will be included in these reports. I understand that basic details about me (ie. Role and years of experience) will be summarised in the methodology section. I give permission for my observation notes and interview recording to be typed up with a different name and for this to be used in this research. I agree to anonymised quotes being used as part of the study.</p>	Y	N

Appendix vii: Reflective Questions Template for Support Meetings for School Staff and EPS professionals

This reflective questions template will be used at the end of support meetings as a prompt to discussion regarding a particular issue with implementation. The researcher will be asking both the staff member and AEP to discuss together a topic that they discussed in the support meeting. The purpose is for them to be reflective about the support that was provided to better understand the mechanisms of support.

What topic would you like to reflect upon? Please describe it.

What was your response to the situation? Has that changed or remained the same?

Why?

Are you satisfied with your response to the situation? Why?

Would you describe today's discussion as mostly positive or mostly challenging?

Why?

What has helped you work effectively? Why?

Do you feel that this meeting has changed the situation? Is there anything you would do differently next time?

Have you learned anything new today? If so, will this change your practice? How?

Appendix viii: Semi-Structured Interviews (SSIs) Schedule

Interview schedule	Questions
Introductions and rapport building	<ul style="list-style-type: none"> • Participants will be thanked for agreeing to meet with me. • I will engage in neutral, rapport-building conversation topics (such as asking participants how their day has been so far and checking the time they have available). • The participant information sheet will be discussed, and the expectations of participation will be clarified. • If they do still agree to participate, their signature will be sought on the consent form.
Initial uptake	<p>Participants will be asked to share their perception of what influenced the initial uptake of the intervention in that school:</p> <ul style="list-style-type: none"> • What factors encouraged the school to take up the intervention? • Were there any barriers? Did you overcome them? How? • Did the EPS support package factor as a facilitator for the initial uptake? What aspects were helpful? Why? What aspects could be improved for your setting?

Success features	<p>Participants will be asked to share their perception of what has been successful when implementing the intervention:</p> <ul style="list-style-type: none">• What has enabled the school to continue with the intervention?• Have there been any barriers? Where they overcome? How? Are there any that are unresolved? What impact have they had? How do you think these could be problem-solved?• What do you think factored as a facilitator for implementing and maintaining the intervention? What aspects were helpful? Why? What aspects could be improved for the setting?
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<p>Questions for School Leaders</p>	<ul style="list-style-type: none"> • To what extent has research evidence played a role in policy discussions? • To what extent has the school had a co-worker relationship with the EPS? • What do you think are the conditions that have encouraged the selection and implementation of this intervention? • To what extent do teaching staff have experience of problem-solving? Is problem-solving part of the typical organisational experience in school? What do you think the role of problem-solving is in implementing interventions? • What expectations did you have regarding the implementation? Have these expectations been realised? In what way? • What factors have been involved in the pupils undertaking the intervention in having difficulty making progress in reading previously? What is their progress now? What do you think has contributed to this? • How important are staff pupil relationships in this intervention? Why? • Do you reflect upon the data generated by the intervention? How does this inform future action?
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<p>Questions for School Staff/ AEPs</p>	<ul style="list-style-type: none"> • To what extent has research evidence played a role in practice discussions? • To what extent has the school had a co-worker relationship with the EPS? • What do you think are the conditions that have encouraged the selection and implementation of this intervention? • To what extent have you had of problem-solving previously? Have these experiences been relevant when implementing the intervention? If so, how? • What expectations did you have regarding the implementation? Have these expectations been realised? In what way? • What factors have been involved in the pupils undertaking the intervention in having difficulty making progress in reading previously? What is their progress now? What do you think has contributed to this? • How important are staff pupil relationships in this intervention? Why? • Do you reflect upon the data generated by the intervention? How does this inform future action?
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<p>EPS Leadership Questions</p>	<ul style="list-style-type: none"> • Why has the EPS engaged in providing a comprehensive package of support for the implementation of this intervention? • To what extent has research evidence played a role in policy discussions? • What are the key features of the support? What are the implications for the EPS (e.g. financial)? • What aspects do you think are particularly helpful? What do you think could be improved? • How do you think the support is making an impact on implementation?
<p>Questions for leaders in organisations/ link EP</p>	<ul style="list-style-type: none"> • How has the EPS promoted co-worker relationships with the school? • What do you think are the conditions that have encouraged the selection and implementation of this intervention? • How important are staff pupil relationships in this intervention? Why? • Do you reflect upon the data generated by the intervention? How does this inform future action? • What expectations did you have regarding the implementation? Have these expectations been realised? In what way?

Joint Interview for SEPs	<ul style="list-style-type: none"> • What factors led to the joining of the Local Authorities for developing and implementing the approach? • How important has been the joining of two organisations to implementation support? • Why has it been important? • What support is provided to each Local Authority? Can you give any examples? • Has joint working contributed to the facilitators and barriers of implementation? How and why? • What supervision and mechanisms support you in your partnership with the intervention?
Debrief	<p>Participants will be given the opportunity to tell me anything else that they feel is relevant.</p> <p>They will then be thanked for taking part, and asked the following questions:</p> <ul style="list-style-type: none"> • How was this interview experience for you? • How have you been left feeling now? <p>Participants will be reminded of the right to withdraw within 14 days and of the contact details should they have any questions or concerns.</p>

NB. Throughout the interview:

- Ask about events marked by the speaker but not expanded upon:
 - Can you give me an example?
 - Tell me more about when....?
- Give nods and remarks to encourage ongoing narrative but refrain from overt commentary as this may disturb narrative.
- Keep asking follow-up questions to gain all details if not forthcoming:
 - Tell me what happened?
 - And then what happened?
 - What happened that made you remember that particular moment
- Use probes to clarify meaning
 - What do you mean by that?
- Use probes to elicit an evaluation
 - How did that make you feel?
 - What was that like for you?
 - What was the outcome/result of that?

Appendix ix: Head Teacher Recruitment Leaflet

Head Teacher Recruitment



/

[Home LA] Educational Psychology Service (EPS)

- *Would your school value help from the EPS in setting up the 'EP Recommended Approach to Literacy'?*
- *Would your school value help with solving any barriers that you might face with keeping the intervention going?*

If you answered yes this research is for you...

Your school has expressed an interest in the 'EP Recommended Approach to Literacy' by [Home LA] Local Authority. The intervention is intended to reach all pupils and has had some good results so far. The EPS provides a free package of support which supports schools to set up the approach. This includes:

- webinars for staff to show them the approach
- assessment materials;
- a dedicated Assistant Educational Psychologist to support you

We know secondary schools have their own unique environments and we want to learn how to better support your school.

We would like to invite your school to work with [Home LA] EPS and University of Birmingham to find out how the EPS can support you to embed the intervention and make it a success.

The research will include:

- the researcher (Trainee Educational Psychologist – Victoria) accompanying Educational Psychology staff who support you to find out how they can best support you
- Victoria to interview you and your staff to find out your views on the programme and its implementation.

If you are interested in knowing more or taking part please contact:

Work mobile: ...

Appendix x: School Staff Recruitment Leaflet

Staff Recruitment Leaflet



/

[Home LA] Educational Psychology Service (EPS)

- *Are you involved in the 'EP Recommended Approach to Literacy'?*
- *Would you value help with solving any barriers that you might face with keeping the intervention going?*

If you answered yes this research is for you...

Your school has expressed an interest in the 'EP Recommended Approach to Literacy' by [Home LA] Local Authority. The intervention is intended to reach all pupils and has had some good results so far. The EPS provides a free package of support which supports schools to set up the approach. This includes:

- webinars for staff to show them the approach
- assessment materials:
- a dedicated Assistant Educational Psychologist to support you

We know secondary schools have their own unique environments and we want to learn how to better support you and your school.

We would like to invite your school to work with [Home LA] EPS and University of Birmingham to find out how the EPS can support you to embed the intervention and make it a success.

The research will include:

- the researcher (Trainee Educational Psychologist – Victoria) accompanying Educational Psychology staff who support you to find out how they can best support you
- Victoria to interview you to find out your views on the programme and its implementation.

If you are interested in knowing more or taking part please contact:

Work mobile: ...

Appendix xi: Information Sheet for School Staff

Information sheet for school staff (Page 1 of 3)



[Home LA] Educational Psychology Service (EPS)

- *Are you involved in the 'EP Recommended Approach to Literacy'?*
- *Would you value help with solving any barriers that you might face with keeping the intervention going?*

If you answered yes this research is for you...

Your school has expressed an interest in the 'EP Recommended Approach to Literacy' by [Home LA]. The intervention is intended to reach all pupils and has had some fantastic results so far. The EPS provides a free package of support which supports schools to set up the approach. This includes:

- webinars for staff to show them the approach
- assessment materials:
- a dedicated Assistant Educational Psychologist to support you

Aims

- To find out your views about the EP Recommended Approach to Literacy and current support
- To find out about how your school implements the EP Recommended Approach to Literacy and learn how the Educational Psychology Service can better support you and your school

We would like to invite you to work with [Home LA] and University of Birmingham to find out how the EPS can support you to embed the intervention and make it a success.

The research will include:

- the researcher (Trainee Educational Psychologist – Victoria) accompanying Educational Psychology staff who support you to find out how they can best support you
- Victoria to interview you to find out your views on the programme and its implementation.

Your Involvement

- An introductory meeting which will last approximately fifteen minutes where I can introduce myself and answer any questions
- Victoria to accompany EPS colleagues with support visits (this will not include observing your practice but joining the discussion afterwards with the member of staff supporting you) to reflect on any successes and challenges you are facing and how the EPS can help. This will be audio-recorded
- One 45 minutes audio-recorded interview in your place of work asking about the successes and barriers you faced with the intervention.
- A follow up meeting in December 2023 to feedback initial findings to you and provide you the opportunity to confirm you are happy the findings reflect your views

Findings

The findings will be published in:

- A summary (full report if preferred) will be provided to you and other professionals who are interested in the approach
- A research report for the Local Authority
- Doctoral thesis for the University of Birmingham published in full online in the University e-theses database.
- Shorter papers summarising the research may be written for submission to a peer-reviewed journal for publication or disseminated at professional conferences.
- Your name, school and any other identifying information will not be included in any of the reports.

What will happen to the data that is collected?

- The audio-recorded data will be transferred from the devices to a password-protected folder on the University of Birmingham's secure electronic data storage system, BEAR DataShare and then erased from the recording devices. Electronic transcripts and notes will also be held in a password-protected folder on BEAR DataShare. Any written notes and forms will be scanned in and also stored on BEAR DataShare in a password protected folder. Original paper notes and forms will be shredded. In accordance with university research policy, data will be stored on BEAR DataShare for 10 years after completion of the project. A 10-year expiry date will be set for the electronic data stored on BEAR DataShare.

If I change my mind, can I withdraw from the study?

- You can decline any parts of the research
- You can ask me to redact any part of the notes I have taken during the support meeting. You can choose to exclude specific comments and these will not be analysed.
- You have a right to stop the interview (and the recording) any time, without having to give a reason.
- You can ask me to redact any part of your interview transcription but it will not be possible to erase excerpts from the audio recording.
- If you choose to withdraw completely from the study during or immediately after the interview, the recording will be deleted from the recording devices immediately.
- Following Victoria attending the support session or your interview, you can withdraw your data from the research, for a period of up to fourteen days, by contacting the researcher (see contact details below).

Will my information be kept confidential in the study?

- Yes! Anything that you say will be treated as confidential, which means that it cannot be identified as yours.
- Pseudonyms will be used throughout the transcript and research report.
- Every care will be taken to minimise the reporting of specific or unique case details that may reveal your identity. Please contact me if there is anything that you would like to be left out.
- If, in the unlikely event, I become seriously concerned about your own or others' safety and/or well-being, I have a responsibility to pass on this information to the university tutor or placement supervisor, in order to decide how to offer support.



This would be fully discussed with you first.

If you are interested in knowing more or taking part please contact:

[\(Supervisor Anthea Gulliford, University of Birmingham\)](#)

Work mobile:...

Appendix xii: Information sheet for Partner Organisation/ member of Senior Leadership Team in [Home LA] and [Partner LA] EPS

Your Involvement

- An introductory meeting offered which will last approximately fifteen minutes where I can introduce myself and answer any questions
- Victoria to accompany you to EPS meetings regarding the support offered to schools reflecting on any successes and challenges the school are facing and how the EPS can help. This will be audio-recorded
- One 45 minutes audio-recorded interview at a location of your choice or online asking about your involvement with the intervention, views regarding the successes and barriers experienced by EPS's and secondary schools when taking up and implementing the intervention. We will discuss how the EPS support has changed, how the EPS can respond to secondary schools, and the support that the Local Authorities provide one another and any associated challenges
- A follow up meeting in April 2024 to feedback initial findings to you and provide you the opportunity to confirm you are happy the findings reflect your views

Findings

The findings will be published in:

- A summary (full report if preferred) will be provided to you and other professionals who are interested in the approach
- A research report for both Local Authorities

- Doctoral thesis for the University of Birmingham published in full online in the University e-theses database.
- Shorter papers summarising the research may be written for submission to a peer-reviewed journal for publication or disseminated at professional conferences.
- Your name, school and any other identifying information will not be included in any of the reports.

What will happen to the data that is collected?

The audio-recorded data will be transferred from the devices to a password-protected folder on the University of Birmingham's secure electronic data storage system, BEAR DataShare and then erased from the recording devices. Electronic transcripts and notes will also be held in a password-protected folder on BEAR DataShare. Any written notes and forms will be scanned in and also stored on BEAR DataShare in a password protected folder. Original paper notes and forms will be shredded. In accordance with university research policy, data will be stored on BEAR DataShare for 10 years after completion of the project. A 10-year expiry date will be set for the electronic data stored on BEAR DataShare.

If I change my mind, can I withdraw from the study?

- You can decline any parts of the research
- You can ask me to redact any part of the notes I have taken during the support meeting. You can choose to exclude specific comments and these will not be analysed.
- You have a right to stop the interview (and the recording) any time, without having to give a reason.

- You can ask me to redact any part of your interview transcription but it will not be possible to erase excerpts from the audio recording.
- If you choose to withdraw completely from the study during or immediately after the interview, the recording will be deleted from the recording devices immediately.
- Following Victoria attending the support session or your interview, you can withdraw your data from the research, for a period of up to fourteen days, by contacting the researcher (see contact details below).

Will my information be kept confidential in the study?

- Yes! Anything that you say will be treated as confidential, which means that it cannot be identified as yours.
- Pseudonyms will be used throughout the transcript and research report.
- Every care will be taken to minimise the reporting of specific or unique case details that may reveal your identity. Please contact me if there is anything that you would like to be left out.
- If, in the unlikely event, I become seriously concerned about your own or others' safety and/or well-being, I have a responsibility to pass on this information to the university tutor or placement supervisor, in order to decide how to offer support. This would be fully discussed with you first.

If you are in interested in knowing (Supervisor Anthea
more or taking part please contact: Gulliford, University
 [REDACTED] of Birmingham)

[REDACTED]

Appendix xiii: Data Capture Overview

<i>Date</i>	<i>Type of Data</i>
2.10.23	In person meeting with Case Study School
6.10.23	Thesis discussion with EPS1
18.10.23	Support direction meeting with EPS1 and AEPs
20.10.23	Reflective discussion EPS1
7.11.23	Reflective discussion link EP and EPS1
8.11.23	EPS1Teams presentation to Secondary Schools
10.11.23	Reflective discussion with supervisor and EPS1.
16.11.23	Email support from VA
16.11.23	VA email AEPs
16.11.23	VA email
16.11.23	VA Teams meeting
21.11.23	VA Teams meeting
24.11.23	VA email school
27.11.23	VA email school and EPS 3

<i>Date</i>	<i>Type of Data</i>
8.12.23	SEP and AEP Implementation Meeting
8.12.23	Reflective discussion VA and EPS1
11.12.23	VA and EPS 2 and 3 support meeting with case study school
14.12.23	VA and EPS1 reflective discussion
14.12.23	EP Literacy Approach Network Meeting
10.1.23	Email discussion with academic supervisor regarding ethics
10.1.24	Literature review
12.1.24	Preparation for and meeting with EPS1 re EPS support for secondary schools
16.1.24	Preparation meeting with EPS3 re support visit to case study school. Follow up email to case study school.
22.1.24	Emails
23.1.24	EPS support meeting to case study school
29.1.24	Cognition and Learning Development Group
31.1.24	Twilight Session EPS support for schools – network meeting

<i>Date</i>	<i>Type of Data</i>
5.2.24	EPS interviews
6.2.24	EPS interviews
6.2.24	Discussion with school staff re interviews (telephone)
9.2.24	EP Literacy Approach Planning Meeting
15.2.24	Supervision with academic supervisor
19.2.24	Interviews with case study school
23.3.24	Ethics amendment submitted Interview agreed with Head Teacher
20.3.24	Ethical approval
5.2.24 and 6.2.24	Interviews with EPS
25.3.24	Interviews with Head Teacher
20.3.24	Ethical Amendment Approval
12.4.24	Consent from two LAs for joint interview
12.4.24	Joint Interview

Appendix xiv: Excerpt of a Transcript of EPS2

Researcher: "Can I ask you what factors encouraged about [CSS] to take up the intervention?"

EPS2: "In terms of their what they were doing previous to this prior to the intervention, they had been running small groups and they've also been running already individual reading programs for young people such as Accelerated Reader. So, they already had programs in place for taking students out at particular times, and they also had a [group] which I was involved with a number of their students through my work with them anyway. And they were doing a phonics Read Write, Inc start again. Those sorts of programs and the Accelerated and and they had and a number of Teaching Assistants at the time that were very dynamic and ...extremely good and and then led [the intervention]. [Colleague] was the one who took and led on implementing the EP Literacy approach last summer, so I'd been mentioning that this program was was available.

EPS2: There was an idea that it was just for primary, but I was saying "No", the range of students who I knew would benefit from this particular program. So they, so I think there was a number of factors that came together, constellation sort of thing.

EPS2: So one was that they had the right staff in place.... Who was able to lead it and were competent and had experience in in delivering programs already. And they had the Assistant EP, who was very...Who was really nice with them on the Internet and answered questions and was encouraging, but [they] didn't actually do an actual face to face visit.

EPS2: But I know that [colleague] was involved in liaising with them and I think they had the right sort of cohort that they were looking at and they were looking at programs beyond the ones that they already had, and I'd raised this one for quite a while.

EPS2: So, over a period of time, I kept mentioning it, especially since I was trying to say that at the current time it's got, well, got very good research background. It incorporates a number of.... it's very prescriptive, so it's quite targeted at the young people and their needs and and also it was free, you've got an additional support from the Assistant Educational Psychologists".

Appendix xv: Extracts from Reflexive Diary

<i>Date</i>	<i>Reason for reflection</i>	<i>Initial action and reflection</i>	<i>Follow up action and reflection</i>	<i>Follow up of actions and follow up reflections</i>
8.12.23 (A)	AEP meeting with SEP 8.12.23	<p>Discussion regarding EPATT, commissioning streams and AEP support from January. A framework of support was suggested by EPS5.</p> <p>The EPS has set up ways to communicate the intervention in various formats e.g. visual depiction, App (EPATT), videos, leaflets for parents and twilight support sessions for all schools and for secondary settings. The tone and type of communication was discussed.</p> <p>Experience from myself and other members of staff has led to the consideration of returning to fidelity visits for schools.</p> <p>The meeting was a mechanism for ideas sharing, communication and being creative.</p> <p>Some schools have been asking to use the App as homework.</p>	<p>Reflections</p> <p>I will start thinking about what this framework might look like and how it can be communicated and to whom?</p> <p>I will research types of communication in implementation which may overlap with marketing. I will consider whether a presentation may be useful for the case study school and other secondaries?</p> <p>I will consider fidelity in the literature review.</p> <p>I will consider this as a mechanism.</p> <p>I will consider parent workshop suggestion.</p>	

<i>Date</i>	<i>Reason for reflection</i>	<i>Initial action and reflection</i>	<i>Follow up action and reflection</i>	<i>Follow up of actions and follow up reflections</i>
14.12.23 (B)	EP Literacy Approach Network Meeting	This meeting was very useful in that it provided an overview of the intervention. The barriers to implementation and gaining access to EPATT were discussed alongside facilitators. The EPS is listening and acting upon feedback and is developing further support packages as this intervention evolves. Rich data was gained on barriers and facilitators at this time. New ideas were generated. The EPS is in a stage of change and is trying to push schools to have this similar process.	I will email case study school with some of the ideas that have been generated so far, and also with a list of the meetings coming up and the offer of a fidelity visit.	

<i>Date</i>	<i>Reason for reflection</i>	<i>Initial action and reflection</i>	<i>Follow up action and reflection</i>	<i>Follow up of actions and follow up reflections</i>
14.12.23 (C)	Network meeting for all schools	Many of the barriers that had been discussed were picked up in this session with ideas of how these could be overcome – demonstrating the ability of EPS1 to synthesize and feedback to the team swiftly and put facilitators in place.		
Christmas holiday 2023 (D)	Review of all data so far and transcriptions	All the data was reviewed, listened to and notes made. Transcriptions were entered into Nvivo. This has been a useful process generating ideas for the progress of this thesis and for the EPS support to secondary schools and the case study school.	I will explore Nvivo.	

<i>Date</i>	<i>Reason for reflection</i>	<i>Initial action and reflection</i>	<i>Follow up action and reflection</i>	<i>Follow up of actions and follow up reflections</i>
10.1.24 (E)	Invitation to other Local Authority	Following a discussion regarding ethics with my supervisor I made the decision to invite the LA that is working closely with my placement LA to participate in this thesis. The reason was that a) their SEP works closely with the SEP at my placement LA and is becoming increasingly involved in decision-making, b) the meetings may involve staff from the other LA and therefore ethically the participants will need to provide informed consent.	I sent the information and consent forms to the contact at the partner LA to formally invite them to participate in this thesis.	

<i>Date</i>	<i>Reason for reflection</i>	<i>Initial action and reflection</i>	<i>Follow up action and reflection</i>	<i>Follow up of actions and follow up reflections</i>
23.1.24 (F)	EPS support meeting for case study school	<p>Students are preferring the app because it is easier to read.</p> <p>There were concerns about who to select and how for the programme – and what is next for those who have finished the programme. There is a need for other skills e.g. comprehension.</p> <p>The barriers of the secondary curriculum needing to be delivered were discussed – this was a barrier to other staff being trained.</p> <p>A wider discussion about the school ethos and inclusion of students was very useful – this provided insight into the barriers but also how the school problem solves and provides support.</p>	A limitation of this research is the lack of student voice (Fletcher & Nicholas, 2016) and this is a suggestion for further research.	

<i>Date</i>	<i>Reason for reflection</i>	<i>Initial action and reflection</i>	<i>Follow up action and reflection</i>	<i>Follow up of actions and follow up reflections</i>
5.2.24 (G)	Interviews with EPS colleagues	<p>I prepared for the interviews beforehand ensuring I understood the questions I wanted to ask in relation to the thesis. I shared this with participants alongside ethical reminders.</p> <p>I became more confident during the interviews in responding to participants answers, I drew from other questions, made reflective probe questions, gave time for silence and asked additional questions. I will reflect upon this in preparation for questions tomorrow. I have begun to look at how I can make better use of my reflective diary.</p>	<p>Additional questions:</p> <ul style="list-style-type: none"> • What supervision and mechanisms support you in your role with the intervention? • How has the support changed over time? • How would you describe your leadership? (PEP) 	<p>Reflections regarding research diary:</p> <ul style="list-style-type: none"> • Educators are time-poor • Educators need time to reflect • Reflexive diaries can help the researcher to regain control • Diaries are flexible in response to demands made on me • Keep it small, simple and sustainable (Kelly, 2023) <p>I will read Mosurska (2022), Tkavashvili (2021) and Taylor (2020) for further information</p>

<i>Date</i>	<i>Reason for reflection</i>	<i>Initial action and reflection</i>	<i>Follow up action and reflection</i>	<i>Follow up of actions and follow up reflections</i>
19.2.24 and 21.2.24 (H)	Interviews with CSS	<p>The interviews with the CSS went well. These were in person at the CSS. Due to time constraints I had to remove some of the questions, and this was undertaken prior to interview and on an ad hoc basis during the interview, for example, if a participant had mentioned a theme (leadership) and I felt that this had been discussed I moved on to another question. I also used reflective questions for clarification and asked for examples.</p> <p>I found this process most helpful in terms of confidence with my research. I found that many themes emerged from the literature review (leadership for example). The constraints of staff time were difficult in that a 30-minute slot was reduced because of needing to arrive at their next destination.</p>	<p>I was able to gain access to one member of senior management through professional contact with a member of management and therefore gained cognitive access (Saunders et al., 2019c). I require elite person access (Saunders et al., 2019c) to another member of the organisation (SLT) to ensure sufficiency of data (Saunders et al., 2019c). I need to persuade the school of my competency and credibility in order to gain this access (Saunders et al., 2019c) and my strategy is to explain my rationale for wanting to interview SLT in person, offering more dates for interview and also different media e.g. Teams. I have been able to discuss the questions and rationale for questions with members of the CSS in person at the school. After speaking with one member with management responsibility I was able to gain access to another member of staff and undertook this interview today (21.2.24).</p>	<p>I used the strategy of explaining my thesis clearly and concisely and using appropriate language i.e. 'learning from your experience as a good example' (Saunders et al., 2019c). I have explained again to this member of staff, and I am now hopeful that I will be able to gain elite person access to one more member of SLT. I will need to re-prepare questions for this member of staff. I would consider the two members of staff to whom I spoke as gatekeepers for this research and perceive its value (Saunders et al., 2019c).</p>

<i>Date</i>	<i>Reason for reflection</i>	<i>Initial action and reflection</i>	<i>Follow up action and reflection</i>	<i>Follow up of actions and follow up reflections</i>
25.2.24 (I)	Reflective Journal reflection	<p>I read and used a text that promoted reflexivity for researchers – thinking about prompts relating to my research in order to make the best use of my research diary and to help write the positionality section of my methodology (Taylor, 2020).</p> <p>I reflected upon the epistemology held by my participants – thinking about how and where they gained their knowledge and what they thought constituted as knowledge.</p> <p>I reflected upon my ethics and considered how difficult it has been to negotiate the participant-researcher role in an ethnographic study in reality. The difficulty is that others do not see the boundaries or the different hats I swap during meetings.</p>	<p>I thought about how to best reflect my participants interpretations. I will review my literature section and start a framework for coding.</p> <p>The EPS is running a parallel group for improving implementation in the EPS this year. I had wondered whether I could gain a deeper understanding from the chair of this group on their findings/ process so far. The group do not have the remit of the EP Recommended Literacy Approach intervention, however.</p>	<p>I will consider putting this as ‘support’ as an overall theme. The theme could also be ‘responsiveness’ – the EPS is responsive to the needs of the school at the time (although this was driven by the EPS in terms of changing the format of data capture/ delivery).</p> <p>An ethnographic study is challenging: boundaries, time, lack of researcher ‘control’. I will need to give a cut-off point – possibly mid-March 2024.</p> <p>I may organise a virtual presentation and then have a confidential session for participants to drop in afterwards for feedback.</p>

Appendix xvi: Coding and Indexing Process and Rationale for Key Decisions

This appendix outlines the coding process undertaken and some of the key changes made to the codes alongside the rationale for decisions. I reflected upon the process in my Reflexive Diary. The steps below are taken from the process and a full copy of my Reflexive Diary is available upon request. The final coding framework is reflected in the Charting Summaries (Appendix xvii-xxv) and copies of the initial, interim and final coding frameworks are available upon request.

Step 1: Developing the Coding Framework

I thought about how to best reflect my participants interpretations. I reviewed my literature section and started a framework for coding.

Step 2: Higher Order Code Decision Making

I decided upon codes for barriers, facilitators, mechanisms with examples of strategies/ activities.

Step 3: Managing the Data

I used NVivo version 14 (Lumivero, 2023) to manage my data. Using my knowledge from literature, the familiarization stage from the FMA, and the transcripts I reviewed from meetings and two SSIs, I developed overarching codes: context, barriers, facilitators, mechanisms (possibly intrapersonal, interpersonal and organisational level as per Lewis et al. (2022)) and two phases (initial set up and maintenance).

Step 4: Testing the Coding Framework.

I coded two further interviews and tested the framework to refine some of the categories. An overlap occurred between facilitators and mechanisms which I explored further. I revisited definitions to assist with this. I realised there was a lack of roles of individuals in the framework – one of the characteristics of mechanisms (Astbury & Leeuw, 2010). I inserted the code of 'leadership' to capture this. I tested this in the next interview. I captured the iterative nature of the EPS developing their support offer. I thought this was a mechanism and linked that to the 'responsivity' code. The social relations of change needed to be captured (Checkland et al., 2007).

Step 5: Review of Codes

I re-read the literature review and methodology which helped me crystallise my thinking with coding. This research was exploratory and therefore the codes were constructed from the data. I found conflation between facilitators, strategies and mechanisms as per the literature (Astbury & Leeuw, 2010). As I built the coding framework, my thoughts were linked to the literature, however the codes were derived from the links and relationships identified by participants. I decided to re-configure the coding framework only when contradictions or new insights were provided from data.

Step 6: Coding decision-making

I asked myself how I made a distinction between facilitators and mechanisms. These appeared to be inextricably linked. I had excerpts of texts where participants talk

about what they would like for support (i.e. thinking creatively) and I thought about how to capture this.

I took time to explore the language used by participants, and the context in which the excerpt was said in order to make a decision. I reviewed my definitions in the literature review to assist with decision-making. I created a code for being creative as part of the role of the EP in response to this review.

I continued to review and refine codes and my decision-making. I discussed this with my supervisor, and we referred to systems thinking (Checkland, 2000). We discussed whether to analyse by role or code. I felt that analysing by role would limit the findings because other roles are commenting upon the work of others and therefore, I set up codes to account for the perceptions of others e.g. role of the EP, role of the AEP.

My supervisor and I reflected upon our reflexivity and natural inclination towards the change process with my supervisor being interested in mechanisms and consultation and my previous experiences in understanding change processes.

Step 7: Code decision-making

I reviewed the first three interviews that were coded to ensure that the new coding framework fitted. Again, I revisited the terminology for facilitators, mechanisms, context and strategies. I found the code was still fit for purpose making slight changes to the role of the AEP including 'thinking creatively' and 'wider system' – thinking about the systems conceptualisation discussed with my supervisor.

I found it challenging to separate facilitators from mechanisms but also sometimes context. I referred to the literature review during my decision-making. This was most helpful with consistency and promoting rigour for my justifications for decision-making. I also considered what participants said in context and listened to the way it was said. This enabled me to think about and conceptualise my understanding of definitions. For example, I reflected upon existing determinant frameworks. I used words, phrases and the meaning from participants to create codes rather than using pre-existing frameworks in accordance with a grounded methodology. I set up new codes accordingly and transferred some codes e.g. financial commissioning from mechanisms to facilitators.

I coded leadership support in mechanisms because of leaders' 'commitment' which I know was an enabler from my ethnographic experience.

Due to stakeholder voice in the SSIs, I moved 'trust' from a facilitator to a mechanism *"it comes down to relationships and trust.... That we'll do what we say we're going to do"* (EPS1 SSI).

Step 8: Expanding the Coding Framework

I coded a stakeholder's interview, and this led to significant expansion of the codes because this individual had a stakeholder insight into the implementation support. There were some important insights. The implementation has its own balance and cycle every time a variable was changed e.g. a new learner or new member of staff taking on the approach, and a new relationship needing to be built. Also, there was the suggestion that staff need a knowledge base in order to implement the

intervention. A relationship between learner motivation and relationship with a trusted adult was noted.

Step 9: Reviewing the Coding Framework

I re-read and re-coded a previous interview with the new framework. Codes were still being developed, however, there were over-laps with the other interviews.

Step 10: Coding Decision Making and Indexing

I reflected upon the codes and the decision-making process undertaken. I coded using:

- the context of the question,
- the whole answer and interview,
- my own knowledge via ethnographic immersion, and
- the words in the sentence.

Sometimes the answer was split up into different distinct codes. This decision was made when there was a clear and direct reference – usually for determinants, such as time being a barrier. However, other answers were coded as a complete answer – and sometimes into several different codes. This was to ensure the ‘fabric’ of the answer remained intact but where participants joined themes together.

The coding framework was large, and I needed to make decisions about how to reduce the data. I continued to code but was mindful that I was thinking about this reduction when coding. The coding framework reflected what had been said and

inferred by participants. The codes were directly derived from their answers – reflecting the structure and language used.

I began indexing alongside the coding by indexing transcript excerpts into categories. Parkinson et al. (2016) cautioned that this should not be mechanical, ensuring it is a thoughtful activity. I started reduced the coding framework in order to prepare for the charting activity.

Step 11: Resolving Challenges

I found two challenges:

1. Inconsistencies.
2. There being no clear distinction between the set up and maintenance phases.

My supervisor and I examined the codes. We thought it would be helpful for me to devise my own definition of terms so that I could demonstrate transparency (Appendix ii).

I reviewed my codes and ensured I was confident with their positioning within my conceptualisations and reviewed my data and coding decisions.

Step 12: Charting

I grouped codes where necessary re-coded all the data as part of the charting process. I undertook the process twice and then discussed analysis with my supervisor.

Appendix xvii: Charting Summary (Context)

Overarching Theme: Context	Main Themes	Subthemes	Charting Summary (Context)
School Context	Implementer Characteristics	Adult & Learner Relationships	This relates to the quality of the relationships existing between adults within school and the learners.
	Implementer Characteristics	Adult Skills & Experience	This relates to the pre-existing skills and experience of adults within the school, including their knowledge of teaching reading previously.
	Organisational Change	No subthemes	This relates to a recent planned organisational development within the school. The school day has been restructured, to shorter lessons and an additional break time. There has been a focus on learner behaviour, supporting learners with English as an Additional Language and some staff turnover.
	Organisational Characteristics	Culture	This relates to the existing culture within the organisation. The culture is one of improvement and aims to build capacity within school with staff encouraged to undertake development opportunities and to feel empowered to make decisions. There is a collegial culture of teamwork, and the staff have an holistic view of the learners in addition to having an existing intervention culture where staff routinely implement a number of interventions for learners.

Overarching Theme: Context	Main Themes	Subthemes	Charting Summary (Context)
School Context (continued)	Organisational Characteristics (continued)	Leadership	This relates to the leadership within the school context. Participants noted the support offered by senior management team as a potential facilitator. Leaders reported that their preferred style of leadership was distributed leadership and were aware that there may be different perceptions between espoused and enacted leadership. However, those within the school identified that leadership which promoted an open culture, trust, promoted shared values, prioritised supporting learners, and provided support channels such as time for team meetings were valued.
		Physical Resources	This relates to the existing physical resources available in the school including library facilities, technological capabilities (e.g. iPads), and a dedicated room and facilities for interventions.

Overarching Theme: Context	Main Themes	Subthemes	Charting Summary (Context)
EPS Context	AEP Role		The role of the AEP was identified as an important contextual feature of the EPS. Leadership had purposefully commissioned the AEP team for supporting the implementation.
	Organisational Change		Planned organisational development was underway within the EPS.
	Leadership		Leadership was identified to be a significant factor regarding implementation. Distributed or collegial leadership and adapting to context was the preferred model by the EPS in addition to co-working with the partner LA, valuing the ideas of others (within and outside of the organisation), and using organisational thinking via the reflective space of supervision sessions, potentially linked to the values of anti-oppressive practice.
	Valuing the Intervention		The intervention and implementation were valued in the EPS context. Staff across the LA understood the potential for the intervention to enable learners' progress via viewing assessment data. The intervention being prioritised was identified as a significant contextual feature.

Appendix xviii: Charting Summary (Mechanisms)

Overarching Theme: Mechanisms	Main Themes	Subthemes	Charting Summary (Mechanisms)
Mechanisms	EPS Planned Mechanisms (i.e. specific to the intervention)	Responsive Communication	The EPS planned opportunities for responsive communication e.g. through initial contact from the AEP, monthly network meetings, fidelity visits, daily email support function and message function on the web-based platform. Feedback loops were purposely created to gain feedback from schools to improve the intervention and implementation. The role of the researcher was a potential mechanism in the communication process in terms of supporting the school and maintaining interest in the intervention.
		Financial Commissioning	The EPS viewed sourcing annual funding through commissioners as a mechanism. In addition, there was a perception that the intervention and implementation support being free to the user was a mechanism because of the removal of such a significant barrier meant that the process of accessing the intervention and support was more equitable.

Overarching Theme: Mechanisms	Main Themes	Subthemes	Charting Summary (Mechanisms)
Mechanisms	EPS Planned Mechanisms (Continued)	AEP Support Team	<p>The EPS purposely commissioned a team of AEPs to provide implementation support and embedded several processes into their practice: AEP initial contact meetings with schools, monthly network meeting support from schools attended by the SEP and AEPs, AEP fidelity visits to schools, and daily email support from the AEPs. The AEPs were noted to engage in problem-solving processes including active listening, active use of knowledge and skills (following training from the SEP and using pre-existing knowledge & skills), using reflection, using a coaching approach and encouraging in-person support. The EPS also provided group meetings that enabled reflective processes. The EPS also enabled creative processes, where one AEP initially conceived of the web-based platform and was encouraged to undertake the design process. The AEPs also had a process of checking the data from the web-based platform to identify the schools that appeared to be struggling and contacting them to offer support.</p>

Overarching Theme: Mechanisms	Main Themes	Subthemes	Charting Summary (Mechanisms)
Mechanisms	Implementer and Implementation Supporter Characteristics	Commitment & Values	Commitment was a recurring theme from both the EPS and school staff in terms of being a significant facilitator. This was linked to the value of being committed to teaching young people to read. However, stakeholders viewed this characteristic as more than a facilitator but of a process of aiming for improving outcomes for learners that drives the implementation.
		Driver Role	The driver role was noted as significant in both the EPS, partner LA and school context. All organisations had at least one driver, with colleagues identifying other professionals who contributed to this drive. The driver role was associated with setting up and enabling processes for implementation to occur.
		Encouraging Change	The process of changing beliefs was identified by the EPS stakeholders and participants as a significant mechanism in terms of encouraging schools to undertake the intervention and then to implement it with fidelity. The process was identified to be longitudinal and involved challenging the way that teaching of reading was delivered in schools. Additionally, changing adults' beliefs regarding teaching encompassed a process that involved changing the beliefs of school and EPS professionals.

Overarching Theme: Mechanisms	Main Themes	Subthemes	Charting Summary (Mechanisms)
Mechanisms	Interacting Factors Between Organisations	Relationships	Relationship building between the EPS and school were identified as a significant process that enabled implementation of the intervention. One process of building trust was noted by nearly all participants and stakeholders. This trust process led school professionals to have the confidence to make the decision to take up the intervention.
		Problem-Solving & Working Together	A key process identified between organisations was that of problem-solving and working together.
	Role of the EP	Being Pro-Active	The EP supporting the school identified that being pro-active and persistent was an important mechanism over time from the perspective of the EP and AEP. The process used by the EP was encouragement and persistence in suggesting the school take up the intervention. The EP also used the process of recommending the intervention for specific learners alongside sharing good practice regarding implementation from other schools. The EP was interested in implementation and therefore used traded visits to the school to set up a process of visiting and seeing the intervention for themselves to find out any implementation needs.

Overarching Theme: Mechanisms	Main Themes	Subthemes	Charting Summary (Mechanisms)
Mechanisms	Role of the EP (continued)	Using consultation	The EP supporting school used the process of professional curiosity and asking questions with the school to explore their context to promote school's thinking around reading and the intervention. The process of consultation was used with school professionals in meetings. Specifically, the EP drew upon their knowledge base relating to the intervention, the learners and the school context. Additionally, the EP used 'reflecting together' as a process using active listening, questioning and re-framing to enable school professionals to think

Overarching Theme: Mechanisms	Main Themes	Subthemes	Charting Summary (Mechanisms)
Mechanisms	Role of the EP (continued)	Using Other Psychologies	<p>EP professionals identified using a range of psychologies during the activities associated with the intervention and implementation support package. The process of behavioural change in terms of creating demand and promoting the approach was identified. Social psychology was used in group meetings, in the process of decision making. The EPS used a coaching process and drew on positive psychology. Attribution theory was also used by EPs to better understand school professionals and then using a process of modelling in terms of aiding school staffs' thinking and subsequent behaviour towards the intervention and implementation. EPs also used locus of control and personal construct psychology (PCP) as a process to explore decision-making with school staff. The EPS was also exploring how to use psychology in a relatively new field for them in terms of supporting school staff with educational technology due to the intervention being launched on the web-based platform. It was noted that the email support process had led to new and unseen responses from school professionals in that there were more expressions of frustration regarding technology in an email communication system than when giving in-person support. The AEP team used a process of containing frustrations and responding to school professionals via email using social psychology. EPs were beginning to use technology in a solution-focussed process to assist with harnessing school staff's motivation to promote changing their beliefs and behaviours.</p>

Overarching Theme: Mechanisms	Main Themes	Subthemes	Charting Summary (Mechanisms)
Mechanisms	Support Mechanisms Within the School Organisation	Decision-Making Process	The school had decision-making process that includes the SENDCO, deputy SENDCO, Learning Support Assistant Co-ordinator and Learning Support Assistants for the purpose of selecting and de-selecting interventions each year. The support of leaders in this process of empowering staff to make decisions was noted. A review process was integral where staff made decisions regarding maintenance or de-selection.
		Finding Solutions	School staff had process of finding solutions which was enabled by the Learning Support Assistant Co-ordinator initially. Regular team meetings and conversations occur to enable solutions to be found to barriers. A process of leaders empowering staff and staff developing self-efficacy was associated with the process of finding solutions.
		Coaching	School staff had a coaching process that enabled them to start and maintain the intervention. Staff also coached new staff in response to staff turnover and additional staff to build capacity to ensure that intervention continued.

Appendix xix: Charting Summary (General Facilitators)

Overarching Theme: Facilitators	Main theme	Subtheme	Summary (General Facilitators)
<i>General Facilitators (i.e. for both stages)</i>			
EPS Organisation Characteristics	Co-Working		From the perspective of the EPS the ability to co-work with colleagues assisted staff to develop and maintain the intervention implementation programme. LA staff particularly noted the relationship with web-based development team and the EPS had been a key facilitator in ensuring that the web-based platform was developed. Working in partnership with another LA was also viewed as a key facilitator because of the creativity and support provided to one another.
	Web-Based Platform		The WBP was a facilitator in terms of ease of use, providing structure for users (and prompts), reducing workload (e.g. producing probe sheets) and enabling assessment data to be instantly available.
Implementation Supporter Characteristics	Encouragement, Knowledge & Skills		Key supporter characteristics included the encouragement provided to schools to take up the intervention or to continue with it. The range of Knowledge and skills that AEPs brought to the team were also valuable and utilised by the EPS.

Overarching Theme: Facilitators	Main theme	Subtheme	Summary (General Facilitators)
Implementer Characteristics	Knowledge of the Learner		Staff knowledge of individual learners was an important facilitator. Also, the LSA then being in class with the learner was a facilitator in terms of generalisation. LSAs were able to be flexible in response to individual learners' needs e.g. giving them a time which suited the learner best and being mindful of not taking learners out of their preferred lessons.
	Building Relationships		Building relationships with the learner was identified as a key facilitator which enabled learner engagement. The school noted the relationships, routine, consistency was appealing to learners and the intervention then appears easier for learners to engage with, noting an increase in confidence and attendance.

Overarching Theme: Facilitators	Main theme	Subtheme	Summary (General Facilitators)
Implementer Characteristics (continued)	Motivation		Staff motivation was viewed by the EPS to be a key facilitator to taking up and maintaining the intervention.
Intervention Characteristics	Flexibility		The flexibility of the intervention was perceived as a facilitator by the EPS and school staff because the approach could be changed slightly to work in the school setting e.g. time of day undertaken.
	Learners' Positive Experiences & Motivation		Learners' positive experiences of the intervention were a significant theme regarding facilitators. The EPS and school staff attributed these positive experiences to increased learner motivation towards the programme. The positive experiences were linked to having time away from the classroom environment, structure and consistency of the approach, and individual delivery (therefore avoiding the judgement of peers). Learners were reported to look forward to their probe tests because they like to see their improvement charts. The EPS linked learner positive experiences with the intervention being based upon positive psychology.

Overarching Theme: Facilitators	Main theme	Subtheme	Summary (General Facilitators)
Intervention Characteristics (continued)	Ease of Use		Ease of use of the web-based platform to deliver the intervention was a significant theme for both the EPS and school. In addition, the ability to view and use data from the EPS and school perspective was significant.
	Free		The intervention and implementation support being free of charge was also a significant facilitator from the perspective of the school and EPS.
School Organisation Characteristics	Resources		Having the resources available was a facilitator linked to the context of the organisation.
	Staff Capacity		Staff being available to undertake the intervention in the event of sickness or staff turnover was identified by the EPS and school to be an important facilitator.

Appendix xx: Charting Summary (Facilitators for Set-Up Phase)

Overarching Theme: Facilitators	Main theme	Subtheme	Summary (Set-Up Phase Facilitators)
<i>Facilitators for Set-Up Phase</i>			
Set Up Phase	Pull Factors	Learners requiring phonics	From the school perspective they had recognised that there was a gap in terms of their learners needing support with learning to read who were not at a level who could access the curriculum. The EP had also noted that students would benefit from the intervention and had been recommending it over time.
	Implementation Supporter Characteristics	EP and AEP Support	The key facilitators that enabled the school to set up the intervention were through EP recommendation, AEP support meeting and watching the training videos. The school's link EP was reported to be a significant factor as noted in mechanisms. The AEP also provided encouragement. The implementation support package provided resources that were ready to use. School staff watched the videos, were able to watch at their convenience and repeat when necessary.
	Implementer Characteristics	Driver Role	A key facilitator was the driver role for the intervention. This is detailed in the mechanisms section.

Overarching Theme: Facilitators	Main theme	Subtheme	Summary (Set-Up Phase Facilitators)
Set-Up Phase (continued)	Intervention Characteristics	Appealing: Flexibility and Sharing of Research Base	The intervention characteristics appealed to the school. The flexibility of the approach (it is short and can be delivered when convenient). The EPS sharing the research base was helpful to school staff in terms of understanding why they were teaching in a particular way, and this helped with the LSA who was responsible for rolling out the intervention to share this knowledge with staff and to think about ways to help learners.
	School Organisation Characteristics	Culture of intervention	The intervention was easier to implement because it fitted into the school's embedded practices, as noted in the mechanisms section. Relationships had already been built with students which contributed to the intervention success.
		Resources in Place	Resources were in place for the intervention to be trialled. This included books, space, staff, time to plan and a trial period.

Appendix xxi: Charting Summary (Facilitators for Maintenance Phase)

Overarching Theme: Facilitators	Main theme	Subtheme	Summary (Maintenance Phase Facilitators)
<i>Facilitators for Maintenance Phase</i>			
Maintenance Phase	Implementation Supporter Role	On-going In-Person Support	Facilitators for maintaining the intervention included the on-going in-person support provided by the EPS. Support for learners who were not making progress was particularly valuable for the school.
	Implementer Characteristics	Embedded Problem-Solving Practices	School staff were able to problem-solve issues, as noted in the mechanisms section.
	Intervention Characteristics	Ease of Scaling Up	The school found the intervention easy to scale up to greater numbers of students once they had trialled it with a small selection of learners.
	School Organisation Related Characteristics	Leadership Support & Review	Support from leaders was noted as a key facilitator for maintaining the intervention. Purposeful decision-making regarding continuing or de-selecting was an important facilitator, meaning that school continued interventions until a decision had been made to de-select. At times, some learners were selected to re-start the intervention if they had not made progress since finishing the programme. Staff were able to pass on their knowledge to one another if staff turnover occurred.

Appendix xxii: Charting Summary (General Barriers)

Overarching Theme: Barriers	Main Theme	Summary (General Barriers)
General Barriers (i.e. for set-up and maintenance phases)		
EPS Organisation	Finding Funding	Despite being a mechanism, the need for annual commissioning and commitment to ensure the intervention and implementation support free for all schools was also perceived as a barrier by senior leadership.
	Delays	Delays with moving to the web-based platform, in terms of technological and legal issues were a barrier creating delays and the need for additional thinking.
	Competing Priorities and Variations Between LAs	Competing priorities were identified as potentially reducing time and support from the intervention and implementation support package. The competing priorities between the two partner LAs was noted, with variations between the two LAs noted as a barrier. There was a perception from both LAs that the support for the approach was from EPS senior leadership, necessitating the EPS to take a driving role.
Implementation Supporter Characteristics	AEP Role	Barriers encountered regarding the AEP role related to quickly gaining the knowledge and skills required for the implementation support. There was an acknowledgement that there was a need for greater clarity with the role of the AEP in terms of the implementation support as it evolved.

Overarching Theme: Barriers	Main Theme	Summary (General Barriers)
Implementer Characteristics	EP Role	A significant barrier from the EPS perspective was the role of the EP. This related to the different areas of interest of EPs and their beliefs regarding cognition and learning, with a perception that some EPs did not value the intervention or implementation support as much as other EPs. There was a perception that implementation support was lacking in general EP practice and that implementation needed to be part of review conversations. The need for further PBE from feedback loops was related to this review process. There was also a perception that psychology was not being used in the organisation. Time constraints were also acknowledged to be a barrier in terms of leadership and EPs.
	Confidence	A barrier from the school perspective was feeling nervous regarding planned fidelity visits with EPS colleagues coming to watch staff practice. However, both the EPS and school viewed there was a greater need for in-person visits to occur.

Overarching Theme: Barriers	Main Theme	Summary (General Barriers)
Implementer Characteristics (continued)	Perceptions and Beliefs	<p>A key barrier related to the intervention was noted to be perceptions of the intervention and secondary school staff beliefs regarding teaching reading. The EPS had noted reports that secondary schools were generally perceiving the approach as being a primary school intervention, with learners not needing this level of intervention with some schools being unable to identify the need for phonics (often conflated with comprehension difficulties) because of staff lacking these skills. However, the EPS also noted that TAs without previous reading experience appeared to be more open to the experience of undertaking the intervention and welcoming fidelity visits, therefore, TAs with experience of teaching reading being a barrier due to their beliefs regarding reading. The EPS also found that despite sharing data and research base regarding the intervention, beliefs regarding reading could be steadfast with the research leading to uncomfortable feelings because it didn't reinforce beliefs. Another factor in this is the lack of understanding of the EP role from some schools, with a view that EPs are primarily involved in the Education, Health and Care Plan Needs Assessment (EHCNA) process. From the school perspective, staff initially perceived that the intervention was difficult to undertake and had feelings of apprehension.</p>

Overarching Theme: Barriers	Main Theme	Summary (General Barriers)
Implementer Characteristics (continued)	Lack of Agency	The EPS had reports that some school staff had a lack of agency or ownership in terms of selecting interventions.
	Resistance to Change	The EPS had reports that some schools were resisting from taking up the intervention or not taking up the offer of the web-based platform and using the paper-based version. It was perceived that schools felt comfortable in undertaking what they knew.
	Forgetting	A barrier from the EPS and school perspective was forgetting the training for the intervention.
	Variations in Fidelity	The EPS and school noticed that variations in fidelity can occur between staff. There was a link between staff who had knowledge of teaching reading and not having enough time to watch the training videos making adaptations to the intervention.
Intervention Characteristics	Comprehension	There were concerns from school that learners' comprehension skills were not progressing or regressing whilst undertaking the intervention and were concerned that they should focus on comprehension instead of the intervention.
	New Technology	A significant barrier from the perspective of the school was to move to the web-based platform due to the technological issues they encountered e.g. the wrong role within school having the admin rights to set up other users etc.

Overarching Theme: Barriers	Main Theme	Summary (General Barriers)
Learner Characteristics	Complex Needs	The school raised concerns regarding one student whose needs were perceived to be complex, and a slower rate of progress was being made. School staff noted the greater range of learners' abilities within school and found that teaching staff were needing to differentiate to a greater extent, possibly beyond their experience and skills.
	Engagement, motivation, and peer judgement.	The school reported very few instances of learners who did not wish to engage and lacked motivation. School staff did perceive that peer judgement may be related to this and felt that their intervention culture and individual delivery supported their learners. However, the EPS had reports from other schools that this may be a barrier.
School Organisation Characteristics	Lack of Staff Capacity	The EPS perceived that a barrier had been reported when school staff left. Schools that had taken up the intervention did not continue when key staff (such as the SENDCO) left.
School Organisation Characteristics (continued)	Curriculum	A key barrier in secondary schools were perceptions around the curriculum. School teaching staff (e.g. English teachers) were unlikely to be involved in the intervention and may not know the learners needs in terms of phonics. The EPS and school reported that there appeared to be an embedded perception in many secondary schools that learners may not be withdrawn from any curriculum time making it difficult for staff to find times they can deliver the intervention. The school perceived that teaching staff were restricted in terms of time because of the need to deliver the curriculum.
	Campus	The case study school was a split school site, which is common for many secondary schools. The size of the campus was a barrier in terms of staff and learners being on the same site at the same time.
	Resources	The EPS noted that many secondary schools had reported the lack of space, physical resources, and staff available required to take up and maintain the intervention, with staff turnover being a particular issue.

Overarching Theme: Barriers	Main Theme	Summary (General Barriers)
Push Factors	Tribunal Rate	An unintended consequence of the intervention for the EPS was the increased tribunal rate, due to the SEND team requesting schools undertake the intervention before proceeding further in the EHCNA process.

Appendix xxiii: Charting Summary (Barriers Particular to the Set-Up Phase)

Overarching Theme: Barriers	Main Theme	Summary (Set-Up Phase Barriers)
Barriers Particular to the Set-up Phase		
Implementer Characteristics	Perceptions of Intervention Difficulty	There was a perception from the EPS and school that setting up the intervention was the most difficult part.

Appendix xxiv: Charting Summary (Barriers Particular to the Maintenance Phase)

Overarching Theme: Barriers	Main Theme	Summary (Maintenance Phase Barriers)
Barriers Particular to the Maintenance Phase		
Implementer Characteristics	Lack of Screening Materials	A barrier from both the EPS and school perspective was the need for screening materials to better understand which learners would benefit from the intervention.
	Perceptions Regarding Progress	A barrier from the school perspective were concerns that learners were making progress too fast or too slow perceiving the intervention to not be the correct intervention.
	Generalisation	The school perceived the most difficult part of the intervention to be in terms of generalisation and the assessment for this. Staff reported that learners needed to be in the 'right frame of mind', needed time, and were unclear about whether they should be concentrating upon comprehension. There was also the difficulty of using real books, with these either being unavailable, different, not chosen by the learner or staff finding it difficult to mark the words that were correct (without the learner seeing), alongside the time taken to photocopy the text selected beforehand.
School Organisation Characteristics	Staff Availability	School raised concerns that due to higher level of needs for learners that they required more staff to be able to continue the intervention in the future due to competing demands with other interventions.
Learner Characteristics	Attendance	The school raised concerns regarding one student not making progress due to their attendance.

Appendix xxv: Charting Summary (Strategies)

Overarching Theme: Strategies	Main Themes	Summary (Strategies)
EPS Planned Strategies	Use of Evidence	The project leaders used a combination of PBE alongside evidence-based literature to develop the strategies over time.
	Responsivity	The overall strategy of responsivity was based upon the graduated approach. The aim of being responsive was to better understand school's implementation needs with a view to scaling up the intervention.
	AEP Support Team	The AEP team was a central part of the implementation strategy. Described as 'invaluable' the AEPs were the core of the strategy but also helped to develop and enhance the strategies over time.
	WBP	The web-based platform was developed to access the data for the purpose of evaluation. The EPATT allowed the EPS to access the anonymous data where the team were able to view which schools were undertaking the intervention, the frequency, and the progress that individual children were making. This enabled the EPS to target schools who had stalled with the intervention, or to provide enhanced support to schools who had learners who were not making progress. This enabled the EPS to begin to practice systemically.
	Co-Working	The EPS co-worked with the partner LA SEP, and teams within the home LA (legal team and web-based development). The goal was to scale up the intervention. The SEPs from each organisation provided peer supervision as a supportive mechanism. The shared values regarding reading drew colleagues were noted as a factor for enhancing co-working.
	Responsivity and Reflection	This related to the overarching theme of the EPS being responsive to schools and taking every opportunity to reflect upon the intervention and implementation support to learn from the process for improvement.