Teacher talk during CPD: An exploration of talk as a tool for reflective inquiry into practice

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Doctor in Education (EdD) Programme

2020

ABSTRACT

This qualitative case study examines the role of specialist reading teachers' talk during CPD and how their talk develops as dialogue which enables them to inquire reflectively into practice. Despite a large body of research into teacher learning through CPD, how teachers talk within CPD has had less attention from the field compared to the interest in CPD designs and factors which contribute to CPD effectiveness. In addition, most interest from the field into the role of talk in learning, has concentrated on classroom talk and the exchanges between teachers and children. Consequently, the findings from this study add to current understanding of how individuals learn from CPD and the role played in their learning by their participation in dialogue about practice observation.

The study was situated in the CPD context of an established group of Reading Recovery teachers. Data were generated from observation and audio-transcripts of the CPD event and through group and individual interviews with the teachers and the group leader. A grounded theory approach to data analysis was used to explore the nature of dialogue in this context and participants' explanations of their roles and learning.

The premise of this thesis is that teachers' adaptive expertise is extended through reflective inquiry when their collaborative talk is used to assemble and interrogate data from observed lessons, theorise about decision-making and propose and test hypotheses about what they observe. Although there was individual variation, and factors other than length of experience were significant in teachers' participation in reflective inquiry, the analysis indicates that by collaboratively problematising practice, teachers can develop deeper rationales for their decision-making and are able to synthesise theoretical and practical knowledge. I propose that developing and maintaining an inquiry stance through dialogue generates reflective inquiring leading to learning transformation.

DECLARATION

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

Word count (exclusive of appendices, list of references and footnotes) but including glossary, figures and tables: 44,986 words

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February, 2020

ACKNOWLEDGEMENTS

Exploration is never an individual effort and it is important to acknowledge the support which has enabled me to complete this work.

My grateful thanks are offered to the Reading Recovery professionals who generously participated in this study and have continued to be interested in the progress of the research. Thanks also to the many Reading Recovery teachers, Teacher Leaders and colleagues who have contributed to my thinking, through our discussions and reflections about professional learning.

My particular thanks to Dr Sue Burroughs-Lange for being there at just the right time and offering encouragement and a much-needed space to talk about the research in its early stages. Thanks also to Dr Val Hindmarsh and Dr Sinéad Harmey for taking the time to read and comment on drafts.

The guidance over the past three years of my supervisor, Professor Gemma Moss, has helped me to shape this work. Thanks also to Dr Rachael Levy for joining the supervisory team in recent months and to both Gemma and Rachael for asking challenging questions which helped me to deepen the analysis.

Thank you to my dear family, especially Judith and friends for your ongoing encouragement and belief – you can now enjoy the relief of no longer having to ask how the thesis is going and there will be more time to enjoy making plans for other things!

Arriving at this point has been a longer journey than expected, because life brings challenges and unforeseen events. Bandura (2000[1]) wrote about efficacy suggesting – 'when faced with obstacles (…) those who doubt their capabilities slacken their efforts, give up, or settle for mediocre solutions. Those who have a strong belief in their capabilities redouble their efforts and figure out ways to master the challenges (ibid: 18). The resilience and efficacy to complete this thesis has mostly been inspired by the memory of my dear mum and lovely dad, who believed in their children and in the simplicity of 'doing your best' but could never have imagined this journey. Thank you – this work is dedicated to you.

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[1] Bandura, A. (2000). Self-efficacy: 'The foundation of agency'. In W.J. Perrig and A. Grob, (eds) *Control of human behaviour, mental processes and consciousness.* New Jersey, London: Lawrence Erlbaum Associates Publishers.

IMPACT STATEMENT

The study's impact has been ongoing. The research questions were generated from my professional role in Reading Recovery with constant iteration between my reading, thinking and writing and my professional work during the study timeline. In my role as a Reading Recovery National Leader, I teach on the MA accrediting those leading teacher learning (Teacher Leaders/ TLs); I coach TLs in the field; and participate in other associated work through writing and conferences. Here I discuss three ongoing impacts of this study through field work, MA teaching and conference workshops.

In the field, I observed many cases of Reading Recovery professional development (PD), following the same conventions as the study context. My field work involved observing PD sessions and leading post-session conversations with session leaders. Frequently those leaders articulated goals of improving how they led teacher talk during PD. I used the themes emerging in the study, both as a lens for observing the PD, and for generating reflective conversations with session leaders about moves in the talk and ways that talk could develop an inquiry stance. Several teacher leaders have offered feedback indicating that the ways of naming teacher talk from the study have productively developed teachers' metacognition about dialogue.

I also used the preliminary data analysis to inform my teaching on the MA in Reading Recovery and Literacy Leadership (MA RRLL[2]). This included planning for participant learning about leading talk during PD, through theory and practice both in module sessions and through support for participants' fieldwork. Ongoing reflection on this study contributed to how I led and supported those participants to consider their use of talk moves and the patterns of responding from the teachers they worked with in the field.

At various points during the research, I led conference seminars with those leading teacher PD in Reading Recovery. In one session the discussion focused on themes from selected literature I was drawing on for the study, to prompt

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[2] An MA programme at UCL Institute of Education which prepares participants to lead teacher learning in Reading Recovery under the auspices of Reading Recovery Europe

participants to reflect on the goals and problems of socially constructed learning through talk. In subsequent sessions, I used anonymised study data to stimulate participants' own inquiry into dynamics within the talk and further interrogate their understanding about the role of leading talk in PD. In those sessions, I also received feedback and questions which helped ensure that the final presentation of the study should be both recognisable and thought-provoking in the context in which it took place.

I suggest potential future impact from the study, for both Reading Recovery and the wider field of education. Following publication, I will engage colleagues in discussion about the thesis findings to consider how they might influence both the MA curriculum[3] and the continuing PD of Reading Recovery TLs. I plan to write two journal articles – one for a Reading Recovery audience focusing on reflective inquiry while observing live lessons; the other for a wider audience, problematising the nature of teachers' talk as an aspect of CPD.

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[3] An MA programme at UCL Institute of Education which prepares participants to lead teacher learning in Reading Recovery under the auspices of Reading Recovery Europe

REFLECTIVE STATEMENT

Explaining the role of a reflective statement as a required preface to the EdD thesis, Cunningham (2018) proposes that the reflective task connects professional concerns of practice with professional learning and develops pensive and imaginative professionals. My professional learning has developed through a number of border crossings taking me willingly into new territories - from teaching in Australia to teaching in England; from teaching children to teaching adults; from being a teacher to becoming a learner on the MA programme at Sheffield University; and in the last decade, into the new territory of doctoral study while simultaneously beginning a leadership role in Reading Recovery Europe at UCL and teaching on MA programmes. Acknowledging Pat Thompson's (2015) suggestion of problems with a journey metaphor in reflective thesis writing, here I reflect on my learning in the EdD as *exploration* rather than a pilgrimage to a planned destination.

Blaxland, Lawson and Wentworth farmed successfully near Sydney in the 1800s. They could have stayed safely on their farms, contented by establishing themselves in the new colony of Australia. But they wanted to know what was beyond the seemingly impenetrable Blue Mountains and set off with packhorses and provisions to attempt a mountain crossing to explore new territory[4]. Forty-five years later, Burke and Wills left Melbourne to travel north through inland Australia, aiming to be the first Europeans to find a way 2000 miles north to the Gulf of Carpentaria. Those explorers were only there at all because in 1770, James Cook had left Whitby to explore the east coast of Australia and recommend the settlement of Botany Bay. Stories and history lessons about exploration are still strong in my memory of

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[4] Earliest known image of Blaxland, Lawson and Wentworth at the summit of their expedition. http://acms.sl.nsw.gov.au/_DAMI/image/20/136/a1511029r.jpg Image in public domain

primary education in Australia. Perhaps they instilled the spirit of exploration that has kept me on the move both geographically and educationally for most of my life. There is something compelling about what is not yet experienced or understood.

Border crossings or transition between contexts for thinking and working can disrupt ideas about identity and culture in ways that are challenging but also stimulating for the open-minded explorer. Having simultaneously begun a new professional role and commenced the work of the EdD, I found iteration and reciprocity in my learning between those spaces. Here I reflect on my learning in the EdD through two communicative lenses – language and writing, as ways of entering and making sense of new territory. I conclude by reflecting on the tension between individual and collective learning which seems to have been a pervading theme in my academic and professional explorations.

Learning the language

Learning new language was significant in doctoral exploration. As Johnson (2004) notes, language matters because it is both 'representational and also constitutive (…) it actually creates realities and invites identities' (ibid: 9). In the Foundations of Professionalism (FOP) module, key readings and guest lecturers gave me new ways to name and discuss ideas about professionalism and my professional identity. Lectures and seminars introduced me to a field of literature and ideas that were revelatory after over 30 years as a teaching professional. In the transition from work as a consultant in a local authority, Ball's (2008) description of regulated professionals and Powers' (2008) 'distressed professional', resonated, as did contrasts between managerialist and democratic forms of professionalism (Sachs', 2001; 2003). Hargreaves' and Goodson's (1996) principles of professionalism as discretionary judgement, engagement with the social and moral purposes of the curriculum, collaboration, authoritative and open working with partners, skills and dispositions of active care, self-directed learning and creation and recognition of high task complexity gave me a language to describe both my work and aspiration as a teaching professional. In module sessions and the essay, I tried out my use and understanding of this new

language. The accountability dilemma I discussed in the essay continued to interest me and led me to further new language related to agency (Bandura, 2001) and praxis (Kemmis and Smith, 2008).

The Specialist Route module involved wide reading and weekly seminars combined with observation in the field. Seminar literature introduced me to language in fields of literacy learning, literacy intervention and adult learning. Debating and reflecting on those ideas with colleagues was pivotal in developing my learning as I used the new language to reflect on and discuss my findings from auditing an MA course for Reading Recovery Teacher Leaders and observing both adult and child learning in the field.

Through the two modules on Methods of Enquiry (MOE) I developed a better grasp of the language of research design and methods. Becoming more fluent in speaking and understanding 'research language' was important in my work of teaching and supervising students on MA programmes as well as developing my own research skills. Initially I wondered if my lean towards qualitative research may have been a leaning away from the numerical complexities of quantitative research. However, I reflect that I was more interested in exploring the detail of what people do and say, and the situated contexts in which those acts and words arise, than analysis of quantitative data. Reading, planning, presenting and writing about a project for MOE 2, developed my understanding of how research can communicate and respond to real world problems. At that point, the role of talk in adult learning was becoming a theme that I wanted to explore.

Writing as a way of making sense of experience

Explorers chart and record their progress into new territory, usually with two purposes in mind – to set out pathways for others to follow and to record and examine their own experiences during the journey. Writing has been critical to my learning throughout the EdD in both those ways.

Writing the FOP essay helped me make sense of my role transition and return to academic writing after many years spent writing documents and reports. The

feedback tutorial responding to my draft built my confidence and was a stimulating exchange of ideas. During the other taught modules, the writing-feedback relationship was significant in generating conversations and stimulating or challenging my thinking. Seeing events and ideas from other perspectives and debating them has deepened my learning. I recall being startled when my tutor in MOE 2 was suddenly interested in the lesson observations in Reading Recovery as 'subversive activity' and I reflected on how I could maintain a critical stance as I ceased to be a newcomer in that community. In thesis work, I have learned the value of writing to mediate my learning and strengthen my data analysis. I have examined the data in detail through multiple iterations of writing analysis in memos and chapter drafts. The challenge was partly in writing to make sense of the data and partly to communicate to those who are not insiders in my professional field. The written feedback conversation with my supervisor continually pressed me to consider audience and interpretation.

Further opportunities to engage in writing for publication alongside doctoral writing, have been significant in my learning. Three collaborative writing projects developed my confidence and skills. Co-writing a book chapter (Amott *et al.,* 2013) was a complex and interesting activity involving negotiation of theoretical frames, data analysis and voice. The discussions and iterative approach as the writing passed between authors supported my development of a critical stance. In addition, reading for the EdD enabled me to suggest the theoretical lens that was adopted for the chapter based on Coburn's (2003) proposals of depth, sustainability and spread as key factors in educational reform. In other collaborative writing, I worked with two colleagues to develop a journal article (Taylor *et al.,* 2012) and a book chapter (Bodman *et al.,* 2012). Ideas explored in the FOP module about teacher's professional knowledge, formed a key aspect of the article along with theory and practice in literacy intervention.

These writing collaborations occurred at the transition between taught modules in the EdD and writing the thesis proposal. Looking back, those diversions to venture into other territory away from the doctoral path were both costly and beneficial. I lost time, but I also learned a lot about, and from the experience of collaborative academic writing. In addition to writing for graded assignments,

writing collaboration became a further way to explore and critique ideas from the literatures I was engaging with in the EdD programme.

Productive tensions – the individual and the collective

In my professional role and for the Specialist Route module, I audited the first year of a MA course, making observations and writing reflective accounts of participants' learning and exploring my data from the field through lenses of adult learning theory. At that point, I became interested in how individual differences affected learning in a group and my own move from one professional community to another also caused me to reflect on individual agency within community (Billett, 2001) and what it meant to be part of a community of practice (Wenger, 1991). Reading Wenger's ideas of the significance of practices and language that mark communities, I reflected on tensions between 'fitting in' and maintaining a critical stance and the experience of being a newcomer seeking to have my experience and knowledge valued in the context.

Dissonance occurred as I moved between discussing transformative learning theory (Mezirow, 1991; Cranton, 2016) in the Specialist Route seminars and observing individual differences in adult learning in my fieldwork. Reading Opfer, Peddar and Lavicza's (2011) paper on individual orientations to learning was pivotal in a further line of inquiry into how individual agency (Billett, 2001), emotions (Saunders, 2012; Kelchtermans, 2005), affect (Yorks and Kasl, 2002) and beliefs and values (Peddar and Opfer, 2013; Biesta, *et al.,* 2015) can affect teacher learning. An introduction to Fenwick's (2012) work on complexity theory helped me to better understand the complex interactions between individual and collective goals.

Through the MOE1 and 2 modules and the IFS module, I developed two small research projects. Of those, Morris (2010) illuminated how factors relating to the individual could impact participation and learning. Simultaneously writing a book chapter (Amott *et al.*, 2013) with a focus on system reform, triggered my thinking about why goals for change in practice through PD are not always realised. Through MOE one and two I found that individual dispositions, rather than

previous Reading Recovery learning were significant in participation. I also found that the newness of the learning community impacted how far individuals committed to or trusted in collaboration. Through the IFS I established confidence with the researcher role and piloted the methods that I used later in the thesis. I realised, when analysing data for the IFS, the centrality of dialogue and that individuals understood their learning roles differently. My professional fieldwork indicated that learning to lead teachers' talk was complex and difficult and established authentic reasons to explore in this thesis how experienced teachers and leaders used talk for learning.

Conclusion

Entering new territories can be productive and exciting but also daunting. Blaxland, Lawson and Wentworth were rewarded by finding suitable farmland in the expanding colony and by establishing a way to reach it. Burke and Wills were not so fortunate. They did expand what was known about inland Australia and they did make it to the Gulf but died of malnutrition while heading south again. There have been personal costs of exploring doctoral territory, though at the time of writing, not the extreme one experienced by Burke and Wills. When experiencing each of the many setbacks, I wondered why I didn't just remain contentedly on familiar ground. I worried that the new territory I was trying to chart was already being claimed by other explorers or would prove in the end to be infertile. In the end, like other explorers, I am acutely aware that wider fields of discovery are continually unfolding. I reflect that the EdD has prepared me to be a reflective researcher and to understand how my own explorations are built upon, enriched by and can contribute to ongoing exploration in the field.

CONTENTS

List of tables and figures

List of acronyms

CPD – Continuing Professional Development

COP – Community of Practice

DfE – Department for Education (England)

IPD – Initial Professional Development in Reading Recovery

IRE / IRF – Initiation Response Evaluation / Initiation Response Feedback patterns in talk

LA – Local Authority

NC – National Curriculum

NL – National Leader in Reading Recovery

NLS – National Literacy Strategy

PD – Professional Development

PIRLS - Progress in International Reading Literacy Study

PISA - Programme for International Student Assessment

PL – Professional Learning

PLC – Professional Learning Community

RR – Reading Recovery

RRT – Reading Recovery Teacher

TL – Teacher Leader in Reading Recovery

Chapter One

INTRODUCTION: THE CASE FOR EXPLORING TEACHER TALK IN CPD AS A TOOL FOR REFLECTIVE INQUIRY INTO PRACTICE

Introduction

This study focuses on an expert group of Reading Recovery teachers (RRTs) and the role talk plays in enabling collaborative reflective inquiry during continuing professional development (CPD). Reading Recovery is a one to one intervention for children demonstrating literacy difficulties in their first year of formal schooling[5]. RRTs receive an initial year of professional development (IPD) on how to identify, assess and work with pupils experiencing such difficulties. Once trained, RRTs participate in regular CPD, including ongoing opportunities to observe and discuss live lessons.

Based on its own terms, Reading Recovery CPD is an inquiry-oriented, problem-solving approach (Gaffney and Anderson, 1991; Lyons, Pinnell and DeFord, 1993; Pinnell, 1997). RRTs are not being trained to deliver a scripted programme. Instead, the CPD aims to develop specialist reading teachers' responsiveness to students struggling to develop strong literacy skills and to fine-tune their decision-making about supporting students by scaffolding, modelling and prompting. This study was designed to respond to the following three research questions:

1. **In what ways does talking while observing lessons, offer potential for teachers' learning within a CPD context?**
2. **In what ways does teachers' talking while observing develop reflective inquiry?**
3. **Which kinds of learning do individual teachers ascribe to their participation in dialogic inquiry?**

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[5]Ref: https://www.ucl.ac.uk/reading-recovery-europe/reading-recovery

Lyons (2010) proposes reflection is not easy to learn or teach, and that whilst reflection is commonly expected in professional learning more could be done to advance the understanding of it. Reflective inquiry according to Dewey (in Lyons, 2010) is *a way of thinking* with four crucial attitudes for individuals engaging in it – being open-minded to new ideas; being whole-hearted and fully committed; being responsible for what is learned and how the learning is acted on; and directness or 'believing that one's actions can make a difference' (ibid: 40). Dewey suggests reflective inquiry is stimulated by *disturbance* of some kind, with contrasting meanings and something at stake (ibid). Reflective inquiry also has *situational* and *social* aspects according to Schőn (1991) who positions it as *a way of knowing*. Mezirow (1991) also saw *disturbance* as essential to prompt adult learners to confront and reflect on assumptions and habits of mind and he suggested a role for critical discourse with others in raising awareness of assumptions. Reflective inquiry also has a basis in Freire's writing as *a way of being critical* and *interrogating learning contexts* with a view to social justice (in Lyons, 2010; Schőn, 1991).

Reflective inquiry is both an individual and a collective endeavour. The context offered potential to explore these different aspects of reflection. Reading Recovery teachers work with the lowest attaining literacy learners and are aware of the role of their teaching in impacting children's life chances. A theory-practice connection is foregrounded in Reading Recovery PD, where teachers regularly observe and discuss lessons as part of PD sessions which requires them to articulate and examine their thinking. The lessons are observed in real time and as such have the unpredictability of teachers' daily practice, thus offering authentic contexts for problem-solving.

Schőn (1991:66) suggests 'an artful teacher sees a child's difficulty in learning to read, not as a defect in the child but as a defect of his own instruction', prompting the teacher to 'either search his repertoire or invent new methods' (ibid). Yet knowing how to respond can be tacit or in the individual's action and once practice becomes routine, the individual finds it harder to reflect, seeing themselves as an expert presumed to know, rather than a reflective practitioner (Schőn, 1991). In the study context, individuals are supported to develop a reflective stance. According to Gaffney and Anderson (1991), leadership of

reflective inquiry in Reading Recovery PD involves challenging teachers to observe, evaluate and form hypotheses about child responses, to 'provide rationales for the teacher's decisions and to suggest alternative instructional procedures' (ibid: 6).

In the literature, there is no clear agreement about how to describe teachers' ongoing learning. Subtle differences are perceived between professional learning (PL) and professional development (PD). I use the term PD because the Reading Recovery context uses it, as does much of the literature referred to in chapter two. However, I conceptualise PD and CPD in this study as being about change in teachers' learning at the level of altering teachers' beliefs and assumptions, not about training or development which often presume a linear relationship between PD and fidelity to programme delivery with change in surface structures such as class activities and organisation (Coburn, 2004; King, 2019). Kennedy (2014) situates training as a *transmissive* model of PD and collaborative professional inquiry at the other end of the spectrum as *transformative*. In this chapter, I introduce the study context as a site with potential for reflective inquiry in PD and discuss how the study goals were influenced by experience in my professional role in two international contexts.

Reading Recovery CPD

Reading Recovery developed from large scale longitudinal research by Clay (1979) who observed and documented principles and procedures which teachers used successfully to improve literacy outcomes for the lowest attaining children. Observation and discussion of lessons in CPD is an indispensable aspect of Reading Recovery in all international settings[6] where it is used as a literacy intervention. The observations are often referred to as 'teaching behind the glass' or 'teaching behind the screen' because they are facilitated by a glass screen in a PD venue (Appendix 1).

Figure 1 illustrates the physical context of the lesson observations with the teacher and child on one side of 'the glass', unable to see or hear the observing

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[6] Standards and Guidelines for Reading Recovery – ECRR (2012); RRCNA (2018); (CIRR) 2014.

teachers on the other side. The child is aware teachers are observing the lesson and both the child and parent have consented. In the study context, the children came into the main room with their teachers after the lessons to be briefly greeted and thanked by the observing teachers.

Figure 1: An example of the physical surroundings of a live lesson observation in Reading Recovery[7]

The unique nature of live lesson observation in Reading Recovery PD is partly an historical marker of how the original development research was carried out by Marie Clay and colleagues, as they observed and discussed numerous lessons led by expert teachers of reading to identify effective features of practice (Askew, 2009; Ballantyne, 2009; Clay, 2009). In that way, the PD mirrors the research inquiry, based on the proposal that 'through controlled and sequential observations [teachers] can become aware of patterns and the discovery of patterns can give rise to theories' (Askew, 2009:127).

Talking while observing was proposed as an essential aspect of the PD because using video-taped replays of lessons 'lost the on-task question and commentary' (Clay, 1991:364). Clay claimed that through the CPD, teachers would 'become more flexible and tentative, to observe constantly and alter their assumptions in line with what they record as children work [and] challenge their own thinking continually' (Clay, 1997:663). A typical Reading Recovery PD session is described in the following vignette:

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[7] Image is not from the observed group and has been adjusted to maintain anonymity

Teachers from different schools have settled into chairs set out in a circle. On a central small table, the Teacher Leader (TL) has laid out spare copies of useful texts, post-it notes and pens. The TL sits in the circle and introduces the session focus. In pairs, teachers discuss the theme and connections with the pre-session reading which was set last time the group met. The TL prompts the group to reflect how the theme activates ideas about dilemmas in practice.

Next, one teacher from the group describes in detail the learning of a child she is about to teach during the session. Strengths in learning and progress are described and the teacher asks the group to observe particular aspects and help her to reflect on ways to help the child. A second teacher then describes the child she will teach. The listening teachers make notes about both children. The room lights are switched off as the teachers move to stools facing a one-way viewing screen. In a brightly lit room on the other side, their colleague is settling in the child who has arrived for the first lesson. The child and teacher cannot see or hear the observing group.

As the lesson begins, the TL prompts the group to notice acts by both teacher and child, how those could be considered in relation to the session theme and to revise principles underpinning Reading Recovery lessons. The observing teachers discuss the lesson, prompted and challenged by the group leader. When the first lesson concludes, the second teacher takes her place behind the glass with the child who has just arrived and begins to teach. The group observe and discuss the child's processing and the teacher's decision-making. After the lessons, teachers discuss some of the ideas from their shared observations and return to their reading to help frame some possible ways forward in the teaching of the observed children. They also reflect on their personal learning and influences on shaping their future practice.

Reading Recovery PD is theorised as socially constructed learning because of its collaborative nature. Key claims about the PD according to literature within the field of Reading Recovery research, include that it foregrounds teachers' assumptions about both curriculum and teaching sequences, and about the child's potential, and prompts teachers to consider alternative responses (Clay, 2009). This involves development of analytic and reflective processes through dialogue while observing lessons and in the reflective conversation following the observations (Bodman and Smith, 2013; Pinnell, 1997). Clay (2009) proposed that talk with peers can – 'overcome the unreliability of one person's decision by pooling knowledge in a network of decision-making' and 'bring(ing) the implicit, whether observed or assumed into a verbal form which allows discussion and revision'; (and) 'generate reflection by 'putting what you see into words, but equally important the articulation of how what you see conflicts with what you assumed' (ibid: 237). She also suggested talk while observing could 'enrich understanding of children and sharpen [teachers'] use of teaching procedures' (Clay, 1991:367).

Through these claims, Clay positioned teacher talk as a tool for critical reflection on practice, with assumptions about the talk as a way for teachers to examine and transform their thinking and decision-making. Lyons' (1994) study found that teachers assisted each other during lesson observation by thinking about instructional decision-making and constructing 'chains of reasoning', and by using evidence to challenge others and consider alternative explanations. A further rationale for discussing lessons while observing is that –

> Freed from teaching, they [teachers] are able to talk while observing [allowing] them to put their observations and analyses into words – almost a think-aloud process. In their conversations they articulate their questions and dilemmas; they describe reading behaviour and teaching moves in great detail. This process builds up case knowledge over many observations of different children at different points in time. The experience helps teachers think critically about the art of teaching. Schmitt, *et al.* (2005:96).

These claims that the PD develops teachers' capacity to critically reflect on and adapt their decision-making based on observing a child's responses, align Reading Recovery PD with principles of transformative learning (Cranton, 2016; Mezirow,1991) and reflective practice (Schőn, 1991).

Whilst claims from the Reading Recovery literature about talk while observing are consistent, how talk operates in the context is under-researched. Most studies of Reading Recovery have focused on evaluating student outcomes from the intervention (e.g. CPRE, 2016; D'Agostino and Harmey, 2016; Pinnell, 1989; Quay, *et al.,* 2001; Schwartz, 2005; Sylva and Hurry, 2007; What Works Clearinghouse, 2013). A smaller number of studies considered the PD model (e.g. Lyons, 1991; Pinnell and Woolsey, 1985; Pinnell, *et al.*, 1994). For instance, Lyons (1991) compared CPD models with and without live lesson observation, finding that students achieved higher outcomes if teachers participated in CPD with live lesson observation. She concluded that the observations enabled teachers to internalise effective behaviours and transform their thinking. However, differences in length of the PD models were not accounted for. A large-scale study (CPRE, 2016) explored the instructional strength of Reading Recovery by studying teachers' behaviours and attitudes and found deliberateness and instructional dexterity through in the moment decision-making

related to a capacity to reflect on practice. However less understanding was advanced about how the PD, or more specifically teachers' talk contributed to develop a reflective stance.

Teachers' talk has an implicit role in PD but how it pertains to reflective inquiry is less comprehensively researched, compared to the large body of work on teacher-student talk in classrooms. In this thesis, I present and discuss a detailed data analysis from one CPD context where teachers' reflective inquiry is shaped through their talk. As this work forms part of a professional doctorate, it is important to acknowledge that the research questions arise from my roles both in Reading Recovery and previously as a teacher and leader of PD.

Situating the research questions

Continued learning has been central to the professional roles of my whole teaching career. Experiences as a participating teacher, a trainer/consultant, a leader of professional learning (PL) and an observer coaching others who lead PD, have led me to reflect on variation in individual teacher's responses to PD, whether and how their practice was impacted, the role of teachers' agency and possible misalignment between the concerns of the system and the concerns and problems that occur in teachers' daily practice.

Miller (1995) suggests historicising the questions to set one's own life history with the focus, within the wider context of the study. To that end, I first discuss why I pursued the research focus in relation to experiences and perspectives which I brought to the research process from experience as a teacher and PD leader in Australia and England and my subsequent experience as a Reading Recovery teacher and leader. By doing so, I hope to illuminate why and how this study took the route that it did. Next, I consider the wider context of teacher professional learning from macro (system) and micro (individual teacher) perspectives and discuss the potential of collaborative inquiry within PL. Then I describe the context of Reading Recovery CPD which is the site of both my professional practice and my research.

Perspectives from class teaching in Australia and England

Collaborative team-teaching was common when I was a class teacher in Australia. I learned from observing others', hearing their rationales and being called to articulate my own rationales for decision-making. Moving to teach in England in the mid-1990s, resulted in fewer opportunities to observe others' practice. I also became aware of constraints on my agency to divert from set curricula and methods because of assessment accountability and a culture in which observation was aligned with accountability processes, rather than learning. Assuming a leadership role introduced opportunities to observe other teachers' practice, but for monitoring rather than collaborative learning purposes. In that role I developed observation and coaching skills but was always aware of the power imbalance and how that could constrain genuine collaboration and practice inquiry.

Perspectives from leading PD

As a National Literacy Strategy (NLS[8]) consultant for 12 years, I planned and led PD for large numbers of teachers in two different local authorities (LAs). I found many factors impacted teachers' responses, participation and application of new learning, the foremost being that PD goals and focuses set by the government and local authority did not always sufficiently respond to the authentic problems arising from teachers' own practice. Teachers were delegated to attend NLS courses and many had to cascade their learning to colleagues in school, inferring that content such as handouts and activities were the locus of knowledge and downplaying participation and discussion as tools for professional learning in their own right. As such the CPD was mainly a transmissive model (Kennedy, 2014).

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[8] The National Literacy Strategy was a 1998 government initiative to improve literacy standards in schools in England through a comprehensive programme of teacher training and support. Ref:
http://www.educationengland.org.uk/documents/literacytaskforce/implementation.html

NLS PD included video examples of practice to demonstrate techniques, methods and classroom organisation. Observation of DVD clips of classroom practice seemed memorable for teachers, perhaps through professional curiosity because they didn't spend much time in colleagues' classrooms. Seeing lessons conducted or resources being used probably extended the practical repertoires of some teachers. Later, when coaching teachers identified by headteachers as weaker in literacy teaching, I found many tried to replicate pedagogical practices observed in the videos but with varying success in adapting those to their own contexts.

In NLS training, post-observation discussion of video clips was used to direct observers to pre-determined points about practice rather than opening authentic spaces for dialogue. Despite interest in glimpsing other contexts, teachers frequently found fault with videos which didn't adequately reflect their own classrooms. On my visits to schools I found many teachers had returned to the safety of prior practice, rather than achieving the practice transformation anticipated by the NLS.

Perspectives from field visits and leading Reading Recovery PD

When I began a new phase of professional learning as a National Leader (NL) in the international[9] Reading Recovery professional community, I developed a heightened interest in the unique way in which lesson observation was shaped in Reading Recovery PD. As part of my NL training, I observed trainee Reading Recovery Teacher Leaders (TLs[10]) talking while observing live lessons and learning to lead the talk of teachers. During field visits to CPD led by experienced TLs, I observed teachers similarly engaged. As a newcomer to Reading Recovery, I was fascinated by the practice and the differences in teacher response compared to observation in my previous roles. Some critical incidents (Cunningham, 2008), arising from experiences or clusters of events at that time,

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[9] National Leaders in Reading Recovery are part of a network of sites including Europe, New Zealand, Australia, Canada and the USA. National Leaders evaluate and quality assure Reading Recovery implementation and lead initial and ongoing CPD for TLs.
[10] Teacher Leaders work directly with RR teachers in CPD and individual coaching.

established foundations for the present study including the following reflections and questions –

Talking seemed necessary to learning

Induction into my professional role as a National Leader involved auditing an MA course preparing TLs to work with teachers in Reading Recovery. As a Reading Recovery novice, I realised that, my own learning was hampered in some way by only observing and not taking part in the lesson discussion, and that the nature of the talk was different to what I had experienced or led in other PD approaches.

Teachers seemed to have differing understandings of how to participate in the talk

The CPD seemed to offer agency for teachers to talk about what mattered to them as they considered practice and observed lessons. However, in my visits to observe CPD in the field, I noticed variation in teachers' rationales for and participation in talk while observing. I became increasingly interested in how TLs' leading the talk facilitated or constrained teachers' discussion and I wanted to understand what teachers were learning from their dialogue.

Does the dialogue benefit the observers or the observed?

One critical incident involved a personal experience of teaching on one side of the two-way mirror while my colleagues observed from the other side. This was an expected part of my training as a National Leader. I wasn't sure I had learned from the follow-up discussion, because much of it passed in a blur as I tried to recall the moments from the lesson which my colleagues were interested in discussing. In fieldwork, I have observed numerous Reading Recovery CPD sessions and many RRTs have told me that although they are nervous about being observed, they consider that observing others is valuable to their own learning. I have continued to be interested in who was learning what through this process.

Leading teachers' talk is complex

During fieldwork in many Reading Recovery PD contexts, I discerned variation in how TLs led the talk. Preparation for leading Reading Recovery CPD involves an intensive MA course and includes rationales, supporting materials (e.g. Burroughs-Lange, 2009, Appendix 14) and fieldwork in leading talk during lesson observations. Yet leading teachers' talk is an aspect of practice that even experienced TLs often requested support with during my field visits. I noted that some TLs' approaches to leading teachers' talk, led to stronger discussions and I wanted to understand more about what constituted effective leadership of the talk.

This study was designed to explore participation of individuals in an expert context of Reading Recovery CPD. By analysing patterns in RRTs' talk, in a context where the TL and the teachers were very experienced, I hoped to learn more about how talk was shaped and led, and in what ways participation contributed to teachers' learning. I aimed to understand more about three themes:

- The nature of teachers' talk while observing practice, and ways in which their talk was fostered or constrained within a CPD event;
- Patterns in observers' talk which were indicative of reflective inquiry; and
- How participants characterised their learning, or barriers to learning from their talk.

Any observation of practice is socially situated within a context. A unique approach to using talk during lesson observation is a key feature of the professional learning context explored in this thesis. This study recognises the uniqueness of the context and does not aim to generalise. However, through in-depth exploration of teachers' talk while observing, the thesis contributes to the field in two main ways. It offers Reading Recovery practitioners further understanding of factors which enhance or constrain learning from live lesson observation. To the wider field of professional learning, the thesis proposes some principles for developing teachers' talk as a tool for facilitating and mediating teachers' reflective inquiry into their practice.

Thesis structure

The rest of the thesis is organised as follows. In chapter two, I offer a critical discussion of studies and theory in the field of teacher professional learning, with a specific focus on talk as a tool for reflective inquiry. Chapter three outlines the methodological approach and analytical processes. Three chapters of data analysis follow, based on three distinct areas of the research. Chapter four presents analysis and findings about the nature of talk within the CPD event and the learning opportunities presented. Chapter five outlines a deeper analysis of dialogic talk patterns and the ways in which the talk is indicative of reflective inquiry. In chapter six, participants' perspectives of their learning are discussed and related to observational data from the previous two chapters. In chapter seven, I reprise the goals and conduct of the study and discuss the relevance of key findings to Reading Recovery and for the wider context of professional learning.

Chapter Two

CONSIDERING THE ROLE OF TEACHER TALK IN CPD

Introduction

International comparisons of pupil attainment such as PIRLS and PISA[11], have increasingly directed attention to teacher effectiveness and teacher professional learning (Evans, 2011; Moss, 2009; Moss, 2012; Opfer, *et al.*, 2011; Storey, 2009). Consequently, much teacher PD in the past two decades, has been aligned with improving teacher quality as a way of improving student outcomes (Fullan, 2009). PD is often limited to seeking cost effective ways to spread selected knowledge and skills as a means of developing instructional quality (Groundwater-Smith and Mockler, 2009). Improving reading instruction has been at the centre of much of that policy development, focusing on teachers' knowledge and pedagogy and impacting the framing of PD, according to Coburn *et al.,* (2011).

One working assumption in the field is that pupil attainment can be improved by making teachers and schools accountable to a prescriptive curriculum by use of standardised testing and inspection. Performativity and accountability processes in England, have shaped the discourse of professional learning according to Boylan *et al.,* (2018). Ball (2008) defines performativity as 'regulation that employs judgements, comparisons and displays as measures of productivity or output or value of individuals and organisations' (ibid: 50). He suggests a dilemma arises from performativity since it invites professionals to improve and be constantly reflexive but it also changes teachers' experience of their work and the satisfaction derived from it (ibid). In addition, Ball proposes that social structures for learning are replaced by informational structures and that teachers' sense of moral purpose and responsibility towards students is distorted when

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[11] PIRLS – Progress in International Reading Literacy Study monitors reading at fourth grade
 PISA – Programme for International Assessment tests 15 year olds all over the world in reading, maths and science

performativity defines professional roles. Barnett (2008) describes this as a 'lurch from an ethics of service to an ethic of performance' (ibid: 197).

Much of the literature in the paradigm underpinning reform agendas, applies the logic of a linear relationship between research and practice (Coburn, 2004; Coburn and Stein, 2010). The current English National Curriculum (NC) for literacy (DfE, 2014) is one such example. Through its emphasis on phonics, spelling and grammar in curriculum specification and assessment, the NC attempts to overcome individual teacher variation. Seeking better understanding of relationships between CPD and student outcomes, has increased attention to what happens at the *meso level* of the school. Cochran-Smith and Lytle (2009) suggest that through structures such as PLCs, teachers can mediate policy and curriculum ideals with accountability to students in the reality of the classroom. However, Ball (2015) points to tensions between recognising teacher agency and the value of policy in focusing teacher discourse, with what he calls translation and enactment of policy in schools as teachers negotiate, try to make sense of, adapt or even ignore policy. Lesson study is one example of a collaborative structure which may be directed towards exploring how to enact curriculum policy rather than to explore genuine problems from practice.

Accountability processes aligned with reform-focused CPD are often aimed at reducing innovation to maintain fidelity (Coburn and Stein, 2010). However, teachers *do* make adaptions in their individual practice creating a dilemma – adapting curricula to local needs and conditions is essential to effective implementation, yet adaption also risks quality of implementation (Borko, 2004; Coburn and Stein, 2010). A contrasting assumption is that factors related to the individual teacher are significant. Compared to the *macro* view framing CPD as a function of policy goals a *micro* view considers how an individual teacher's dispositions and orientation to learning can account for how they respond.

Opfer and Peddar (2011) suggest a teacher's orientation to PD is shaped by personal history and experience, motivation to make changes in practice, personal dispositions such as reflection, meta-cognition, self-regulation and communication skills. Likewise, teacher participation in PD and how it impacts

their classroom expertise can be affected by perceptions of autonomy and agency (Bandura, 2001; Biesta *et al.*, 2015; Embirayer and Mische, 1998; Fullan and Hargreaves, 2016). Desimone (2018) notes that even well-designed PD is experienced differently by individuals.

A further clash in assumptions occurs around whether PD aims to train the individual teacher to deliver curriculum goals with fidelity, or to develop decision-making expertise. Considering research findings about relationships between PD and teacher effectiveness, Muijs *et al.,* (2014) concluded that 35 years of research on teacher effectiveness had directed PD to focus on teacher behaviour at the expense of developing teacher decision-making and inquiry. They proposed three essential conceptual changes in PD – moving away from information delivery, to learning; developing collaborative inquiry; and putting students rather than practices at the centre (ibid).

Researchers comparing novice and expert teacher performance, such as Berliner (2004), Eaude (2014), and Ross and Gibson (2010), propose that expertise can be characterised as both *routine* and *adaptive*. Using adaptive expertise is an iterative process of teaching, involving noticing events in a lesson and making sense of those events and where each act of noticing is further refined by the meaning discerned (Sherin *et al.*, 2011). Adaptability is also characterised as *decisional capital* (Hargreaves and Fullan, 2012) described as what professionals learn through practice, structured or unstructured experience and reflection that supports their decision-making where there is no fixed rule i.e. their in-the-moment decision-making in reaction to students (*op cit*). Several researchers contend that adaptive expertise is of even greater significance for teachers working with children who struggle in literacy learning (Duffy *et al.,* 2009; Gallant and Schwartz, 2009; Ross and Gibson, 2010). This is where I situate my own work.

I use those lenses in the rest of this chapter to review the broad field of research into teacher CPD and its relevance for this study. I begin by examining the research literature on CPD from the macro (system) view. Next, I discuss the micro (individual teacher view) and the kinds of expertise that specialist reading

teachers need to develop. Then I review how far the specific role of teachers' talk about practice during CPD, is an object of study considered in the literature, and whether the larger body of research into dynamics in classroom talk offers any indications for analysis of teacher talk as practice inquiry in my study. Wherever possible, I prioritise literature making an explicit contribution to development of the teaching of reading.

What we know about effective CPD is mostly about design

Seeking to better understand relationships between CPD and student outcomes has increased attention from the field to professional learning design. Systematic reviews of research into effectiveness of teacher CPD indicate that most attention in the past 20 years has been paid to what constitutes best practice, primarily by identifying and evaluating optimum PD design features. Similar descriptors of effective CPD design arise across most studies and include aspects such as focusing on depth of professional knowledge, provision of adequate time including regular sessions, enabling active participation, involving collective learning and focusing on teacher learning as well as student outcomes (Avalos, 2011; Caena, 2011; Cordingley *et al.,* 2003; Darling-Hammond *et al.*, 2017; Kennedy, 2016; Nelson *et al.,* 2015; Ping *et al.,* 2017; Timperley *et al.*, 2007; Wilson and Berne, 1999).

The aims and findings of studies included in these reviews, demonstrate a prevailing international consensus that teacher professional development is the best means to improve student outcomes (Borko, 2004) and is an integral part of the dissemination stage in policy reform (Coburn, 2003). So, from the standpoint of the system, the question the field has mostly been exercised with is – what is the best way to design CPD, to make the fastest and most widespread improvement in student outcomes?

However, Eraut (2002) suggests there is little evidence that CPD impacts practice, precisely because research attention has been too centred on CPD content and processes rather than on what participants learned. Further to that view, Kennedy (2016) proposes the education system is 'noisy' with many

conflicting messages about PD and that insufficient attention is paid to underlying theories of action in CPD evaluation and research. Although identifying effective PD structures is attractive to reformers, design features can fail to account for complexity (Cochran-Smith *et al.,* 2014) and can underplay the situated nature of PD context (Timperley *et al.*, 2007). For instance, CPD may be sustained over time but other elements of content or engagement may reduce its effectiveness (ibid).

Two key features of effective CPD design are well-represented in the research literature - CPD which uses collaborative approaches and CPD which fosters inquiry into practice. Both are relevant to the context and analysis of this study and merit closer attention because they offer insight into how individuals may construct new understandings during PD.

Collaborative learning

Collaborative learning is a design feature identified in many reviews of research into effective CPD. Collaborative designs are theorised as developing individual and collective capacity to enhance the progress of educational reform, promote pupil progress and sustain learning over time (Fullan, 2011; Stoll *et al.,* 2006). This literature considers that where teachers operate within strong learning communities, it is more likely they will make changes in practice (Coburn and Russell, 2008; Elmore *et al.,* 1996). Collaboration is theorised and actioned in different ways. Two commonly referenced conceptions of collaboration are Communities of Practice (COPs) and Professional Learning Communities (PLCs).

In a COP, the theory of collaboration involves inducting newcomers into an existing repertoire of knowledge, where knowing is an act of social participation (Lave and Wenger, 1991; Wenger, 2003; Wenger-Trayner and Wenger-Trayner, 2015). Three features distinguishing a COP are the domain (shared interest and commitment); the community (learning from each other) and the practice (repertoire and mutual problem-solving) (Wenger, 1998; 2003). Wenger (2003) points to the importance of balance between these aspects to keep learning at

the centre and maintain 'a spirit of inquiry'; (ibid: 81). He characterises learning though inquiry as jointly negotiated; involving identification and problem-solving of gaps in knowledge; arising from shared experience, language and practice so that participants can 'walk in another's shoes'; and involving deep, effective listening, trust and understanding of others' perspectives (ibid: 87).

However, problems in the logic of the COP as a site of collective learning, arise around engagement of participants, constraints on the kinds of conversation that are possible, and norming rather than remaining open to new possibilities. Power relations can 'exclude particular practices and knowledge' (Fenwick and Nerland, 2014:5) or privilege particular interpretations (Hughes *et al.,* 2007). The COP may also place insufficient emphasis on the reflexive individual (ibid) or on individual agency (Billett, 2001) if the primary function is inducting newcomers, implying that expertise rests with more experienced group members frames learning in a one-way direction from insiders to newcomers.

The concept of the PLC relates more specifically than the COP to the education field and differs because it focuses more directly on inquiry. Groundwater-Smith and Mockler (2009) define a PLC as a 'deliberate arrangement to bring practitioners together in a systematic way to examine and make problematic features of practice with the intention of development and improvement' (ibid: 103). Cochran-Smith and Lytle (2009) suggest a PLC's function is to sit between the system and the reality of teachers' classrooms, where practitioner inquiry can generate understanding of student learning by teachers who have a sense of accountability to those students. Activity in a PLC involves ongoing critical reflection on practice, sharing and responding in ways that enable individuals to mutually enhance others' as well as pupils', learning, in communities of inquiry and continuous improvement (Cochran-Smith and Lytle, 2009; Stoll *et al.*, 2006). Important features of PLCs include – having shared values and vision; taking collective responsibility for student learning, utilising reflective professional inquiry including reflective dialogue; and the promotion of group as well as individual learning (Stoll *et al.*, 2006; Stoll and Seashore-Lewis, 2007).

In the last decade, attention has turned to refining understanding about how PLCs function. According to a review by Van Lare and Brazer (2013), one limitation in research into PLCs, is that most empirical studies have aimed to either define their nature or suggest conditions/designs which enable their success, at the expense of considering contexts in which they operate. Those contexts involve the macro and micro processes which influence teacher learning within e.g. a school (Moss, 2012) and the micro-processes involved in collaboration and collaborative dialogue (Horn and Little, 2010). The rise in data cultures has also impacted goals of PLCs, reducing potential for inquiry, risking some of the focus on learning (Datnow and Parks, 2019) and underplaying factors such as development of trust, depth of focus on learning, sustainability over time and pedagogical diversity (Hargreaves and Fullan, 2012; Nelson *et al., 2015*).

Examples of COP/PLC designs include joint practice development through action research (Kemmis, 2011; Kemmis and McTaggart, 2000) and lesson study (Dudley, 2013; 2014). Both collaborative learning designs have potential to focus on authentic problems in practice and they do so, using structures and defined participant roles. A systematic review of 82 studies of teacher collaboration in CPD (Vangrieken *et al.*, 2017), found benefits including - at the student level, improved outcomes and a more student-centred curriculum; and at teacher level, increased motivation, practical knowledge, innovating and dealing with complexity, more productive colleague conversations and increased efficacy. Datnow and Parks (2019) propose that learning is increased through establishing a collaborative orientation towards equity and excellence, thoughtful engagement with evidence on student learning, embedding collaboration in everyday practice and making sure it is sustained.

However, if a PLC is seen mainly as a 'structure', the focus may be mainly on timetabling and organisation so that PLCs 'exist only in name' (Datnow and Parks, 2019:18). Implementing PLCs as top-down structures to meet school goals, can also result in 'contrived collegiality' according to Hargreaves and O'Connor (2018b:5). Although collaborative contexts may actively create opportunities for the dissonance which stimulates new learning, members may also support each other to maintain the status quo (Timperley *et al.,* 2007). For

example, Coburn (2001) found that reading teachers rejected ideas for change based either on their assumptions about the children or their prior experience as teachers.

Along with conflict between an individual teacher's goals and the goals of school improvement, learning may be constrained by factors including the individual teacher's understanding of how to participate, power relationships within a group or individuals' existing theoretical knowledge. Thus, goals for collaborative activity in PLCs may be directed by macro concerns (system/school focuses for improvement) at the expense of response to genuine problems in teachers' practice. Datnow and Parks (2019) suggest that in policy and school improvement literatures, collaboration has been framed mainly in technical-rational terms and that despite viewing collaboration as essential to teacher change, providing for it does not always lead to transformed practice.

Some negative consequences of collaboration identified in Vangrieken *et al.*'s (2017) review, were that 'teachers may experience competitiveness, tensions that can escalate into conflicts, a loss of autonomy, an increased workload and a push towards conformity with the majority' (ibid, 2017:29). Key influences on the potential of effective teacher collaboration were proposed, including maintaining a hierarchy of interaction depth – from individualism (individual responsibility and autonomy), to sharing ('clarification of pedagogical motives that direct the way teaching and learning is being structured' (ibid: 26). However, they found the deeper level collaboration of 'sharing' was infrequent. This was partly explained by two factors - active avoidance of conflict and disagreement, which arises where teachers' deeply held beliefs are challenged, and resistance towards collaboration requiring higher levels of interdependence (ibid). These findings highlight the need for consideration of how genuine inquiry into practice can be fostered in CPD contexts.

Inquiry into practice to activate teacher learning

Active inquiry into practice is a second feature commonly cited in the literature about effective CPD. Kennedy (2014) defines collaborative inquiry as 'all models

and experiences that include an element of collaborative problem identification and subsequent activity, where the subsequent activity involves inquiring into one's own practice and understanding more about other practice' (ibid: 693). Yet, a review of studies into collaborative teacher learning as inquiry (DeLuca *et al.*, 2015) found that most research attention had been directed to design, structure and 'how to' steps for carrying out collaboration. The review suggested a need to further clarify and articulate the meaning of inquiry (ibid). Harris and Jones (2019) suggest that confusion exists in the field between collaborative *models* and collaborative *strategies* with less attention paid to the latter.

Teacher inquiry is theorised in different ways. For instance, the system improvement literature positions collaborative teacher inquiry as a means of professional capacity building as teachers support each other's development. Hargreaves and O'Connor (2018a) propose that collaborative professionalism is characterised by inquiry, along with challenge though dialogue and care for and solidarity with colleagues (ibid). However, Groundwater-Smith and Dadds (2004) suggest that practitioner inquiry through activity such as action research has often been appropriated for policy implementation purposes rather than responding to the questions of individual teachers.

Another way of framing teacher inquiry centres on the use of data and artefacts, for example – 'teachers gathering and using evidence to improve classroom practice and enhance their understanding of their own knowledge and expertise' (Groundwater-Smith, and Mockler, 2009:16). Evidence used in this kind of inquiry can include student data, samples of work, lesson plans, curriculum documents, cases of student learning, vignettes of practice to observe including video-recordings. However not all use of evidence constitutes inquiry, and Earl and Timperley propose that moving too quickly from reviewing evidence to making recommendations, without sufficient inquiry into alternatives, would be characteristic of falling into 'activity traps', or simple problem-solution decision-making relationships (2008a).

A contrasting view frames teacher inquiry as a *stance* taken by individual teachers, motivated by best intentions for the learning and life chances of

students (Groundwater-Smith, Mitchell and Mockler, 2016; Cochran-Smith and Lytle, 2009; Kemmis and Smith 2008). *Inquiry as stance* is 'an orientation of teachers towards generation of and engagement with their own curiosities of their work' (Groundwater-Smith and Mockler, 2009:65). Inquiry as *stance* suggests a key role for reflection, aligning it with Schőn's (1991) proposal that overcoming the tacit nature of knowledge requires individuals to reflect in action, or be 'willing to enter into new confusions and uncertainties' (ibid: 164) and with Brookfield's (1987) suggestion of framing critical reflection as considering alternative courses of action. Schőn (1991) proposed reflective inquiry involves both reflection-in-action (reframing the problem in the moment), and reflection-on-action (anticipating the effect of action and examining it retrospectively with additional consideration of social justice).

Developing an *inquiry stance* involves working with real world problems in practice (Cochran-Smith and Lytle, 2009) where 'teachers' practical knowledge is generated through their own systematic inquiry' by 'critically examining practice alone or with others' (Cochran-Smith and Lytle, 1999:289). This is also described as *praxis* which involves a synthesis of critical reflection and action with a moral dimension of aiming to make the best possible decisions for the benefit of the learner (Kemmis and Smith, 2008; Carr and Kemmis, 1986). Dialogue is essential to collaborative inquiry. Cochran-Smith and Lytle (2009) suggest that potential for transforming practice lies in teachers' collaborative questioning of their practice and theories and that inquiry involves 'making current practice problematic using the data arising from practice, and studying, theorising and acting on those problems' (ibid:123).

Cochran-Smith and Lytle (2001) propose an inquiry-based model of PD would privilege production of knowledge over consumption of knowledge; posing of questions over answers; and generation of curiosity and debate along with - 'a willingness to navigate the unsettling, the uncomfortable and sometimes the downright messy, in the negotiation of professional learning that meets the needs of teachers and their students and schools' (ibid: 65). But such goals for teacher inquiry are not always realised. For example, a systematic review of research in teacher collaboration concluded that possibilities for learning were hampered by

a 'lack of critical reflection on and discussion of teaching practice' (Vangrieken *et al.*, 2017:35). Further, Fenwick and Nerland (2014) caution against reflective practice being posited as a PD model, suggesting an over-simplification of the link between reflection and practice because it doesn't support some individuals to develop specific expertise.

Roskos and Bain (2010) propose some necessary conditions for learning environments to be conducive to developing the intellectual engagement and thoughtfulness required for reflective inquiry. Those conditions include - positioning teachers as co-learners sharing knowledge, with permission for thinking/studying; facilitating teachers' articulation of how they construct meaning; modelling thoughtful dispositions (e.g. 'a keen interest in ideas, a willingness to grapple with complexity, (thinking) out loud, showing others their reasoning and logic and (…) acknowledge(ing) what they did not understand' (ibid: 100). Further, Roskos and Bain highlight the need for superior mediation with leaders making deliberate attempts to elicit thoughtfulness, mediation of viewpoints and increasing the analysis and reflection needed for constructing meaning. Their final condition involves maintaining a focus on active construction of learning - establishing a dialogue of problem-solving, circulation of knowledge and reflection rather than simply passing on instructional techniques (ibid).

Earl and Timperley, (2008a) suggest that interpreting evidence from practice is aided by both an individual's thinking through 'an inquiry habit of mind', and by participation in 'learning conversations' with others to consider 'a broad range of relevant evidence' and participating in 'learning conversations' (ibid: 3). Thus, aside from individual cognition and reflection, dialogue has a key role in inquiry. Within a learning conversation, respect is a further key aspect which is seen to foster dialogue, not only through offering space for all viewpoints, but respect signified as challenge - taking time to probe, explore and challenge others' interpretations with improvement for all as a goal (Earl and Timperley, 2008a).

Although these proposals indicate an ideal of dialogue as a means of fostering collaborative inquiry, the reality can be different. In a study exploring a range of formats for learning conversations, Earl and Timperley (2008b) identified three

key limitations. Firstly, where protocols were used to guide conversations, those protocols, not the inquiry, were privileged by teachers. Also, despite willingness to converse, not all conversations were grounded in 'needing to know' and finally, there was a lack of preparedness to encounter and deal with challenge (ibid). Earl (2008) suggests a critical role for a leader to develop learning conversations as probing rather than describing; and challenging rather than confirming existing practice.

In summary, researchers interested in the development of teacher inquiry as a collaborative practice, have found it is a complex process and that the formation of a community may not automatically foster new learning or changes in an individual's practice (Opfer and Peddar, 2011; Skerrett, 2010). Groups may form initially around some aspect of a role or activity, but they may not function as learning communities, which 'continually inquire into their practice, (to) discover, create and negotiate new meanings that improve their practice' (Skerrett, 2010:648). Learning potential in collaborative CPD designs may be affected by how far the CPD creates genuine inquiry (Brown *et al.*, 2018). The literature remains open on the potential of such communities to create meaningful change for individual teachers' practice. I turn now to consider the micro view of CPD, taking into account factors relating to the individual teacher.

Individual learning and response to PD

Much of the literature indicates that even in effectively designed PD, impact on change in teachers' practice can be limited (Desimone, 2018; Harris and Jones, 2019; Opfer and Peddar, 2011; Peddar and Opfer, 2013; Timplerley, 2011). This may be because teachers' experience of CPD fails to sufficiently connect to or change their class practice (Cordingley, 2015; Groundwater-Smith and Mockler, 2009). Despite the best efforts at system-led teacher development, individuals and schools demonstrate different levels of engagement according to Boylan *et al.,* (2018). They argue this is partly explainable by 'the alignment or dissonance between continuing professional development or change programmes and the pedagogical and CPD cultures and purposes of the 'actors' (schools, departments and teachers) (ibid: 360). The individual teacher is one system,

operating within the system of the school or context, which operates in wider contexts, so it is important to consider that individual responses are mediated by a wide range of factors within what Fenwick, et al. (2014) refer to as 'nested systems'. King (2014) also cautions that simply measuring teacher satisfaction from PD has limited potential in determining its effectiveness.

Understanding how individuals function within collaborative PD is complex, because it involves considering participation problems along with individual histories, experience and biases which can determine how or whether an individual responds when existing understanding comes under challenge. Eraut (2002) signals the importance of the situated nature of professional knowledge, which he argues is constructed through experience, and is dependent on how experience is acquired, selected and interpreted by the individual over time. Gomez *et al.* (2003) describe knowing in practice as *dynamic* (evolving as soon as the knower acts), *contextual* (connected to the social and material circumstances where it is constructed) and both *personal* and *social* (as individuals know both through experience and previous knowing and through collective activity). Korthagen (2017) proposes that PD could more effectively connect the personal with the professional, accounting for what individual teachers think and feel and what they are inspired by, and with a key role for critical reflection to reframe limiting beliefs.

One barrier to practice change may be the individual teacher's response to new information. Individuals strive for consonance or consistency with what is already known or understood, leading them to selectively attend to information that supports their current views. Encountering new evidence and information can lead the individual to experience 'cognitive dissonance' (Festinger, 1962). Attempting to reduce cognitive dissonance may lead an individual to maintain existing frames of understanding. However, it can also be productive in triggering change in thinking and practice.

It is suggested that talking about practice can be a way to overcome resistance to change as teachers actively deconstruct, test and reconstruct their beliefs and examine their espoused theories of education (Argyris, 1991; Schőn, 1991).

According to Argyris (1991), reconstruction involves double loop learning – rather than becoming defensive when routine responses are not successful, an individual's double loop thinking would enable them to draw on logic and reasoning in a metacognitive way, to examine how they are thinking about practice (ibid). It is not easy to take a metacognitive stance according to Earl and Timperley (2008b), 'but the commitment of a group to engage in inquiry (can) develop this disposition to inquire and learn' (ibid: 122).

An extended discussion of literature on the complexity of individual teacher knowledge and learning is beyond the scope and purposes of this thesis. Instead, I now narrow the focus to review literature and studies which consider affordances and barriers to transformation in individuals' understandings and their practice. Then, I turn to the literature on teachers' adaptive expertise and relationships between PD and individual decision-making in practice. Where possible, I include research which is specifically relevant to teachers of reading.

Transformation in an individual's learning and practice

Research into teacher learning and school improvement has mostly relied on changes in student outcomes to signal change in teachers' practice and knowledge (Muijs *et al.,* 2014). Focusing on change as an aspect of adult learning brings other perspectives into the frame including the nature of transformative learning (Cranton, 1996; Cranton, 2016; Mezirow, 2012; Taylor and Cranton, 2012) and the role of reflection in transforming practice (Brookfield, 1987; 2005; Schőn, 1991). Models of change processes in collaborative teacher learning were identified and critiqued by Boylan *et al.,* (2018). They concluded insufficient attention had been paid to the situated nature of learning with the environment treated as 'external and static' and that teacher agency was 'relatively neglected' (ibid: 18).

Sachs (2011) uses four metaphors to characterise how CPD approaches variously theorise transformation in individual teacher learning. Of these, CPD as 'retooling' (training a set of skills) and 'remodelling' (aiming to modify behaviour rather than beliefs) are aligned with system improvement goals for large scale

change in practice. 'Revitalising' - focuses more on teacher renewal and learning focused on students, possibly through coaching or collegial networks.

In contrast, Sachs' 're-imagining' metaphor suggests PD can be transformative, enabling teachers to pose questions, innovate, inquire, reflect based on evidence from student learning using collaborative processes and open, trusting dialogue (ibid). The reimagining metaphor 'links the imperative of *learning to improve* (my italics) as well as improving learning' (ibid: 165) and suggests more agency for the individual than e.g. 'retooling'. Sachs proposes transformational learning would be evidenced by criteria including - 'reflection resulting in action'; promotion of 'what if? thinking'; 'people go(ing) away determined to make changes in their own practice'; and taking account of 'when (changes) actually make a difference to student learning' (ibid: 167). Her proposition highlights the potential for individuals to be motivated towards reflection and making beneficial changes in decision-making – the difficult but productive response to cognitive dissonance.

From a review of 25 studies, Opfer and Peddar (2011) noted that individual dispositions are not easily altered. However, they found an increased likelihood of change in orientation to learning if classroom experience was examined at a conceptual level and where opportunities for reflection increased the potential for belief change. They contend PD can play a significant role in challenging teachers' existing orientations to their learning where knowledge about teaching and learning is actively applied to practice as part of the PD. These proposals suggest a role for PD contexts to enable teacher inquiry into practice in ways that combine theory and practice and to develop the inquiry in contexts supportive of teachers' productive response to cognitive dissonance.

Transformative learning is characterised as involving both cognitive and affective dimensions as the learner becomes aware of assumptions and reflects upon them through critical discourse with others (Brookfield, 2005; Cranton, 1996; Cranton, 2016; Mezirow, 1998; 2012; Taylor *et al.,* 2012).   Yet it can be problematic for individuals to respond to their potentially unconscious personal perceptions and biases on their own (Fenwick, 2000) or to do what Brookfield (1987) describes as 'imagining alternatives which require breaking with existing

patterns of thought and action' (ibid: 117). The literature on how thinking can be exposed to scrutiny through shared dialogue is consequently of importance in framing this study and I will discuss that later in the chapter, after first considering how the development of teachers' expertise is discussed by the field.

Adaptive expertise and teacher decision-making

Routine expertise describes knowledge and pedagogy which enables a teacher to respond in standard situations (De Arment *et al.*, 2013). Some degree of routine efficiency is required by novice teachers, but to develop *adaptive expertise*, the teacher needs to be able to innovate and solve problems (De Arment *et al.*, 2013; Schwartz *et al.*, 2005). Adaptive expertise relates to teachers' complex decision-making, as student learning unfolds in context (Darling-Hammond, 2006; Darling-Hammond and Bransford, 2005; Timperley, 2011). Along with personal disposition, Gomez *et al.* (2003) identify three kinds of knowledge necessary to innovation in practice. Of these, kinds of knowledge acquired through training and repetitive practice are characteristic of routine expertise. This is necessary to ensure that teachers use evidenced pedagogy, but adaptive decision-making could be enabled if combined with that 'knowledge of internalised rules' and used in decision-making (ibid: 101).

Adapting instruction involves responding to demands of tasks within the social context of the classroom; using flexible decision-making; quickly recognising patterns of student response; and drawing on rich background and experiential knowledge to support problem-solving. Berliner (2004) proposes that along with both automatic, routinised responses, expert teachers also respond flexibly based on fast recognition of meaningful patterns in their particular domain. This kind of responding is also conceptualised as a feedback relationship including feedback to the teacher from observation of the child's performance (Hattie, 2009; Hattie and Timperley, 2007). Making productive adaptions, reflecting, responding flexibly and solving problems on the run, in practice has also been labelled contingent teaching (Wood, 2003; 2018).

According to (Schwartz *et al.*, 2005), a critical factor supporting adaption is that 'innovation often requires a movement away from what is momentarily most efficient for the individual' (ibid: 44) that is, a willingness to respond productively to dissonance. They propose a relationship between innovation and efficiency as a way of distinguishing routine and adaptive expertise, where the adaptive expert is high on both dimensions as represented in Figure 2.

Figure 2: Two dimensions of learning and transfer: innovation and efficiency. Schwartz, Bransford and Sears (2005)
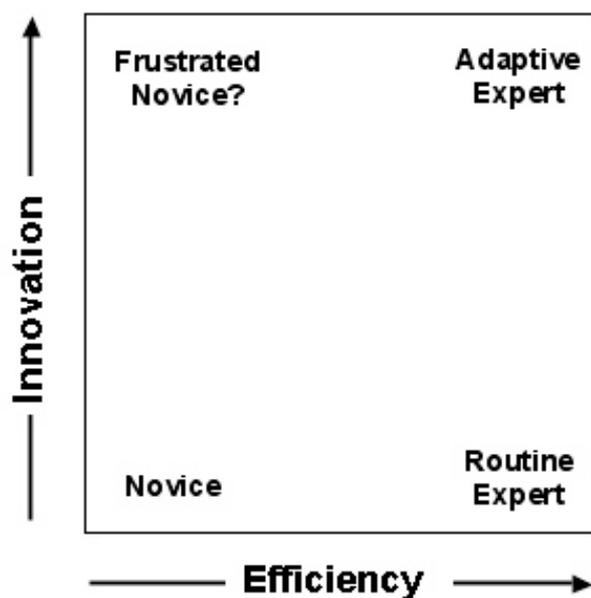
Routine practice is reliant on tacit knowledge and a practitioner may be prompted less to reflect whilst doing or may become 'selectively inattentive to phenomena that don't fit the categories of his knowing in action' (Schőn, 1991:61). Failing to examine and reflect on practice is just one aspect that can risk the quality of instruction. This study is not so concerned with identifying kinds of content knowledge and routine expertise that reading teachers need. Instead, it focuses on experienced teachers reflectively examining their practice to improve outcomes for children struggling to learn to read; and the ways in which the PD positions teachers as adaptive experts - 'continuously expanding their expertise, restructuring their knowledge and competencies to meet new challenges' (Darling-Hammond, 2006:11).

Adaptive expertise and teaching reading

Effective reading instruction requires teachers to have a body of knowledge about literacy development including for example, phonological awareness, decoding, fluency, and reading comprehension. That knowledge, along with pedagogical skills or knowledge about literacy development begins to be formed in initial teacher training and is further developed through both informal means and continuing professional development or use of published curriculum.

A teacher's guidance and scaffolding is claimed to be significant to the learner-reader's performance (Gaffney and Rodgers, 2018; Wood, 2003; Wood and Wood, 1996) based on learning from assisted performance (Tharp and Gallimore, 1998; Gaffney and Anderson, 1991). Scaffolding involves 'gradually diminishing amounts of assistance as students become confident learning the task' (Gibson and Ross, 2016:41). Three elements distinguish teaching as scaffolding – contingency (based on the immediately preceding child response); decrease in use over time as a child takes on more capacity; and transfer of responsibility to the student (Tharp and Gallimore, 1998). Scaffolding in instruction is suggested by Gibson and Ross (2016) to be a 'critical element of adaptive literacy instruction' (ibid: 41).

If effective scaffolding can positively impact student performance, then consideration should also be given to the possible negative impact of ineffective decision-making by teachers. Wood (2018) points to a continuing lack of consensus about the concept of scaffolding. In their comprehensive review of scaffolding in literacy learning, Brownfield and Wilkinson (2018) argued that inconsistent definition of scaffolding in literacy teaching has contributed to difficulties in researching how it impacts learning. They found theoretical reasons for learning impact linked to scaffolding, and some empirical evidence for teachers knowing what to focus on next, but they found less evidence about the timing of scaffolding.

Decisions about scaffolding are triggered by a teacher's observation of a child's literacy processing. Rodgers *et al.* (2016) found that how much scaffolding early literacy teachers gave, had less impact on student outcomes than what the

teacher chose to focus on supporting. A newly advanced concept in the literature on effective teaching of reading, is the notion of 'instructional risk' occurring when teachers fail to notice significant child responses or fail to make the most effective decisions about how to respond (McNaughton, 2018). McNaughton proposes that risks can arise around the timing and nature of scaffolding and judging when and what kind of feedback is needed to promote the child's effort and self-regulation.

The interplay of teacher 'noticing' and making corresponding decisions both in the moment and in response to patterns of student response is central to adaptive expertise (Ross and Gibson, 2010; Sherin *et al.*, 2011) and is essential behaviour for the specialist reading teacher according to Lose (2007). Ross and Gibson (2010) analysed comparisons of expert and less expert literacy teachers' noticing, while observing three videos of instruction. Analysis of teachers' comments while observing indicated that expert teachers commented with more detail 'in order to monitor, understand and interpret' (ibid: 186); proposed hypotheses to explain student responses and elaborated on their own reasoning; and experts also identified a greater number of significant/meaningful incidents in the lessons and attempted to extend their own understanding by linking observations.

Operationalising adaptive expertise therefore involves teachers in close observation of student responses, including patterns of response, comparing those with expected outcomes, hypothesising and responding with appropriate instructional moves. Ross and Gibson propose that 'elaborate noticing allows for teachers' perception of the 'big ideas' regarding students' understanding that effectively guide decision-making' (ibid: 189).

PD which supports the development of adaptive expertise

Adaptive expertise enables teachers to review and expand their understanding by reflecting on practice. However, reinterpreting and evaluating professional actions and decision-making can be difficult because teachers tend towards repeating previous practice. Working with others can create space for

communicative learning according to Mezirow (1991) and can challenge individuals to review their knowledge and lead to knowledge transformation (ibid).

Principles for PD developing adaptive performance were identified through a critical interpretive research synthesis on concepts related to adaption and skill (Ward *et al.,* 2018). They were a) feedback directed at overcoming rigid patterns of thought and action and promoting flexible responding in new situations; b) experience of a wide variation of cases including some focus on tough cases to increase challenge and responding to dilemmas where there are no clear right/wrong actions; c) maintaining training at the edge of the zone of proximal development as learners improve; d) preserving a sense of complexity and developing understanding of how to respond in real world complex domains with anticipatory thinking and 'learning on the fly'; and e) active reflection where learners use metacognitive skills and reflection to calibrate and elaborate on their current understandings .

An expert is presumed to 'know' while a reflective practitioner recognises that others have relevant and important knowledge, and that kind of uncertainty offers productive learning opportunities for all according to Schőn (1991). Ruch (2015) describes uncertainty as something that might be actively embraced - 'the sense of never feeling that we have arrived […] a constant striving to be unsettled by experience so that we remain fully alive to all we are encountering' (ibid: 33). Fairbanks *et al.,* (2010) propose that 'thoughtful' teachers –

> …know *when* to apply "what" and "how" knowledge and *when not to*; they know *why* certain knowledge would be appropriate in one situation but not in another; and they proactively *look for multiple perspectives and pursue multiple possibilities* because they recognise and respond to the complex needs of their students (their italics, ibid: 164).

Yet designing PD to shape adaptive expertise is not straightforward. In a study requiring teachers to make on the run responses to other teachers' decision-making while observing lesson videos, Rosaen *et al.,* (2013) found that teachers were enthusiastic about studying authentic cases of practice, but the scaffolds used for responding to the videos (question structures and literacy specialists' comments) were not well-received. Whilst the scaffolds were intended to support

teachers' observations, they proved restrictive and seemed to imply potential to generate correct answers. The specialists' comments were either disagreed with based on the observer's own experience or agreed with because they were perceived as authoritative voices.

In summary, this literature concludes that teachers need to respond flexibly and contingently while teaching and they make adaptions, even in tightly scripted curricula. Adaptive expertise is particularly pertinent to the specialist reading teacher because they teach children with a range of individual difficulties which require more responsive and adaptive teaching. Adaptive expertise can be supported by CPD that brings together different voices and perceptions and which creates space for inquiry into practice but CPD does not always function as inquiry. I turn now to the relationship between teacher talk in CPD and reflective inquiry.

Theorising teachers' talk about practice

From Vygotsky's (1978) perspective, higher mental functions such as thinking are described as both social and individual. He proposed that individual learners progressed from interpersonal functioning (guided through social interactions) to intrapersonal functioning (guided by self) through a series of transformations afforded by speech (ibid). These proposals are relevant to the context of this study and the analysis of how teachers use collaborative dialogue in the situated context of CPD to mediate and transform their individual knowledge.

Despite the potential of dialogue as a mediational tool, according to Holmlund-Nelson *et al.,* (2010), most talk occurring in PD is congenial talk, often involving active avoidance of conflict. However, others such as Timperley *et al.,* (2017) claim that 'talking and reflection are important aspects of collaborative learning' (ibid: 8). Parker *et al.,* (2016) include 'critical dialogue' as one of three distinct pedagogies of successful PD along with 'public sharing of work' and 'engagement in communities of learners' (ibid: 5). Although PD is reliant on teachers' talk to mediate their learning as they inquire into practice (Orland-Barak and Maskit, 2017), specific references to teacher talk were absent in the systematic reviews

of CPD research noted above, despite dialogue being one of the most important pedagogies of effective teacher learning according to King (2019).

Research more specifically focusing on teacher dialogue is emerging separately from the research into PLCs, however it is a recent development and limited in scope. Research into peer talk as an aspect of coaching and mentoring is more prevalent, but mostly I do not include that field in this discussion because group contexts and dynamics are more relevant to this study and require different logics of inquiry to those used in researching paired coaching and mentoring. The bodies of work which address teacher talk do so from different perspectives which are here discussed.

Teachers' talk as representations of knowledge and judgement

Shulman's (1986) proposals about different kinds of teacher knowledge underpin this perspective. For instance, knowledge of content, curriculum, pedagogical content knowledge, knowledge of learners, contexts and wider education history and goals. Some studies focused on this area, for example Louie's (2016) study of maths teachers' conversations, found that contested or restricted discourses about mathematical competence stifled opportunities for collaborative learning. Penlington (2008) proposes that being able to embrace debate and dissonance within dialogue is crucial to teacher learning and that this involves examining assumptions and recognise that interchanges will not always end with agreement.

Teachers' talk about student learning

In studies with this focus, talk is emphasised in different ways. These include considering what teachers understand about students' learning (e.g. Helstad and Lund's 2012 study of teacher talk about students' writing); how teachers shape curriculum to respond to student learning (e.g. Hadar and Brody's 2016 study of talk about student learning rather than teaching); and how teachers talk about student learning in relation to artefacts or data (Datnow and Parks, 2019; Earl, 2008; Earl and Timperley, 2008a; 2008b). Teachers can represent and explain, promote or defend their practice, accompanying talk with tools such as lesson

plans, students work, student-cases and events such as observed lessons. Along with protocols for talk, mediational tools play a significant role in teacher dialogue according to Orland-Barak and Maskit (2017). They suggest that primary artefacts (in this study, the observed lesson) generate forms of practice including telling, illustrating, observing, investigating and analysing, enabling experience to be negotiated and knowledge to be constructed (ibid).

Talk as reflective inquiry

Holmund-Nelson *et al.* (2010), suggest that developing collegial talk focused on inquiry, involves harnessing conflicting views, negotiating meanings, 'asking and answering probing questions', 'recognising the value of cognitive conflict (for) deeper understanding about the complexities of teaching and learning', 'using appropriate tools/protocols' and 'being intentional and accountable for the nature of the dialogue' (ibid: 178). Gergen *et al.,* (2001) propose a role for transformative dialogue, stressing relational aspects such as self-expression, affirmation, responsibility co-ordination, reflexivity leading to co-creation of new constructs of reality.

Yet those relational aspects of dialogue can also act as barriers. Language frames how groups function and can invite or exclude. Ruch (2015) suggests that reflective dialogue requires an open-minded approach, avoiding definitive explanations and considering alternatives; it would 'invite curiosity' and to do that, individuals would need to 'tolerate not knowing' both in terms of what is going on and 'not knowing' in terms of how best to respond (ibid: 352). She suggests a key role for leading discussion, attending both to use of 'scaling language' which keeps options for responding open and attention to body language which can signal a concurrent openness or work against it (ibid).

A growing field of research explores teachers' use of video examples to examine practice. In some studies teachers were grouped in 'film clubs' to examine and discuss practice examples, often with a pre-determined theme and influenced by concepts of teacher quality/improvement and ways to improve student outcomes (Charteris and Smardon, 2013; Dobie and Anderson, 2015; Groschner *et al.,*

2018). Much of the research in this field concerns maths and science teacher PD. The literature suggests video-analysis can be effective in promoting reflection by honing teachers' skills in noticing and focusing attention on how students are learning and responding (Orland-Barak and Maskit, 2017). A review of international literature on use of video in teacher development (Gaudin and Chaliés, 2015) found it was a powerful tool for learning, principally with a focus on improving quality of instruction. They found video-viewing could create a collaborative space. However, they found no causal relationship between video-analysis and student improvement.

Two illustrative studies investigating teacher talk with video-reflection (Horn, 2010; Dobie and Anderson, 2015) found participation in reflective dialogue was not straightforward. Dobie and Anderson's (2015) analysis indicated that simply grouping teachers to retrospectively review practice, did not foster dialogue because many of the teachers expressed their ideas without responding to others. The researchers found a critical role for a facilitator moving the group towards a more sustained and reflective conversation. The facilitator needed to actively shift teachers from advice-forming towards more collective problem-solving (what could we do?). Lefstein *et al.,* (2017) explored debrief conversations from teacher pairs using agreed protocols for discussing video vignettes. They found some teachers maintained strong stances, leading to 'either/or' debate with presumed superiority of one side of the argument. Other pairs developed more exploratory talk, achieving compromises, although Lefstein *et al.* (ibid) reflected that the teachers did not necessarily rethink their own positions.

Teachers' talk as an aspect of agency

This lens considers agency as what teachers *do* rather than what they *have* and suggests that agency involves social engagement which is based in past events but oriented towards the present and future contingencies (Embirayer and Mische, 1998). Three elements of agency are theorised as follows - 'iterational' (reactivation of thought and action); 'projective' (imaginative generation of possible future action) and 'evaluative' (judgement, within context between

possible actions) (ibid: 971). Reactivating, projecting and evaluating relate to individual thinking and action.

Yet, I have found little research exploring reciprocity between agency and collaborative talk. In recent research (e.g. Biesta *et al.,* 2015; 2017), teachers' talk has been found to be influenced by wider discourses of policy structures and contexts in which teachers work. Biesta *et al.* (2015) noted that in teachers' discourses, aims and purposes of learning were articulated at a very broad level (e.g. students needing to reach their potential) without sufficient understanding of the fine detail of how those aims and purposes could be activated and that short term priorities (e.g. tick boxes for observed lessons, lessons being enjoyable for students) featured with a lesser view about the longer term.

From these varying ways of framing teacher talk, ideas about talk as a reflective process have most value for this study. Key ideas from these studies include the potential for inquiry to develop from talk directed at noticing child responses and interrogating teacher decision making. In addition, the role of leading talk is significant. However, whilst PD is reliant on talk between teachers, Van Lare and Brazer, (2013) found that 'limited work has been done on how conversation patterns happen within PLCs or how context influences these patterns', (ibid: 386). Overall there has been more emphasis in the field on defining inquiry and exploring structures and participation in it, than on understanding the role that talk can play in developing inquiry. It is evidently difficult to foster the reflection and interrogation of thinking which is necessary to inquiry.

The emergent nature of research specifically focusing on teachers' collaborative talk about practice, sets up part of the warrant for the present study. However, a much richer body of research and literature has focused on talk within classrooms. I discuss some key ideas from that field where I perceive resonance with this study of teacher talk.

Contributions from research into talk in classrooms

Patterns of classroom talk and the role of the teacher in leading talk, have been comprehensively researched since the 1970s (e.g. Alexander, 2006; Barnes, 1976; Cazden, 1998; 2001; Cazden and Beck, 2003; Edwards and Mercer, 1987; Hennessy *et al.*, 2015; Lefstein, 2011b, 2015; Mercer, 1995, 2000; Maybin, 2005; Nystrand *et al.*, 1997, Nystrand *et al.*, 2003; Resnick *et al., 2015;* Snell *et al.,* 2015; Wegerif, 2001; 2013; Wells, 1999; 2001). Clearly there are differences in how teachers talk with children and how adults talk with each other with an assumption that while children are learning to converse, teachers have accommodated and practised the rules of discussion. However, I discuss two themes from that large body of classroom-focused research which are relevant to this study, to complement the smaller body of research available into teacher talk. These are the use of talk structures and protocols and the nature of dialogic learning and how it relates to thinking and inquiry.

Talk structures and talk moves – facilitating talk

The research literature has placed emphasis on exploring how talk protocols affect learning and thinking through dialogue between child learners according to Kim and Wilkinson (2019). Research into talk in classrooms has mainly attended to teacher student interaction, participation and linguistic aspects of contributions such as language structure or length of utterance or responsiveness to other contributions through turn-taking and specific functions and roles in the talk (e.g. Alexander, 2006; Cazden, 2001; Hennessy *et al.,* 2016). Considering what counts as 'dialogue' often relates to 'a question of discourse patterns and associated norms' (Lefstein, 2010:173) which can be translated into rules and structures for engagement (*op cit*).

Talk has been researched at the level of the utterance by Michaels and O'Connor (2015) and O'Connor and Michaels (2019), but they do so to identify *talk moves* leading to productive interaction. They propose talk moves are used strategically by teachers to develop dialogic problem-solving, deepen reasoning, encourage students to listen to and engage with the reasoning of others (Michaels and O'Connor, 2015). Significantly, they note a transformational role for talk moves –

'by virtue of the positioning and interactional work that these talk moves do, they alter the position and status of the tool user, and they alter the nature of the speech event or activity at the same time' (ibid: 7). However, work by Lefstein, Snell and Israeli (2015) moves away from identifying individual talk moves to focus on how moves interact in sequential analyses of talk.

Lefstein (2010) and Lefstein and Snell, (2011b) point to the complexity of studying dialogic talk in classrooms. This problem is highlighted in a systematic review by Howe and Abedin (2013) of 40 years of research up until 2011. They found that 70 percent of the 225 studies included in the review, had taken a linguistic approach of characterising dialogue rather than considering its implications for learning, and 67 studies sought to evaluate the observed dialogue against 'good practice'. An Initiation-Response-Feedback (IRF) pattern of talk was identified in the large number of studies which addressed participation in talk (ibid).

The triadic nature of IRF talk maintains control of the conversation in the gift of the teacher or TL, thus prioritising authoritative interaction. Alternatively, 'dialogic interaction is explicitly conceptualised as considering several points of view' (Howe and Abedin, 2013: 335).

Developing dialogic talk and inquiry

Alexander's seminal proposals of dialogic talk have been the subject of many studies of classroom talk (e.g. 2004, 2006). Alexander proposes that for interaction to be categorised as dialogic, it should be collective, reciprocal, supportive and cumulative (ibid: 2006). Mercer's (1995; 2000) development of Barnes' concept of exploratory talk (1976, cited in Mercer) and the concept of 'interthinking', or using language to think together (Mercer and Littleton, 2007) offer further significant frames to consider dialogue as inquiry. Wells (1999; 2001) contends that dialogic inquiry involves knowledge construction with others through talk. Nystrand *et al.* (1997) add to Alexander's (2006) concept of dialogic talk by suggesting that it is points of tension and resolution, that signify dialogic talk, rather than evidence of turn-taking. Lefstein (2010) characterises this as the

'critical' principle – identifying and investigating open questions and points of contention.

However, Mercer *et al.* (2019) propose exploratory talk and dialogic approaches are rare in classrooms, despite comprehensive research, and that one conclusion is teachers as leaders of the talk don't afford value to using talk to construct knowledge and understanding. Understanding the development of dialogue, relationships between talk contributions and how meaning is formed and interrogated is important to this study.

Responsivity is a key principle in dialogue – utterances respond to previous utterances and anticipate further responses in a 'complexly organised chain of other utterances' (Bahktin, 1986:69 cited in Wells, 2001). Knowing arising from dialogue, is framed by Wells (2001) as a collaborative activity where 'in this effort to make our understanding more meaningful to others, we have the feeling of reaching a fuller and clearer understanding for ourselves' (ibid: 186).

An openness to assert and reflect on personal views, along with suspending prejudice and being fully engaged with others' views is important according to Lefstein (2010). From Lefstein's perspective, effective dialogue is shaped by principles of being both meaningful and critical (cited in Kim and Wilkinson, 2018). The role of reflection in dialogic learning is considered by Wegerif (2011; 2013) through notions of a dialogic space – a space of reflection with potential to explore new possibilities when different perspectives are held in tension in the dialogue to develop collective, constructive and critical inquiry.

In contrast to the extensive research into classroom talk, less attention has been directed towards studying dialogue amongst teachers in PD. Concepts from the literature about classroom talk which add to the analytic frame for this study include how dialogue develops, the moves adults make in dialogue and how the dialogue shapes reflective inquiry into practice.

Summary: The role of talk in CPD

Much of the research into collaborative CPD has focused on structure and design. Whilst collaboration and developing inquiry through dialogue are proposed as important to effective CPD, less attention in this body of work has been directed to consider what enables participation in dialogue to act as collaborative inquiry. The large body of research concerned with talk as a tool for thinking in classrooms, has mainly focused on the consequences for pupils of changing teacher talk moves. Less is understood about how teachers' talk acts as a tool for reflective inquiry to transform teacher learning. CPD in Reading Recovery relies on dialogue and concurrent observation to support practice inquiry. As such, the context offers potential for in-depth analysis of teachers' talk about practice in response to the research questions in this study. In the next chapter, I discuss how I designed a study to investigate those questions.

Chapter Three
DESIGN AND METHODS

Introduction

In this chapter, I outline the study design and discuss methods used to collect and interpret data. The study was provoked by my role as a researcher/practitioner working within the field in my professional context. The goal was to develop a deeper understanding of a case of the role of talk in professional learning in Reading Recovery CPD. I aimed to widen understanding within Reading Recovery of the role of talk while observing live lessons. By developing a deep analysis of talk in a context that was designed specifically to support reflective inquiry into practice, I also offer a wider audience a renewed focus on the role of teachers' talk in their professional learning.

One site of my professional practice was selected because it offered potential to explore teachers' talk in more depth. The Teacher Leader (TL) and Reading Recovery teachers (RRTs) had many years of collective experience of using talk as a learning tool. I had previously observed those participants, noting they were able to work at a metacognitive level to discuss, describe and interrogate their own learning from lesson observation. For all these reasons, the choice of research site seemed likely to help answer my questions.

Reading Recovery is underpinned by a theory of learning as socially constructed (Lyons, Pinnell and DeFord, 1993). That theory informed the study design and is also aligned with my epistemological stance as a researcher. Epistemology explores issues such as the relationship between the inquirer and the known and what might constitute knowledge or evidence (Hennink *et al.*, 2011). My knowledge of the Reading Recovery context enabled me to understand the language and experience of the participants in ways that could benefit the interpretative processes of the research.

Alternatively, my experience was a potential impediment to working in the field – what Delamont calls 'fighting familiarity' (Delamont, 2002:46). The challenge was

in finding ways to re-examine a practice with which both myself and the participants were familiar. However, there were also benefits, as the participants in this study welcomed the attention being given to the role of talk in shaping reflective inquiry into practice.

Research questions

The study's epistemology is framed by a constructivist-interpretive paradigm (Denzin and Lincoln, 2003; Charmaz, 2014) and focuses on posing and exploring authentic questions arising from my role, employing qualitative research design as what Janesick (2003) describes as an act of interpretation. The study is underpinned by an ontological perspective of learning as socially constructed. Charamz (2006) suggests a constructivist approach 'places priority on the phenomena of study and sees both data and analysis as created from shared experiences and relationships with participants' (ibid: 130). I aimed to explore meanings with participants, with the goal of developing a deeper shared insight into learning from live lesson observation and critique.

I acted as an interpreter from within the field (Stake, 1995) exploring the intrinsic nature of the bounded case of talk during live lesson observation. My goal was to learn how talk related to learning in the context, rather than to see it as a sample of other similar cases (ibid). In case study, iteration between theory and data interpretation can mean that the research questions are replaced or modified as the study progresses (Stake, 1995) and remain provisional (Robson, 2011). My initial goal was to learn more about the relationship between live lesson observation and teacher learning. As I began working with the data, I realised talk was a key signifier of the relationship between observation and learning so the research questions were refocused more closely on participants' dialogue and how they interacted through spoken language. Charmaz (2014) points to the importance of his kind of flexibility and a willingness to alter research questions in the field when other questions seem to have more significance. The research questions fall into the 'narrative' category directed at finding out 'what happens and how it happens' (Robson, 2011:60).

1. **In what ways does talking while observing lessons, offer potential for teachers' learning within a CPD context?**
2. **In what ways does teachers' talking while observing develop reflective inquiry?**
3. **Which kinds of learning do individual teachers ascribe to their participation in dialogic inquiry?**

Through question one, I wanted to explore possibilities arising from talking while observing in a CPD event; understand how the talk was framed and directed; and consider roles taken up by different participants. Not all CPD uses live lesson observation. However, practice is brought into PD in other ways such as through work samples or video-recordings and whilst the study context is in reading Recovery CPD, I envisaged this question leading to implications for practice beyond Reading Recovery. Question two focused on analysis of the event, enabling a deeper exploration of how descriptive talk about two lessons provoked teachers' thinking, and acted as stimuli for learning and inquiry about practice. The third question centred on data from reported perspectives of participants, gathered in interviews after the lesson observation event, to explore how teachers described their learning and participation.

Design

A flexible qualitative approach, exploring the case through multiple methods of data collection (Robson, 2011; Stake, 2003) was chosen as the most appropriate way to respond to the aims of the research. Qualitative research is encapsulated by Denzin and Lincoln (2011) as –

> (…)a set of interpretive, material practices that make the world visible (…) and turn the world into a series of representations, including field notes, interviews, conversations, recordings and memos to self…qualitative researchers study things in their natural settings, attempting to make sense of or interpret phenomena in terms of the meanings people bring to them' (Denzin and Lincoln, 2011:3).

Case study is a qualitative design, involving 'investigation of a particular contemporary phenomenon, within its real-life context using multiple sources of evidence,' (Yin, 1994:178). In this study, the case is the observation and

discussion of live lessons during CPD, as a way of developing inquiry into practice. The case was described and interpreted by talking to and observing participants. The research questions were exploratory, which Robson (2011) suggests is appropriate when trying to understand what is going on in a novel situation and where the conceptual ground work has not been exhaustively explored.

The case may be described as an 'extreme case' (Robson, 2011) since it was purposively chosen as site where I had observed the TL and teachers creating effective dialogue about practice. An extreme case can enable researchers to 'obtain, under ideal conditions, understanding about how it works' (ibid) which was appropriate since my questions had partly developed from observing variability in practice in the field.   Findings from this study could benefit a wider audience of those participating in, leading and researching CPD and should also be intelligible to Reading Recovery professionals interested in live lesson observation.

Discussion, observation and reflection are consistent aspects of Reading Recovery professional learning so I hoped that participants would be comfortable with contributing to a research process shaped in similar ways. According to Delamont (2002), 'research is a series of interactions and good research is highly tuned to the interrelationships of the investigator with respondents' (ibid: 8). Taking a constructivist approach was a deliberate aspect of design. Doing so foregrounds the phenomena of study according to Charmaz (2014) with both data and analysis created from the relationships and shared experiences with participants. (Charmaz, 2006). Charmaz (2014) suggests this is made possible through use of a shared language and mediation of meaning. This stance assumes that people's actions toward things are influenced by the meanings those things hold for them and that meaning is also derived from social interaction resulting in further interpretation and modification of held understanding.

I was influenced by Charmaz' (2014) proposal that it was possible to offer 'an interpretive portrayal of the studied world, not an exact picture of it' (ibid: 17). I placed the emphasis in data analysis on the ways in which the teachers' talk

mediated their representation of reality in this context, and I focused on how participants represented their experiences to themselves and others (Denzin and Lincoln, 2011). I tried, as far as possible, to avoid disturbing the ordinary activity of the group, whilst aiming to preserve a sense of the multiple realities represented by the differing and even contrary views of the participants about their involvement and learning, as suggested by Stake (1995). To that end, the design and methods correspond with a naturalist research paradigm (Lincoln and Guba, 1985) where realities are seen as 'multiple, constructed and holistic'; the knower and what is known are inseparable; hypotheses are time and context-bound; inquiry is 'value bound' and 'all entities are in a state of mutual, simultaneous shaping so that it is impossible to distinguish cause and effect' (ibid, 1985:37).

Research context

Reading Recovery CPD offers a relevant and interesting context. Its structure and goals align with many of the effectiveness features identified in the reviews - it is collaborative, focused on improving student outcomes, sustained over time with six sessions annually and connects theory with refining practice. A Reading Recovery CPD group could be characterised variously as a COP (Wenger, 2003) with common principles and procedures, a PLC (Stoll *et al.* 2006) which has an epistemic function, and as a community of inquiry, collaborating in the process of thinking and learning to develop practice (Garrison and Vaughan, 2008). The CPD uses methodologies including talk about theory, practice and cases of student learning and these are activated through observation, investigation and analysis. In addition, the context was interesting because Reading Recovery has maintained a consistent approach to CPD structure and goals over the past two decades despite change and development in policy and consequently research focuses in CPD more widely.

Participants

In this study I followed the principles Robson (2011) sets out to select a sample of participants to satisfy the specific needs of the project, rather than attempting to generalise to a wider population. It was an 'extreme case sample, selected where it is considered that they will throw a particularly strong light on the phenomenon of interest' (Robson, 2011:277). Participants were also selected purposively (Robson, 2011) because they had first hand and long-term experience of talking while observing live lessons. They could therefore be 'information rich' (Hennink *et al.*, 2011:85) and through observation and interview provide detailed understanding of the issues underpinning the research questions (Robson, 2011). Teachers and a TL with extended experience of live lesson observation were invited to participate in the study because they might be more able than less-experienced peers to report on and interrogate the issues the case was intended to address. Indeed, they had characteristics, roles, opinions, knowledge, ideas or experiences that were particularly relevant to the case (Gibson and Brown, 2009) because of their prior experience.

The TL planned and led the observed CPD session. The RRTs were members of a continuing contact[12] group and individuals had a minimum of 5 years and a maximum of 20 or more years of experience of professional learning in this context. The participant teacher sample were all teaching children from diverse backgrounds in inner-city schools. Some of them were full time Reading Recovery teachers and some had additional class teaching or leadership roles. Some teachers had begun teaching prior to reforms such as the NLS and the institution of inspection and testing. Despite extensive teaching experience, they continued to engage in collaboratively examining their practice as a requirement of their continued accreditation as Reading Recovery teachers. However they also exhibited high levels of motivation to adapt their practice to students' needs. These teachers were also more practised at using dialogue in CPD, with convergent views about teaching and literacy learning which may have influenced the nature of the dialogue analysed in the study.

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[12] Teachers had already participated in Reading Recovery IPD and were subsequently attending 6 sessions of PD annually to maintain their accreditation as Reading Recovery teachers

Teachers were observed during CPD and participated in a short group interview immediately following afterwards. The TL was interviewed individually following the session and some teachers also agreed to later individual telephone interviews. Two of the group (Alison and Kay) taught the lessons which were observed behind the one-way glass screen as a core part of the CPD session. Table 1 summarises participants' Reading Recovery experience and participation in the research.

Table 1: Participants: Experience in Reading Recovery PD and participation in data collection

Pseudonym	Role	Years in RR - 5-10 - 10-15 - 20 +	Present in observation Yes/No	Present in group interview Yes/No	Available for individual interview Yes/No
Di	Teacher	5-10	Yes	Yes	Yes
Bev	Teacher	5-10	Yes	Yes	No
Alison	Teacher	5-10	Yes	Yes	No
Zoe	Teacher	5-10	Yes	Yes	Yes
Gayle	Teacher	5-10	Yes	Yes	Yes
Jen	Teacher	10-15	Yes	Yes	Yes
Lisa	Teacher	10-15	Yes	Yes	Yes
Kay	Teacher	20+	Yes	Yes	Yes
Gwen	Teacher	20+	Yes	Yes	Yes
Chris	Leader	20+	Yes	Yes	Yes

Children receiving Reading Recovery lessons and present in the research context during their lessons were indirect participants. What they said or did provided a context for examining the teachers' talk and was not directly reported as data in the study.

I characterise my researcher role as an observer participant - I was known to the group but not taking part in their activity (Robson, 2011). Descriptors of participant observation include the centrality to the researcher of a focus on peoples' actions and behaviours; a belief that the social world is best understood though exploration of real life settings; that generating data on interaction as it occurs is preferable to gathering secondary accounts of interactions and that working for depth and complexity of data is desirable (Mason, 1996). In my role, I had

previously entered the research context and met many of the participants. I was immersed in their world of practice which can facilitate observation (Robson, 2011). However, I acknowledged the likely effect of my presence and attempted to make my researcher role evident. I recorded data within and immediately after the session to increase accuracy and avoid 'selective attention and selective memory' of events (Robson, 2011:328).

A disadvantage of participant observation was the need to constantly remind myself to critically examine my interpretations. However, the previously established trust between myself and participants led to richness and authenticity in their responses and it seemed more ethical to be open about my involvement in their social world, than to attempt to position myself outside it (Mason, 1996). In some ways, my role was that of an ethnographer, with potential to enable readers unfamiliar with Reading Recovery to understand more about live lesson observation through my use of thick description (Geertz, 2000) of the talk while observing. Thick description is an attempt to represent and report interpretations of experiences that have occurred in the field and take the reader to the heart of the experience being interpreted (Denzin, 2001; Geertz, 2000; Gilham, 2008).

I aimed to present teachers' talk as texts which could be interpreted (Denzin, 2001), through meticulous and detailed description of the context, action, and meanings that organise the action along with participants' own interpretations of their actions, primarily their talk contributions. Gilham (2008) suggests that seeing what is there, the reader may disagree about interpretations made but the data which provide a base for interpretation and theorising provides a reference point. Consequently, the qualitative data is presented as detailed description, with the aim of taking the reader into the research site as authentically as possible (Gilham, 2008).

Methods of data collection

Following the tradition of case study (Stake, 1995), impressions of observing and then participating and leading live lesson observation and critique had begun to shape my own questions about the practice from the beginning of my professional

role in Reading Recovery as discussed in chapter one. Observing many TLs with varying experience of the practice and hearing their questions about how to shape it added to my understanding and raised further questions. Data collection methods included observation, group and individual interviews, documents and researcher notes. The timeline for data collection is indicated in Table 2.

Table 2 Methods and data collection timeline

Method	Format	Mode	Participants	Timing
Observation of PD session including lesson observation and post-observation discussion	Notes and transcribed audio recording	Face to face	1 x Teacher Leader (TL) & 9 teachers	Spring 2015
Post-session group interview	Notes and audio recording transcribed	Face to face	9 teachers	Spring 2015
Post-session individual interview	Notes and audio recording transcribed	Face to face	1 x TL	Spring 2015
Documents	Materials used in the observed session	Printed material	1 x TL	Spring 2015
Individual interviews	Notes and audio recording - partially transcribed	Phone	7 teachers	Summer 2016
Researcher notes	Written text and memos		Researcher	Ongoing between Spring 2015 and Summer 2016

There was a time delay between initial data collection and the interviews caused by my personal circumstances. However this proved to be beneficial because the topics of discussion in the interviews related more broadly to teachers' reflections on learning and talk in CPD more generally rather than specific discussion of the session observed in Spring 2015.

I considered a risk that participants might substantially alter their behaviour during the observations or see me as a gatekeeper and shape their interview

responses accordingly. Those risks may not have been entirely mitigated by the trust I felt I had established with the group. Yet being able to draw on different data sources strengthened the interpretation, since I could observe teachers' theories in use as well as hearing their espoused theories (Argyris and Schőn, 1974; Schőn, 1991).

Observation of a CPD session involving live lesson discussion

Gilham (2008) attributes importance to describing, and interpreting what participants actually do, as well as what they report doing. An advantage of observation is directness – being able to watch and listen to what participants do and say. Robson (2011) claims it is 'the appropriate technique for getting at real life in the real world' (ibid: 316). Participants were observed during a three-hour CPD session involving an introduction to a session theme, observation and discussion of two lessons behind the screen and a plenary discussion.

Data generated from observation was mostly in talk which was transcribed soon after the session conclusion. I considered using video-recording, however I discounted it. Firstly, it would have been difficult to film in a semi-darkened room. I also decided it would be too intrusive and could reduce or impact participation and could restrict permission from participants. However, an over-riding reason for choosing audio-recording was my focus on participants' talk.

Transcription conventions were adapted from Edwards and Mercer (1987) and are indicated in Table 3. They were kept simple, using capitals and full-stops to mark the beginnings and ends of sentences and the additional conventions to capture the rhythm of talk by indicating short phrases, pauses or partial contributions. I indicate where material from the transcript is omitted but have minimised that. The TL is referred to either as the TL or the pseudonym Chris throughout the transcripts. Teachers were attributed pseudonyms.

Table 3: Transcription conventions

'speech'	Direct speech of participants is indicated by single quotation marks or indented in longer quotations
( )	Contextual information added for clarity
[…]	Omitted discourse
//	Pause
bold type	Emphasised speech
"spyglass"	Words quoted from the child's reading, or what a child/teacher said are indicated by double quotation marks.

Full transcription contributed transparency in both data interpretation and coding. However, I remained aware of Nisbet's (2006) contentions that transcripts are unable to fully capture how, for example eye contact and body language contribute to the meaning of words. My field notes were an attempt to log additional descriptions and aspects which could not be audio recorded.

A reflexive researcher stance was important. Gilham notes that 'all observation is an act of selection and reconstruction' (2008:666). I considered Robson's (2011) suggestion that reactivity can be a challenge to observational data where participants are aware of being observed (Robson, 2011). Reactivity may have influenced participation, given the obvious placement of audio-recorders. However, for much of the observation, teachers were talking with each other or facing the screen and focusing on the lesson taking place. I considered their behaviours in the session were similar to those observed in other sessions where I had not been recording research data. Participants were also accustomed to my presence in one session a year and were aware of my genuine interest in their practices.

Group interview with teachers

Observation and interviews are complementary methods (Robson, 2011; Gilham, 2008) and using both offers potential for data triangulation by establishing converging lines of inquiry (Yin, 2018). I carried out three types of interview. Teachers had agreed in advance to remain for 20 minutes at the end of the CPD

for a group discussion with me. The TL remained in the room but did not participate. I considered the risk of teachers modifying their contributions to meet the TL's expectations but decided that based on what I had seen of their ways of working together this was unlikely to be a significant problem. I used a semi-structured question framework with key questions and further probes (Appendix 2) to guide the group interview. Semi-structured interviews are appropriate where the study focuses on the meaning to the participants, of a particular phenomenon within a particular organisation and where individual accounts are required (Robson, 2011).

Hennink *et al.*, (2011) propose group discussions are useful in identifying a range of opinions and key issues where the focus is less on individual experience (2011). Advantages of the group interview in this study included fast assembly of a range of ideas and opinions and the emancipatory effect of seeking that range of ideas (ibid). Morgan (1998) suggests that although detail about individuals is sacrificed in group interviews, they are useful to 'investigate complex behaviour and motivations' (ibid: 58). In addition, reflections in the group discussion were closely related to data from the observation since both events took place concurrently. Robson (2011) suggests 'group dynamics help focus on the most important topics and it is fairly easy to assess the extent to which there is a shared view (ibid: 294).

I aimed to develop a meaningful conversation with the group, where I could probe responses with additional questions. A group interview was expedient because intensive interviewing is particularly well-aligned with grounded theory approaches because it focuses on the topic while providing 'interactive time and space for the research participants view to emerge' (Charmaz, 2014:85). Within a group, it is likely that participants enjoy the experience and that they 'provide checks and balances on each other and extreme views tend to be weeded out' (Robson, 2011:294).

The interview was audio-recorded of the interview and transcribed as an elicited text (Charmaz, 2006). The intention was to develop the richest and most detailed picture possible of the case and to allow individual voices to be heard, 'engaging

the participants in active comparisons of their opinions and experiences' (Morgan, 1998:33). However, I was aware that when using group interviews, a researcher may have to sacrifice depth of information and detail about individuals (Hennink *et al.*, 2011), that the number of questions would be limited by the time available and that the results can be difficult to generalise as they are not representative (Robson, 2011).

I found it difficult to make notes whilst moderating the discussion so I needed to rely on the audio-recording to analyse the interview. Managing group dynamics is a further challenge to the method (Hennink *et al.*, 2011; Robson, 2011) and I found that some teachers spoke at length while others contributed minimally. Because the group interview was dominated by a few participants, the later individual interviews extended the opportunity for quieter participants to share their views. Those individual interviews enabled me to broker deeper discussions about points not fully explored in the group interview.

Although the group may have assumed that as an experienced practitioner, I already knew the answers to my own questions, I tried to model a kind of 'expert openness' (Gilham, 2000:3) and genuine enquiry. Individual responses during the group interview varied in length. Some shorter contributions built on in the same way as in the conversation behind the screen, with partly formed ideas being further developed through contributions of others. Other contributions were longer descriptions, explanations or justifications.

Interview discourses can generate additional outcomes for both researcher and participant – 'people not only invoke them to claim, explain, constrain or maintain viewpoints and actions, but to define and understand what is happening in their worlds' (Charmaz, 2014:85). I chose a semi-structured interview approach because it created a space for discourse which was necessary in the approach to understand role of talk during live lesson observation in Reading Recovery CPD and which valued participants' perceptions of their experience. Taking this constructivist approach to data collection 'places priority on the phenomena of study and sees both data and analysis as created from shared experiences and relationships with participants' (Charmaz, 2006:130).

Semi-structured face to face interview with the TL

By prior agreement, once teachers had left the session, I led and recorded a short semi-structured interview (Appendix 3) with the TL to gather responses to teachers' talk and reflections on leading the talk. 'Asking people is the only feasible way of finding out, particularly the 'invisible elements' - thoughts, feelings, intentions, attitudes and the like' according to Gilham (2008:1). Speculation about individual perspectives inferred from behaviour is likely to be inaccurate, so observing the TL's behaviours and eliciting perspectives was important. I needed to consider that individuals can choose to represent themselves in particular ways, so I did not expect to access the deepest levels of their perspectives.

The interview was recorded and fully transcribed and was returned to the TL for clarification. The approach was aligned with the semi-structured nature of the group interview with opportunities for me to:

- ask for more in-depth description
- stop to explore a topic in more detail
- request more detail
- ask about the participant's thoughts feelings and actions
- draw the participant back to the main topic
- return to earlier points in the discussion
- restate the participant's point as a way of checking accuracy
- change the pace or shift to a new topic
- validate the participant's humanity, perspective or action
- use observational and social skills to further the discussion
- respect the participant and express appreciation for his or her participation

Charmaz (2014:69).

My role involves visiting Reading Recovery PD and engaging TLs in post-session co-reflection about the learning of teachers. Intensive interviewing of the TL for this study was a naturalistic activity since we were accustomed to having a reflective discussion. I made it clear that the discussion had a different purpose and that it was being recorded. The interview focused on the general

phenomenon of talk during live lesson observations, rather than the specific learning in the session, although the TL often used examples from the session to exemplify a particular point.

Individual telephone interviews

Seven teachers signalled their availability for short individual semi-structured interviews. The two who didn't were going on leave and did not have time. A further opportunity to talk to teachers following transcription of the observation data was important for three main reasons. Firstly, I was able to hear more from those who had been less forthcoming during the group interview. Secondly, I was able to shape my questions in response to early interpretation of themes emerging from transcription of talk during the CPD session and to some ideas which surfaced but were not fully explored in the group interview. Finally, the individual teachers were able to make their contributions without being heard by the TL or colleagues and I felt that might avoid norming and could enhance the authenticity of their responses.

There are advantages and disadvantages to telephone interviews. In this instance, the process was time effective for both the participants and myself and avoided significant travel (Robson, 2011). I needed to be aware of and mitigate disadvantages such as having no visual cues to pick up non-verbal responses and potential bias and time constraints (Robson, 2011). I had previously met the participants so I did not feel the lack of non-verbal information impacted. In advance, I agreed a thirty-minute limit to the interviews and invited participants to choose a date and time for me to phone them.

The individual phone interviews were conducted using a consistent set of semi-structured prompts (Appendix 4). Those interviews were not fully transcribed because they had an exploratory function. By repeatedly listening to each interview, making memos and transcribing sections of talk relevant to emerging themes, I listened for responses which either resonated or contrasted with others. An advantage of this decision was being able to take aspects such as pauses, tone, inflections and emphasis into account without detailed transcription conventions.

Semi-structured individual and group interviews yield a wider range of responses than structured interviews. Consequently, it was challenging to maintain focus whilst responding to unexpected directions in the discussions. However, flexible, intensive interviewing enabled me to immediately pursue ideas and issues emerging (Charmaz, 2014). I could ask additional questions to clarify ideas and during some interviews I found myself making new connections which added to the direction of my later enquiry.

Researcher field notes

Researcher field notes were used to collect as much detail possible of my own reflections following the interviews and during the observation, to inform data interpretation and to help address researcher bias (Robson, 2011). I attempted to capture a record of other aspects such as seating arrangements and participant groupings through my note-taking during the session.

Documents

Handouts and readings used in the CPD were included as data, to inform my understanding of the context and goals for the learning of the group and to inform the interviews. These included examples of Inuit language to describe snow and a handout with excerpts from a core text used by the group (Appendix 8).

Approaches to data analysis

I took a constructivist grounded theory approach to data interpretation (Charmaz, 2014), aligned with my epistemological stance and based on Robson's (2011) contention that meaning does not exist separately but is constructed through the interaction of people. Denzin cites Heidegger's notion that 'an interpretive circle surrounds the research process' (2002:354) and proposes that this is a double circle with the study participant at the centre of their own story and the researcher at the centre of their interpretation of that story. Although the researcher can never completely live the experience of the participant, in the overlap between

the circles, the researcher approaches an interpretation that can be intelligible to both (ibid).

There are two main approaches to grounded theory: an objectivist/realist approach and a constructivist approach. An objectivist/realist approach assumes a neutral, objective researcher, representing data in an abstract way to develop conceptualisations form the data which privilege the analytic categories and voice of the researcher. This aligns with early approaches to grounded theory (Strauss, 1987; Glaser, 1992; Strauss and Corbin, 1998). However, it was not possible to be an objective observer of a practice which I had read about, participated in and encountered frequently in my professional role. To that extent I had already formed some background knowledge of the phenomenon and begun to shape the research questions, so both deductive (from the literature) and inductive (from the data) frames were used (Hennink *et al.,* 2011).

A constructivist approach assumes multiple realities and mutual construction of data through interaction, viewing the representation of data as problematic, relativistic, situational and partial. Constructivist grounded theory acknowledges subjectivities and seeks to present participants' views and voices as integral to the analysis (Charmaz, 2014). In line with qualitative enquiry, the research practices were 'flexible, iterative and naturalistic (Gibson and Brown, 2009:8). Readers with intrinsic interest in the case learn more of it directly from description according to Stake (2003), therefore I aimed to establish coding categories which would closely describe the case and crystallize participants' experience (Charmaz, 2014). I aimed to 'hold the phenomenon up to serious inspection' as suggested by (Denzin, 2001:75) and that the findings would have 'credibility, transferability, dependability and confirmability' (Denzin and Lincoln, 2003:24) within and beyond the context of Reading Recovery.

I aimed to follow Robson's (2011:476) stages of thematic coding analysis –
1. Developing familiarity with data through transcribing, listening repeatedly, re-reading and noting down initial ideas.
2. Generating initial codes which were at first mainly deductive.

3. Collating codes to identify themes and checking if the themes worked with sections of the transcripts.

4. Mapping themes across the whole analysis.

5. Integration and interpretation – making comparisons, describing, exploring, summarising and interpreting patterns.

Whilst this linear process of thematic coding was a useful guide, my work with the data became much more iterative between stages two and five as I returned to revise and extend initial codes and themes. Initially I attributed thematic codes to the transcript of talk during the whole CPD event. This generated a very large range of codes which I then mapped with post-its and lists into themes (Appendix 5). I used colour-coding in the transcripts to facilitate tracking individual contributions once I had identified variation. Memo-writing (Charmaz, 2014) was also useful in exploring early attempts at thematic coding and I developed detailed memos of several themes (example in Appendix 6). I was able to refer to those themes during the individual interviews and mention vignettes from the transcripts as a stimulus for teachers' reflections.

Though deductive analysis (Hennink *et al.,* 2011*),* I identified themes related to literatures about Reading Recovery theory and other relevant fields, for example collaborative learning, individual agency and reflective practice. Further inductive themes (ibid) were apparent in the data and at that stage it became clear that the data analysis was still too broad. The research questions were revised, I then returned to the data to focus more directly on the talk in the event and to further explore how teacher talk was framed in research literature. Coding was developed further and revised (Appendix 7) following the approach by Charmaz (2014) and then continually reviewed during the writing of chapters four to six. Immersion in the data and 'listening' repeatedly to recordings reflected the importance of being 'intuitive' and following 'hunches' (Gibson and Brown, 2009:134).

I considered, but did not use, a software package for establishing data themes, partly because of the risk of reducing the wholeness of data to fragments, which could lose their context (Denzin and Lincoln, 2003). In addition, the amount of

data was not significant, and I was cautious about attributing early codes and themes which would then be more difficult to change later in the interpretation timeline (Robson, 2011). This proved to be an important decision. For example, my early attempts at coding had revealed biases towards deductive themes related to Reading Recovery theory and principles and towards my interest in individual agency. Instead of using software I embraced the responsibility of the researcher as research instrument (Robson, 2011) and reviewed the data through repeated listening, transcribing and questioning.

Writing became a critical tool for analysis. Writing memos and developing many drafts of data interpretation chapters became part of the analytic process, enabling me to interrogate the data more critically. As I developed numerous versions of chapters four to six, I was continuing, reshaping and refining the analysis. My goal in embracing the complexity of iterative analysis was to develop a deeper understanding of the role of talk while observing practice. I did not aim for interpretation offering an objective reality – my goal was internal generalisability within the context studied (Robson, 2011). The approach to data analysis was developing a grounded and auditable interpretation of the data through memos and coding to arrive at significant themes.

Being an insider to a context can make verifying interpretation of meanings easier - at the same time it creates dilemmas (Ravitch and Wirth, 2007). I had visited the context twice in my role as a NL and had become known to the group. I had previously engaged in discussions with both TL and teachers about live lesson observation and they had been interested in my ongoing research in the field. I believed this closeness opened the way for more detailed, research-based discussions. However, a challenge as an insider researcher was how to build on the closeness I had with the setting, while creating distance from it to see things critically (Coghlan and Holian, 2007). The potential for confusion and role conflict needed to be considered reflexively throughout. I describe the experience of being the research instrument, as a progressive stepping away from the centre of the data and the context to develop an increasing critical eye.

Conducting an ethical study

A qualitative researcher wants to know about people's perceptions, beliefs and feelings and as far as possible to hear and represent their authentic voices and to do that it becomes necessary to establish a rapport and trusting relationship with participants (Hennink et al, 2011). However, I needed to balance data collection and interpretation with avoiding harm to participants. In conducting the study, I aimed to respect and protect participants and consider both 'benefice and justice' (ibid). The research had potential to benefit participants by deepening understanding of the role of lesson critique as part of their professional roles. I explained my research methods and offered to share transcripts as the research progressed, along with the completed report of the study. The interviews and group discussions offered additional forums for discussion of professional practice which may have been of benefit to participants.

I tried to ensure my approach did not exploit the study population or involve any deception to conduct the research (Robson, 2011). I aimed to do this by fully informing participants (ibid). I explained my interest in getting a better understanding of how participants shaped discussion at the screen to impact their professional learning. The reason for making audio-recordings of the talk was explained and potential audiences for the reports of the study outcomes were suggested. As far as possible, I pledged to ensure that participants' anonymity was preserved. They were given printed information about the study and a consent form to sign (Appendix 9).

They were able to withdraw consent for me to use their words but could not withdraw from the CPD session. However, they could tacitly exercise their right to withdraw from the study by reducing their participation in the CPD. I don't believe that this occurred because two teachers who made fewer contributions in the observed session volunteered for additional individual interviews. Recording devices were placed in full view of the group and I reminded participants at each point of data collection, including the telephone interview, that I was making an audio recording and requested further verbal permission to continue.

I fully outlined all approaches to the conduct of the study in my submission to the ethics committee and followed the BERA guidelines (2004) throughout. I offered confidentiality and have used pseudonyms in reporting the data. It was more difficult to protect the anonymity of the TL, so I discussed with them how to manage that at each stage including prior to publication. I had to guard against informally sharing data within the professional community to avoid identifying individuals. I chose not to disclose the gender of participants in order to preserve their anonymity within the Reading Recovery network. When I used some of the data in conference presentations, it was anonymised, and attendees were not given copies to keep.

Children taught during observations were not represented in the data but were indirectly involved in the research. Difficulty of gaining informed consent from children is an issue (Morrow and Richards, 1996; Robson, 2011), not only for this study but for the Reading Recovery community which is unique in its use of live lesson observation. Permissions, as per the normal practice in Reading Recovery were gained by the children's teachers, from the children and their parents, to invite them to a lesson in the Reading Recovery centre. In addition, I explained that I would be recording their teachers talking about their lesson and asked them to indicate their verbal permission for me to record their voices.

There was a potential conflict for participants in that I may have been perceived as a gatekeeper (Robson, 2011) based on my professional role. At all times I tried to mitigate this potential conflict by establishing trust through previous encounters with the study participants and being transparent as possible about both goals and data collection. Ultimately, I aimed not to take actions involving others that I would not wish to be taken on myself (Malone, 2003). My approach was guided by respect for the initial ownership of the data by participants and their rights to dignity and privacy (Robson, 2011) along with a respect for the truth and my aim of representing my interpretations of the data transparently. Participants were informed and reminded of their rights to withdraw if they felt uncomfortable at any point during the study.

A summary of design and methods

In this chapter, I have outlined and argued for the case study design and key methods of observation and interviewing. The case in question is the nature of teachers' talk as they observed lessons in real time within the context of one CPD session. I have explained how my interpretivist stance and a theoretical perspective arising from social constructivism contributed to the design of a qualitative study. The research questions have been discussed in conjunction with the purposive selection of participants. Merits and difficulties of data collection methods have been discussed and I have explained the approach taken to thematic coding of data. The ethical code underpinning the study has been explained.

The following three chapters present my interpretation of the data. In chapter four I focus on describing the nature of talk within the event of the professional learning context, including the talk while observing. I identify significant ways of talking which afford or restrict potential for participation and learning. In chapter five, I pursue a deeper analysis of patterns of talk that are indicative of reflective inquiry. In chapter six, I draw on data from focus group and individual interviews to explore individuals' perceptions of their participation and professional learning in the context.

Chapter Four

LEARNING POTENTIAL FROM SIMULTANEOUS TALK AND OBSERVATION IN A CPD EVENT

Introduction

Talking while observing is central to Reading Recovery PD (Pinnell, 1997; Schmitt *et al.*, 2005; Clay, 2009; Bodman and Smith, 2013). Yet how teachers participate and learn from it has not been widely researched. My goal was to develop an in-depth exploration of teachers' talk about practice during real-time lesson observation including how the talk was led. In this chapter, I present analysis of opportunities for learning through talk in a CPD event, by focusing specifically on what teachers talked about. In chapter five, I identify how dialogue aligns with the thinking necessary to reflective inquiry and practice, and in chapter six I discuss teachers' reported perspectives on their learning and participation.

Here I focus on the event where data were generated – one three-hour Reading Recovery CPD session with an established group of experienced RRTs. Analysis discussed in this chapter draws on transcripts of audio-recorded talk throughout the whole CPD event to address the following research question: **In what ways does talking while observing lessons, offer potential for teachers' learning within a CPD context?** Additional questions guiding my interrogation of the data included:

- What learning possibilities arise in this event from talking as a group?
- How is the talk framed and directed to realise some of those possibilities?
- What roles are taken up within the talk by a) teachers and b) the TL?

The CPD event was one of six sessions participants attended across a school year, all of which followed a similar four-way format, based on recommendations from Reading Recovery Europe (Appendix 10). In summary, the session involved:

1. An introductory discussion led by the CPD leader (here referred to as the TL) (35 minutes)

2. Case descriptions of two children's learning shared by their teachers (5 minutes)

3. Group talk while observing two lessons with each child and their teacher (75 minutes); and

4. A plenary to reflect on the observation (35 minutes).

Conventions for communication were derived from Reading Recovery principles for facilitating teachers' talk (Appendix 11) and (Appendix 13 – Burroughs-Lange, 2009) and had developed over time as norms for participation in this context. The TL planned the session, determined the focus and structured the opportunities for talking, so leadership is examined alongside teachers' participation. The chapter structure follows the four-way framing of the CPD session by discussing:

1. TL and teacher roles during the session introduction in talking to negotiate and establish a lens for observing;

2. How that observational lens was extended by presentations of case descriptions of literacy processing of the two children whose lessons were to be observed;

3. The topics explored through talk during the group's observation of two lessons behind a one-way glass screen; and

4. Post-observation discussion and reflection in the CPD plenary.

Establishing a lens for observation in the session introduction

The group of nine teachers sat in a circle (Appendix 1), a Reading Recovery convention which implied an equal role in the discussion (Rodgers, 2000). The TL prompted preliminary discussion to introduce the session theme - fostering a child's independence in reading and writing. The chronology of this introduction involved three distinct sections of discussion. First, the TL established the theme by thinking aloud, using a metaphor and inviting brief contributions from teachers prepared in paired talk making connections with theory about learning to read. Next, longer paired/small group discussions developed the discussion in more open-ended ways drawing on teachers' knowledge of theory and experience of practice. In a third section the TL

reprised the theme and set up a focus for observing the lessons. Here I discuss teachers' participation and potential learning in each of those three sections of the introduction.

Establishing the session theme - activating teachers' thinking about developing children's independence

The TL modelled a thinking stance to open the event – 'So when I was thinking about this session, I was thinking about the range of ways in which we talk about what we see and try to capture the subtlety of that in some kind of way'[13].This statement attributed importance to the group's own language and acknowledged the importance in the context of being able to name the complexity of what was observed in a child's reading performance. The possibility of multiple descriptors of the concept of *independence*, was exemplified by a handout which drew attention to a range of Inuit words for the concept of snow and the TL drew a parallel with potential for multiple ways to describe children's independence in Reading Recovery lessons –

> How do Reading Recovery professionals have multiple descriptions or vocabularies for independence or states of independence that we observe during the process of learning to read? Can you think of different ways in which to describe that sense of independence?

After a brief paired discussion,[14] the TL invited teachers to share ideas with the main group. Short responses were made by several teachers including –

- ∼ Kay[15]: Developing a self-extending system
- ∼ Alison: Having a sense of agency
- ∼ Lisa: Being able to problem-solve
- ∼ Di: Willingness to have a go // risk taking

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[13] Transcription conventions - Direct quotes from participants are indicated by single quotation marks or indenting; Emphasised speech is in bold type; Omitted discourse is indicated as […]; Pauses are indicated by // ; Additional description e.g. lesson events or explanation of terminology is indicated in ( ); words quoted from the child's text or what the child or teacher says are indicated in double quotation marks.

[14] I do not have recordings/transcripts of the simultaneous paired/small group discussions but I observed teachers' behaviours and engagement at the points when paired talk occurred.

[15] Pseudonyms are used throughout

Through this short discussion, teachers' thinking about the theme was activated and they revisited some key concepts from Reading Recovery theory. The discussion also revised conventions for talking in the CPD context. The TL modelled co-thinking and all teachers contributed in paired discussion with most also sharing ideas with the whole group.

Talking rights were initially controlled by the TL who drew on teachers for short responses. However, the next part of the introduction shifted the balance of TL/teacher talk to elicit longer contributions from teachers which had features of dialogic talk (Alexander, 2006) evident in the group ethos (collective, reciprocal, supportive talk) and in the context of the talk (cumulative and purposeful) (ibid).

Extended talk responses from teachers prompted by open-ended questions

The shift to extended teacher responses was signalled by a more open-ended question from the TL, requiring teachers to consider relationships between independence and progress – 'And the other thing that occurred to me was that […] there must be some sense of progression in the child's independence so what I was thinking about more generally was how are progress and independence aligned in a lesson?' This question called for deeper thinking. More time was allocated to this segment of paired talk and several longer contributions were subsequently made when teachers reported back to the main group. For example, Lisa replayed key ideas from discussion with her partner, about their observation of fluctuations in independence in children they were teaching –

> So, we were talking about progress and independence. You would think that as you progressed you would become more independent and it would become just a nice straight graph but in fact (colleague) pointed out that it doesn't work like that – to begin with they might seem really dependent […] but […] they actually progress really quickly and seem like they are becoming really independent. Then suddenly they get stuck and actually become more dependent because you've got to that hitch. Everything becomes more demanding […] they become more dependent on you again. And then you are giving some extra help and off they go again and when you are getting near to the end (of the programme) they might **not** be **progressing** so much but they are becoming really independent […]

Lisa's extended reflection stimulated further discussion about change over time in independence. While the first section of the introduction had enabled the group

to assemble some signs of independence, this second section involved extended paired talk where teachers explored in more depth some connections between theory and what they observed or found problematic in their own practice. They had to move beyond listing concepts to exploring and explaining their understanding.

As pairs reported back to the main group, the TL interjected just once, to keep the discussion going by asking – 'And what do people think about that?' Through minimal responding the TL signalled value in teachers' ideas and their agency to contribute. Teachers pursued an emerging theme of child engagement and resilience as signs of independence. Then the TL reflected on how the ideas from the discussion might link to practice -

> So, is part of independence then teaching for the expected and sometimes we teach for the unexpected? So it's that sense of expected, unexpected which creates maybe what you are talking about // resilience, ability to persevere? Because you (I infer 'you' refers to the child here) almost have to experience the unexpected in order to […] use that experience to move forward. Do you think?

Here teachers were reminded about the centrality of observing a child and responding contingently e.g. to their unexpected reading behaviours. 'Do you think' was a rhetorical question, because the TL then changed the topic by asking – 'But […] how do you know if you have had a good lesson?' Gwen suggested a child would be 'happy' if it had been a good lesson. The TL challenged – 'Children are happy? OK // and it's not been very challenging?' Di countered – 'The children **aren't** happy if it's not been very challenging actually – they just stand up and go. They are happy when they get that they have done something amazing'.

Up until that point, the talk had mainly acted as norming of agreement on terminology, concepts and understanding of theory. This exchange brought the first moment of dissonance, signalling that teachers felt able to disagree with each other and the TL. The dissonance was productive because it led to further discussion about indicators of independence; a balance between struggle and success; and absence as well as presence of productive acts by the child as something to note along with reflection on the need to observe. Gayle proposed that seeing a child struggle with something she had considered they knew, would

prompt her to adjust her teaching – 'they might **not** have had a good lesson but you realise, I know what I need to work on now'.

In this second part of the introduction, most dialogue developed between the teachers. The TL mainly listened and occasionally stepped in to keep the discussion going or summarise contributions. In the first section, teachers had contributed short suggestions but in this second section, they were called upon to explain and thus examine ideas at a deeper level and consequently those ideas were also open to challenge.

Drawing on theory to set a purpose for observing

In the concluding part of the session introduction, the TL further emphasised the importance of careful observation of the child by referring to some ideas on the session handout (Appendix 8). The TL directed teachers' attention to some quotes on the handout from a key text used in PD sessions Clay (2005), relating to ideas including: a role for teachers to notice child responses; to make tentative corresponding decisions about how to scaffold the child's learning; to decide when to fade out support to increase independence and that the child's learning should be generative i.e. applied in other contexts. The goal was to remind teachers of principles from Reading Recovery, but there was also resonance with Vygotsky's (1978) proposals about scaffolding in the child's zone of proximal development; and Wood's (2003) ideas about contingent teaching and McNaughton's (2018) proposals that too much scaffolding and support could be an instructional risk.

The TL acknowledged the group's thinking - 'So you were really getting to all those things (in the prior discussion) weren't you?' In the final moves in the introduction, the TL continued to guide teachers to think about their practice by reading aloud a quotation on the session handout (Clay, 2005), suggesting teachers consider timing of their support for a child –

> The more teachers can allow themselves to hold back and allow the student to do his own learning, the more effective and better judged will be their interventions when they are needed.

The TL concluded by proposing a reason for 'holding back' - 'Space allows you to observe, your observation helps you fine tune an appropriate response'. The TL also suggested a purpose for teachers' observation of the child within practice – 'It seems to me the more we observe, and the more we can pinpoint those significant aspects, the better we understand what we are trying to get the child to do. What do you think?' In this way the TL reminded teachers of the importance of observation, both in the upcoming lesson observations and in their own daily practice. This move was also typical of many of the TL's talk contributions in the session introduction i.e. beginning with a closed statement (in this case, foregrounding a principle of observation in Reading Recovery); making the statement tentatively ('It seems to me'), and concluding by opening up discussion to the group ('What do you think?'). The use of 'we' signalled the TL's positioning as co-thinker. In this way, the TL attributed value for what Schőn (1991) terms reflection-in-action.

In relation to the research questions, I noted three sections within the introductory discussion. An authoritative leadership stance initially set up the focus on child independence and generated teachers' prior knowledge. At the conclusion, the TL also took an authoritative stance to set up rationales for observing. But in the main part of the introduction, teachers contributed at greater length to explore ideas, explain their thinking and develop a dialogue without TL intervention. Teachers generated talk topics to revise knowledge about reading instruction and make connections with their practice experience. Actively listening to the teachers' contributions enabled the TL to consider how their understanding might frame the up-coming lesson observations.

Through a balance of thinking prompts, paired and individual talk, references to theory and pedagogical approaches, a lens for observing the lessons was collaboratively shaped. This way of setting up the reflective inquiry also encouraged the group to embrace dissonance. Teachers demonstrated awareness of the value of multiple points of view when they continued active discussion when the TL stepped back. As such, a balance was maintained

between keeping the talk focused on the topic and creating a dialogic space (Wegerif, 2007; 2013) where different perspectives could be explored.

Extending the observational lens – child case descriptions

In the second stage of the event, two teachers (Alison and Kay) shared case descriptions of learning of the children about to be observed. This was a shift to individual teachers holding the floor. Kay and Alison were both very experienced in literacy intervention. Each outlined their child's literacy strengths and difficulties.

Both case children were in year one classes and were allocated Reading Recovery lessons because they were falling behind peers in reading and writing. Ben (taught by Alison in lesson one) was in his 11th week of daily lessons and over halfway through his programme[16]. Lily (taught by Kay in lesson two), was in her third week of lessons and first week of direct instruction following the initial assessment period[17]. Since Ben was much closer to completing his programme and still experiencing some difficulties, the observing teachers would have been aware of an imperative for accelerating his learning in the remaining time, thus creating an authentic purpose for their talk while observing.

Case one - Ben

Alison described Ben's very low starting point based on initial assessments and focused on his problems ('[…] a speech problem where he speaks very slowly; a stammer'*)* in addition to his successes, including –

~ '[…] reading with a lot more confidence, with more pace, with more fluency and phrasing'

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[16] A child's Reading Recovery programme is not expected to exceed 20 weeks and some children can make the required progress in a shorter time.
[17] The assessment involves the Observation of Early Literacy Achievement (Clay 2005) and 10 lessons referred to as 'Roaming around the Known' (RAK) In RAK, the teacher carries out further observational assessment of what the child can do and strengthens that while getting to know the child and creating a positive learning environment prior to the start of formal lessons.

~ '[…] enjoying the variety of stories […] is more familiar now with how things should sound, what comes next, so he's using the structure and visual information, kind of pulling it together whilst attending to the meaning as well'

~ 'he will read something, then he'll stop and then he will re-read it […] have a think and then he may even read it again just to confirm'

~ 'he is taking on responsibility for himself without me prompting'

Alison's contentions that Ben was re-reading to check accuracy and reading with pace and phrasing, proved significant when his lesson was observed because some the observers' hypotheses suggested Ben was not consistently re-reading or reading with phrasing.

Case two - Lily

Kay noted Lily's learning had been delayed by cerebral palsy and described strengths in her learning as follows -

~ 'really tentatively cross checking'

~ 'getting more and more footholds in print so that she could independently cross-check'

~ 'carries a story forward by herself'

~ 'attempts words by herself'

Having a shared language, enabled teachers to use shorthand for specific pedagogical concepts in the literacy intervention context, such as pace, fluency, phrasing, cross-checking (monitoring reading accuracy), structure (syntax) and visual information (orthography of words). For example, Kay mentioned 'cross-checking' (using more than one source of information to monitor reading) and her reference to book level five is a term that the group would understand as a particular skill-set of a child reading at that level.

Both Kay and Alison articulated teaching goals related to the session theme. Alison noted plans to remind Ben to say a word and sound it out when writing and to facilitate his independence by – 'not stepping in', echoing a point the TL made in the introduction. Kay noted – 'I'm carefully selecting texts that support the

structure and meaning and so that she can have a good go at cross-checking'. Kay articulated her decision-making, suggesting a tentative plan to use a form of phonic analysis – 'I'm trying to start sound boxes[18] and I'm thinking, is this going to slow her down? I'm not sure about that but I'm going to do it just to take that sound (phoneme) analysis a bit further'.

In summary, case descriptions had a purpose in framing and directing the group's talk. They enabled teachers to link the theoretical perspectives that had been highlighted in the prior discussion to examples of practice. Descriptions of the children's literacy processing were a starting point for the group's inquiry, providing some initial data. Both children's learning presented authentic problems for the group to reflect on – Ben's slower pace of learning and how to fine tune the teaching and Lily's newness to literacy intervention with a problem for Kay in deciding what and when to scaffold.

However, because the children's performance in the real time lessons was unpredictable, significantly the teachers' case descriptions based on past performance would also be open to scrutiny and challenge from colleagues. In that way, the opportunity to observe lessons in real time closely mirrored the everyday problems of practice and the observers had a genuine role of rehearsing teacher decision-making.

Group talk while observing two lessons

The TL was silent during the case introductions but set up a transition to the observations by reminding teachers of the goal for observing ('So just to say behind the screen // how does the learning context provide opportunities for each child to progress their independent control in reading and writing?'). Then the TL attributed importance to noticing interactions between teacher decision-making /scaffolding and child response – '[…] all we are thinking about is what they (the children) are doing, and the choices the teachers make to support progress, and how does the child use the opportunities'.

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[18] Elkonin frames used for phonic analysis of words to support spelling

In two parallel literacy events, first Alison, then Kay taught lessons in the observation room while the group in the main room observed and discussed. Kay and Alison observed each other's lessons. To contextualise my analysis of this activity, Table 4 presents a description of the physical environment for observing live lessons.

Table 4: A description of the physical environment for observing live lessons

The observation room had furniture and resources similar to those in a normal Reading Recovery lesson environment in a school. Between the observation room and main room was a one way glass screen (Appendix 1). When they entered the room, each child seemed briefly aware of the glass which acted as a mirror from their side but both children settled quickly into the routine of their lessons and ignored their reflections as the lessons continued. The child and teacher could not see or hear the group of teachers.	
Lights were turned out in the main room and the observing teachers moved from the circle to sit in two rows facing the glass (Appendix 1). The TL stood in line with the second row, also facing the glass but able to make eye contact with the observing teachers. The observers could see, hear and discuss the lesson, but the teacher and child could not see or hear the group.	

The activities in a Reading Recovery lesson should be achieved within 30 minutes. That was the case in Kay's lesson. In Alison's lesson there was more conversation between teacher and child, the child's processing was often slow and the lesson over-ran by 15 minutes. The structure of a typical Reading Recovery lesson is indicated in Table 5.

Table 5: The Reading Recovery lesson structure (Douetil, Hobsbaum and Maidment, 2013)

In a Reading Recovery lesson:
1. The child chooses and reads two or three short familiar texts read previously;
2. The teacher takes a running record assessment as the child reads a text they have read only once before in their previous lesson;
3. The child carries out tasks with visual perception, sorting and then manipulating letters to make words including blending/segmenting;
4. Teacher and child briefly converse, generating a topic for the child's writing;
5. The child writes their story with scaffolding from the teacher for topic, grammar and spelling;
6. The teacher writes the child's story onto a sentence strip which is then cut up for the child to reassemble and read;
7. The teacher introduces a new text and the child carries out a supported reading of that text.

Dialogic features of talk during lesson observation

Typical patterns of talk during observation had dialogic features. In Figure 3, I exemplify this finding with a short sequence of teachers' talk which developed without structured turn-taking. Five different teachers contributed in response to both the TL and each other. Leading this talk sequence involved a prompt to connect what was being observed (description) with possible explanations (explanation). After two responses, one descriptive and one explanatory (T1 and T2) the TL called for further explanation. Teachers 3, 4 and 5 joined T1 and T2 in relating data from the lesson (description) to their understanding of theory to consider why the child wasn't independently monitoring his reading. They were thinking aloud as the lesson was unfolding, so their data gathering and changes in explanation were impacted by new events in the lesson. As such they were also reflecting-in-action (Schőn, 1991) or thinking contingently about the child's processing as required in their teaching of similar children. As T5 was speaking,

the child exhibited a behaviour which challenged the prior explanations and T4 responded with a revised contention that the child was in fact showing signs of self-monitoring.

Figure 3: An example of dialogic talk during observation

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TL: Is that giving you a cue into his thinking? He is saying 'Is that right?' what's that showing you or telling you?
  → Teacher 1 (T1): He's listening to himelf
  → T2: That he can't self-confirm yet, he's not able
  → TL: Ok now why might that be?

T1: Because he doesn't know how it should sound. He's just starting to think that doesn't sound right but he can't confirm it //
  → T3: So it relates to his language structures?
  → T2: I think it's because he's reading quite slowly so he is not hearing it as a whole chunk of meaning because "too" can mean so many things // when you just read it as one word you've got no idea if it's the right "too" in the right place or //

T4: His groups of meaning are quite small aren't they // two or three words, two or three words?
  → T5: So if he re-read more could he then confirm himself, rather than asking? Because doesn't seem to do a lot of re-reading yet. Whereas all the talk they are doing will pay off I think when he gets into more challenging texts because he knows that everything has to make sense but it may seem a very tedious task// (child continued reading and no other teacher immediately responded) Or a slow task//

T4: So I think we are getting a sense now that he does self-monitor//
  → T2: He's beginning to//
  → TL: So you are talking about the beginnings of self-monitoring?
  → T4: Well we weren't sure in familiar reading but now we are getting a sense that he is.
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The dialogic nature of talk was evidenced by evenly distributed discursive rights, an active role in meaning making for participants, the development of collaborative and cumulative chains of thinking, and also through the evident agency for individuals and the authentic purposes for talk (Alexander, 2006; Lefstein and Snell, 2011). Most teachers made regular contributions to the discussion. Most contributions were offered tentatively, which had the effect of maintaining flow and participation in the discussion by allowing multiple viewpoints without reduction to dichotomous either/or thinking which can privilege particular opinions (Lefstein *et al.*, 2017). Partial contributions were mandated since the conversation followed the pace of activity in the lesson. However, the partial nature of some contributions facilitated participation by limiting potential monologues and inviting others' views.

Signs of dialogic inquiry

The topics pursued were partly in line with the frame of child independence established in the introduction but were also generated from teachers' interest in other topics stimulated by lesson events. I concluded that much of teachers' talk was either directed at describing lesson events or explaining rationales for what they were describing. As such, both description and explanation are central to the notion of reflective inquiry about practice and I now turn to discuss those two themes in the talk.

Signs of dialogic inquiry – Assembling and verifying descriptive data

Descriptive talk acted as data gathering used to evidence or challenge viewpoints in the reflective inquiry. By describing events in the lesson as they occurred, the group assembled and verified data about each child's processing, in comparison with data from the case descriptions. Description was most evident at the beginning of each lesson but occurred throughout. Teachers' descriptive talk had different purposes as follows –

    a. Describing teacher actions – Gayle: 'Kay jumped in and talked about the meaning // 'is she hungry' or something and then Lily slow-checked 'hungry' and the sounds '(Lesson two);

b. Describing child responses / actions – Di: 'She's got the return sweep. She knows where to go next' (Lesson two);

c. Comparing with data from the case description – Lisa: 'Did Kay say Lily's writing vocabulary was quite strong? Compared to her reading vocabulary?' (lesson two); and

d. Synthesising several actions/responses to identify a pattern – Jen: 'The more she sits back in the writing the more he gets on' (lesson one).

The TL listened actively before sometimes summarising teachers' descriptions, then prompting for further discussion e.g. 'So he is picking up on character isn't he and picking up on the visual information and structure of the text and using that as he goes. What else?' This was a consistent pattern in leading the talk. The TL also frequently asked for further description – 'How would you describe what he is doing?' The TL also contributed description, but often with the additional purpose of facilitating the talk or directing attention as in this example from lesson one - 'So you notice that his initial reaction was to just come in and point to anything but the prompt // 'have a think' so he takes the time and can locate the error'. Through this contribution, the TL directed the group to observe what the child did after an intervention from the teacher.

Productive tension was evident when descriptive data contradicted a case description. One instance occurred when teachers described problems with Ben's reading which contrasted with Alison's case description of him as self-monitoring and reading in phrases. In this moment in lesson one, the TL also disagreed with the teachers' description - '[…] you're saying he is reading for phrasing // I'm thinking it sounds really word by word'.

Such challenges created dissonance and invited further description to defend or negate. Here the TL inferred a point of view and suggested teachers might look more closely and offer more fine-tuned description. The ensuing discussion enabled the group to refine their understanding of what constituted phrased reading. In this instance, in her case introduction, Alison had described Ben's reading as mostly phrased, teachers had described his early reading in the lesson as phrased but the TL's challenge created dissonance and further attention during the observations on expectations of how phrased reading would sound.

The TL's use of description to challenge thinking was a significant finding of the analysis. A further aspect was that most of the teacher description was focused, particularly in lesson one, on the child rather than the teacher. I discuss that finding in more detail in chapter five and focus here on the second purpose of the dialogue – theorising.

Signs of dialogic inquiry - 'Theorising' to explain or suggest alternatives

When individuals moved beyond description of events to attempt to explain, justify, offer rationales or consider alternatives, I named this kind of talk 'theorising'. Theorising, as I defined it in this study, required observers to put themselves in the place of the teacher, think critically about payoff from decisions and consider alternative decisions. I identified four different kinds of theorising talk. These were –

1. Offering rationales for the observed teacher's decision-making: For example, observing Alison rehearsing with Ben how to check the accuracy of what he had read, Lisa predicted – 'Maybe she (Alison) is doing this so that tomorrow when he reads it again, she can sit back and see if he notices himself?' And in lesson two Di and Gwen's sequential contributions constructed a rationale for why Kay was not immediately helping Lily –

> Di: 'She (Kay) doesn't jump in straight away'.
> Gwen: 'She's (Kay's) giving time to let it happen on her own
> (Lily's own)'.
> Di: 'But not too much time otherwise she (Lily) is going to lose
> sense of what she is reading'.

Di, Gwen and Lisa's rationales had echoes of the theme of independence discussed in the session introduction and rehearsed the decision-making a teacher would need when deciding how much scaffolding to offer a child. It was evident that teachers were putting themselves in the place of the observed teachers to try to understand their decision-making.

2. Proposing explanations for a child's actions and responses: One example was Lisa's reflection on how Lily (lesson two) was maintaining the direction of

reading and one to one correspondence on the text – '[…] on some pages it (finger pointing) really is doing a job of helping her and at other times I think it feels like that floating around […]'. Some explanations or rationales about the child's actions were linked to literacy theory. For instance, referring to oral rehearsal during writing composition, Gwen noted - 'I think perhaps he needed to repeat his story a few more times before he began it so that he had it securely in his mind, what he wanted to say'.

3.   Proposing alternative explanations: Dissonance or tension in theorising was embraced by the group. Teachers were prepared to challenge a colleague's explanation e.g. Jen: 'But is that working for him, is reading a book like that working in terms of taking his learning forward?' They also proposed alternative explanations. For example, after several contributions about value of talk to support Ben's writing, Kay suggested – '[…] it's about time and place really isn't it? So yes, it is really good to have interaction at different points in the lesson but it's also actually going to take him away from the message if he does too much talking […]'. Teachers were also active in prompting others to consider alternative teacher decisions e.g. Jen: 'So, at this level, what type of text do we think would support him in this way?' In addition, teachers signalled changes in their own theory-building e.g. Gayle: 'I'm swaying from one minute, thinking he needs lots of talk, to agreeing with you – this isn't going really well for him now.'

4.   Synthesising description across each lesson and between two lessons: Synthesising several descriptions increasingly led to problem-solving or inquiry. Each child read four or more little books during their lesson, offering multiple opportunities to observe and discuss reading behaviours and to consider relationships between reading and behaviours during other letter and sound work and writing. Analysing patterns of response and making connections between their descriptions across the lesson enabled teachers to verify patterns in child-responding or consider alternative courses of action. For example, in lesson one, Kay and Lisa considered how Ben's actions signified conditions for self-monitoring to occur -

> Kay: Ah so he has to read it wrong to self-monitor. The first time he read it right, but he has to read it **wrong** to self-monitor.
>
> Lisa: But when he read it initially, she (Alison) pointed at go (the word) quite quickly didn't she? She came in quite fast. It was as if **she** monitored.
>
> Kay: So we are not **sure** if he can do his own self-monitoring […]

Theorising was engaged in more equally by the teachers and the TL than describing. However, the TL's theorising often seemed to intentionally challenge teachers to dig deeper in their theorising. For instance, during lesson one, the TL prompted for consideration of a relationship between book choice and progress – '[…] what I am trying to get you to, is do the books do it? They are part of the learning context, they might make it easier to hear the language but then what are the requirements for the learning and that shift for him to do it more?'. Those comments arose from theory in reading development that graded books alone are insufficient in supporting reading progress (Clay, 1991).

Although theorising talk involved giving opinions and proposing rationales and alternative courses of action, the participants avoided dichotomous thinking (Lefstein *et al.*, 2017) that can suggest a hierarchy of correctness of the response. Instead, theorising was tentative, and several possible explanations were tolerated simultaneously while more data was collated. This would be risky, if for example the group were less experienced in teaching and needed firmer direction towards successful pedagogical principles. Here, a level of routine expertise was assumed, and the dialogue involved rehearsal of decision-making in a situation that mirrored practice, requiring teachers to notice and describe instances and patterns of responding from the child and theorise about possible corresponding teacher actions.

In summary, I found that talk during the observations was facilitated through conventions in the context which enabled teachers to connect accounts of what they had observed with their theoretical knowledge. Describing was important to teachers' learning because they were articulating what they noticed. High levels of accuracy in teacher noticing are essential to the development of adaptive

expertise (De Arment *et al.*, 2013; Schwartz *et al.*, 2005) and expert reading teaching (Ross and Gibson, 2010). Gaining multiple viewpoints was an essential part of the learning from the activity of describing because the group were observing the same events but sometimes describing them differently. Individual teachers could therefore focus on different aspects and using the discussion to decide on what was most important to attend to could be significant, based on Rodgers' et al. (2016) finding that what the teacher chose to focus on scaffolding was more significant to student outcomes than the amount of help teachers gave. Through description, teachers were refining their understanding of key concepts such as how phrased reading would sound and considering important signs from the child's processing.

Verifying understanding of key concepts in reading instruction could simply be adding to teachers' routine knowledge of pedagogy. However, combining the second aspect of the talk, explanations and rationales, with description, is significant in how teachers can learn to make decisions in response to what they notice and the meaning they attribute to it through what Sherin *et al.* (2011) refer to as an iterative process of noticing and meaning-making. Teachers make numerous decisions in a lesson which can vary in how effective they are in scaffolding the child's learning, according to McNaughton (2018).

I consider the following features of the talk as signs that the learning environment enabled an inquiry stance: everyone had speaking rights; they could describe, theorise and prompt others to contribute; differing viewpoints were not only tolerated, they usually led to further discussion rather than shutting it down; and the TL played a key role in directing attention, challenging for alternative or extended thinking and making connections to theory. In all these ways the interaction between descriptive and theorising talk contributed to my research questions about how teachers learn through reflective inquiry.

Functioning in this way was indicative of Wells' (1991) description of dialogic inquiry as a stance towards knowing with a 'willingness to wonder, to ask questions and to seek to understand by collaborating with others' (ibid: 121). The talk topics were meaningful and teachers were prepared to take a critical stance

which Lefstein (2010) suggests as features of dialogic learning. Teachers discussed a live lesson event as it unfolded, and they were prepared to revise their thinking in ways that Mezirow (2012) and Cranton (2016) attribute to conditions for transformational learning. In the next chapter, I examine the talk while observing in more detail, to discuss how descriptive and theorising talk contributed to inquiry. I turn now to the final stage of the event, the session plenary.

Response to the observed lessons in the post-observation plenary

The group reconvened in a circle for the plenary and Kay and Alison were invited to reflect on their lessons. This led naturally into a discussion with the observers. In each case different points from the inquiry surfaced in the plenary. During lesson two, teachers had discussed Lily's (the child's) strong start on literacy processing and Kay's effective scaffolding of Lily's independence. In the following exchange in the plenary between Lisa and Kay, Lisa shared perceptions of Kay's decision-making and how the fading of scaffolding had helped the Lily -

> Lisa: I thought it was very powerful looking at Lily's independence.
> The scaffolding you gave her // gave her the space // […]
> Kay: Yes
> Lisa: And every time she came across that structure which was a
> kind of running theme in all these stories, she took on more
> independence in response to what you expected of her.

It was apparent that lesson two had offered a demonstration both of effectively timed and directed scaffolding and subsequent child independence. Lisa's response echoed the idea from the introductory discussion about giving a child 'space' for processing and Kay received some affirming feedback about her decision-making.

Ben's difficulties had been more productive in stimulating dialogue during the observation of lesson one and they also generated a rich discussion in the plenary. Teachers replayed aspects of the lesson for further examination with

Alison. Lisa returned to the focus on Ben's inconsistency in re-reading and asked Alison if Ben had re-read when writing. This was significant since Alison's case introduction had suggested Ben often used a re-reading strategy. Alison responded –'I'm not sure // was there? Did he go back?' Lisa indicated the group's perspective – 'He wasn't doing it very much in the writing, I don't know if that was typical?' Alison couldn't recall but a shift occurred when Di noted that – 'It was interesting watching when he **did** re-read'. She then offered two rationales for the importance of re-reading –

> […] they know what word they want to write about next, so that they continue to hold the story in their head. That's why they re-read when they are writing […] And also they are using structure to generate it (the next word) because they have just heard what they have said so far so there are only certain words that they can choose.

At this point, the TL prompted the group to reflect a little more – 'Ok so why are we thinking that this might be helpful for Ben to take on board in terms of really supporting his independence as a writer […]?' This opened the way for teachers to offer feedback to Alison, and required Di to articulate her rationale more clearly as follows –

> For me, because I felt, that because his reading was quite slow, he's not hearing big chunks […] so with his writing because it is big chunks of his own composing, he would get used to hearing those structures and how they sound so that then he will ask himself if it sounds right more when he is reading.

Through this exchange, the discussion on the importance of re-reading was revisited for Alison's benefit but also as potential learning for her colleagues.

In summary, talk in the event plenary focused on aspects of the observation uppermost in teachers' minds and the observed teachers were able to get a sense of how their lessons had been discussed. The plenary was shaped as continuing the inquiry from previous stages of the event. In that way, the discussion prioritised collective thinking and problem-solving. Responses to the observed lessons differed. Where there had been fewer difficulties for the child, teachers were more inclined to offer affirming feedback and where there was more difficulty for the child there was a richer discussion but less direct feedback.

Summary: Learning potential from simultaneous talk and observation in a CPD event

In this chapter, I have presented and discussed data analysis from a four-way framing of a CPD event which took place as a routine part of Reading Recovery implementation. In response to my research questions, I found that dialogic patterns of talk were present at all four stages of the event according to principles suggested by Alexander (2017) and that such talk was significant to teachers' learning in a number of ways.

The collaborative, reciprocal and cumulative aspects of the dialogue (Alexander, 2017) allowed different viewpoints to surface for consideration, and enabled teachers to build on the ideas of others. In addition, the context for talking was also purposefully framed by goals (*op cit)* of increasing teacher attention to ways in which children's independent literacy processing might be described and explained. Alexander's (2017) fifth principle of a supportive ethos for dialogue was evident because the adults were aware of conventions for talking together about practice and also because of how the TL led the talk. The group, including the TL were positioned as co-thinkers and problem-solvers.

An inquiry stance (Cochran-Smith and Lytle; Wells, 1999) was demonstrated in the way practical experience and theory were used to further explore pedagogical understanding in conjunction with others – what Mercer (2000) calls exploratory talk or inter-thinking. Analysis of the dialogue indicated that through descriptive data-gathering and theorising, the observers were involved in active problem-solving and reflective inquiry about their practice. Inquiry was particularly robust where there was more perceived difficulty for the child's progress and where the teacher's decision-making was consequently more complex.

A relationship was evident between talking to describe and talking to theorise. This warranted further analysis which is presented in chapter five. Theorising was often fleeting, matching the pace of the lesson and theory testing occurred quickly, including where the teacher may have coincidentally decided to act in ways the group were suggesting, thus enabling them to see the outcome of their proposed action. Dissonance was evident in contrasting descriptions and

rationales and in Ben's case between the case description and his subsequent acts in the observed lesson. Teachers noted and were prepared to discuss such dissonance. Teachers changed their opinions as further data was assembled from multiple observer viewpoints.

As a further step towards exploring how dialogic talk about practice is used to develop teachers' inquiry, in the next chapter, I present a more detailed analysis of the role of data-gathering and theorising and how the dialogue enables individuals to develop reflective inquiry into practice by constructing chains of reasoning.

Chapter Five

ESTABLISHING, REFINING AND EXTENDING DIALOGIC INQUIRY DURING OBSERVATION

Introduction

Teachers' reflective inquiry about student-learning is of significance to both Reading Recovery professionals and those in other educational contexts. Observation of lessons is common to many CPD designs, yet the relationships between observing and inquiry and particularly between teachers' talk and inquiry, have not been comprehensively researched.

In chapter four, I accounted for what a group of experienced literacy specialists talked about during the four stages of a CPD event, to begin to consider what they were learning. Analysis of their dialogue leading up to during and following observation of two lessons led me to conclude that many teachers demonstrated an inquiry stance. They drew on their understanding of theoretical concepts about literacy learning and their experience of teaching children with literacy difficulties to contribute to the discussion and to engage in problem-solving about the genuine cases of child learning presented in the CPD session.

The dialogue was framed by a session focus, but teachers had agency to pursue other topics stimulated by the observations. Overall, through dialogue teachers were learning to fine-tune their noticing or observational skills and to collectively evaluate contingent decision-making. I identified two significant themes in teachers' talk while observing - description and theorising. I found signs of inquiry into practice in the use of descriptive talk to gather data and the use of theorising talk to develop inquiry into the learning of the observed children, building from the description.

In this chapter, I discuss a deeper analysis developed from longer sections of sequential dialogue during the lesson observations, to consider how the reflective inquiry developed. The following research question guided the data

analysis presented in this chapter - **In what ways does teachers' talking while observing develop reflective inquiry?** Additional questions guiding my interrogation of the data included:

- What role does the leader play in scaffolding teachers' inquiry?
- In what ways does the group assemble and interrogate data from observed lesson events?
- What enables the group to keep the discussion open and maintain an inquiry stance?

Firstly I consider how the dialogue was led and facilitated by discussing and exemplifying talk moves used by the leader and in some cases by teachers. Next, I discuss three stages of how the group established, refined and extended their reflective inquiry. Finally, I discuss two additional strategies which facilitated reflective inquiry – framing contributions tentatively and talking primarily about the child rather than the teacher. Additional data from researcher notes informed and contextualised the analysis.

Talk moves which facilitated inquiry

It was evident that the leader played a key role in shaping the dialogue in ways that facilitated reflective inquiry. In some PD contexts, an IRE (Initiation Response Evaluation) pattern of talk (Cazden, 2001) can be the primary mode of communication as leaders take an authoritative stance in the talk. Dialogic talk and co-construction between the TL and teachers was evident in this study. One layer of analysis of how the group managed to develop their inquiry concerned the TL's moves to direct the talk (Michaels and O'Connor, 2015). The TL used four of the moves identified in teacher and class dialogue by Michaels and O'Connor (2015). These were Marking (M), Revoicing (R), Say more (SM) and Tracking the inquiry (T). Additional moves identified inductively through my data analysis included Observation prompt (O), Explanation prompt (E), Withdrawal (W) and Silence (S). Teachers used some of the same moves as the TL but here I discuss mainly the TL's moves because they were pertinent to how the inquiry was led. I discuss these moves in relation to two main types of talk identified in

chapter four – descriptive data-gathering and theorising. I also consider moves that led to dissonance and indicate how the leader and teachers responded.

Talk moves facilitating description

Marking was used by the TL to attribute significance to responses e.g. 'I think you are getting to something interesting there //'. Whilst marking was one way the TL attempted to focus teachers' attention within the dialogue, *marking* was not used extensively. Because the talk occurred in parallel with the lessons the TL used *observation* prompts to direct teachers' attention to an act or decision in the lesson by the teacher ('Oh have you seen the responding from the teacher?'); or the child ('Ok so you notice that his initial reaction was to just come in and point to anything but […] he takes the time and can locate the error.'). Through o*bservation* prompts, the TL could also *mark* significance - direct teachers' attention to something occurring in the lesson.

Re-voicing (R) – Re-voicing is a common tool in conversation which signals listening, and tacitly acts as a cue for the previous speakers to accept, reject or clarify the interpretation (Michaels and O'Connor, 2015). The TL used revoicing to replay descriptive contributions from individual teachers. I coded moves used to elicit further contributions as *Say More* (SM) e.g. TL: 'Tell us about that'; 'So can you carry on with that?' The move could also be used after *revoicing* to summarise previous descriptions – 'He's responding to what's happening in the story how the characters are behaving // what else?'

The TL used s*ilence* to open the space for teachers to shape the discussion. For example, when the TL remained silent early in lesson one, teachers construed that as an invitation to generate descriptions of the child's processing.

Talk moves facilitating theorising

The TL sometimes used a *tracking the inquiry* (T) move to summarise teachers' description or theorising. For example, towards the end of Ben's reading of familiar texts, the TL summarised various explanations and prompted further reflection on how those ideas related to independence –

So he is very focused, he's engaged, it's sustained, he's getting a message from what he is reading // Ok sometimes he encounters new language or vocabulary and isn't sure of it in some way. But somebody talked about him reading really slowly and so not quite accessing the language structures in the way that he might – what about that? Is that an issue in terms of emerging or developing independence?

Often after descriptive talk, the TL used *explanation* prompts (E) e.g. following ten sequential contributions from teachers describing the child's work on familiar reading, the TL asked – 'So what has he learned how to do then, after all that conversation at the end of the story?'   *Explanation* prompts were key to the development of talk for reflective inquiry, because they called for theorising by requesting rationales or explanations. At times an *explanation* prompt and a *say more* move overlapped but the *explanation* prompt differed in specifically calling for a rationale e.g. TL: '[…] now why might that be?' Although *explanation* prompts were mainly used by the TL, much of teachers' talk involved proposing and interrogating explanations as part of their reflective inquiry.

Talk moves and dissonance

Challenge (C) moves had a significant role in the inquiry by creating dissonance. A *challenge* could be expressed as outright disagreement with an individual or group view – TL: '[…] you're saying he is reading for phrasing. I'm thinking it sounds very word by word […]'. C*hallenges* also overlapped with other talk moves, for example they could also –

- be *revoicing* framed as a question ('Good reading?');
- follow a summary of observations as part of *tracking the inquiry* ('Books are part of the learning context, they might make it easier for him to hear the language but what are the requirements for the learning and that shift for him to do it more?');
- coincide with an *explanation prompt*, for instance when a teacher proposed that an alternative book choice could support the child in lesson one, the TL asked – 'But will those texts do it (solve the child's difficulty)?' The teacher responded with rationales for her proposal.

Whether *challenges* were always productive is discussed in more detail later in the chapter.

Active *withdrawal* was a signal of the TL handing over responsibility to the group to continue the dialogue when contrasting views surfaced simultaneously without being resolved. For example, in lesson one, the TL said – 'I'm just trying to really get you to think about the job the talk is doing […]' and prompted for explanation. After a teacher ignored the prompt and returned to a discussion about reading pace, the TL signalled withdrawal – 'I'm not going to prompt you anymore'. In that instance, teachers responded with three different ideas - Lisa made a connection between the amount of talk and the problems for independent writing in the classroom if Ben was dependent on talk as a scaffold; Jen proposed Ben needed to get his ideas down and Sharon and Bev discussed spelling difficulties which may have been holding Ben back. Then the dissonance was partly resolved by Kay who noted – '[…] it's about time and place really isn't it? So yes, it is really good to have interaction at different points in the lesson but it's also actually going to take him away from the message if he does too much talking'.

In summary, analysis of talk moves enabled me to identify conventions for how the TL led the dialogue without formal organisation of roles for watching and talking. Identifying moves in the talk provided insight into how dialogue developed in line with the principles suggested by Alexander (2006; 2017) for dialogic learning with stimuli for creating and responding to the tension which Nystrand *et al.,* (1997) and Lefstein (2010) suggest is essential to dialogic learning. I now turn to discuss a deeper analysis of how the group used the resulting descriptive and theorising talk to establish and develop their reflective inquiry.

Reflective inquiry: chains of data-gathering, theory-building and hypothesis-forming

To explore relationships between descriptive talk and theorising I analysed longer stretches of dialogue. In this more fine-grained analysis, I coded clusters of description and contradictory description to indicate where differing interpretations of a child's responding surfaced. I also identified where challenges occurred, if they led to additional observational description or theorising and whether resolution attempts were made. This offers some further insight into how

dissonance was handled. The talk coded as theorising is also demarcated with a further category of a hypothesis suggesting a possible action or decision in response to theorising. The codes used are explained in Table 6.

Table 6: Coding of dialogue during lesson observation

Data cluster (DC)	A sequence of descriptive talk, gathering data about either the child's observed processing or the teacher's observed scaffolding moves.
Contradictory data cluster (CDC)	An instance or sequence of descriptive talk when one or more group members described lesson events contradicting previous data. Contradictory data did not always generate an immediate response – it could either resurface later or fade out if it didn't continue to hold significance. Contradictory data clusters were of interest because disagreement about the observed practice seemed to act as a feedback or evaluative loop within the discussion itself.
Resolution attempt (RA)	Teachers or the TL occasionally attempted to resolve a contradiction or a challenge. Teachers' resolution attempts involved e.g. acknowledging difficulty of a choice; that a decision was the responsibility of the teacher or pointing to further data from the lesson. The TL's resolution attempts were instructional – confirming teachers' descriptions. A RA from a teacher could lead to a further challenge by the TL.
Challenge (C)	Occurring where either the TL or a teacher created dissonance by challenging the group to think differently about a line of inquiry. Contradictory data could stimulate a challenge.
Theorising (T)	A way of talking which involved theory-testing where one or more teachers offered rationales for a child or teacher's approach to a task, the teacher's decision-making or why those approaches or decisions were seen to be ineffective or successful.
Hypothesis (H)	Individual teachers formed tentative hypotheses about what the child might need to do or be supported with. A hypothesis could arise from synthesis and testing of previous data and it often stimulated a new focus for observation.

The analysis mainly focuses on data from lesson one, (Ben and Alison) (see tables 7 and 8 below) because that lesson generated the most wide-ranging discussion and because it was also the starting point into the reflective inquiry about children's literacy independence. Talk was coded as indicated in Table 6 and colour coded to facilitate identification of changing patterns of talk such as an increase of challenge or theorising. Initially, I identified chains of talk building up to each hypothesis. However, it became apparent that there were four overarching moves in the dialogic inquiry which I discuss below.

First stage: Establishing the inquiry

The initial 11 minutes of sequential dialogue while Ben read familiar books, is represented in Table 7 with minimal reduction of the transcript (Appendix 12 - full transcription of this section). Talk clusters are numbered in sequence. I have also indicated instances of the TL's talk moves used to scaffold the inquiry. Two descriptive data clusters were constructed with thirteen separate contributions from teachers, before the TL entered the discussion - a sign that the group had established agentic ways of working and common expectations for participation.

The first stage in the talk established the focus of the inquiry into learner independence. Teachers were mainly gathering descriptive data to form a verifiable account of Ben's literacy processing as he read some familiar texts. They started to consider whether and how Alison's decision-making was supporting his independence. At this stage, the TL mainly prompted teachers to observe more closely or to explain their observations. The descriptive data-gathering was partially framed by Alison's case description but attention to the session theme of independence was most evident as the inquiry was established.

Table 7: Establishing the inquiry

TL move	Sequential dialogue	Dialogue code
	Kay: That's nice isn't it? (Ben doing a phonic check of a word). Di: That was independent Kay: He's got control of that. Lisa: A real sense of engagement – he asked how do you make fire? Lisa: He's really engaged with these books isn't he? Bev: Ah that's lovely (Ben reading expressively) Kay: He's kind of delving in – that's such a strange phrase – who will make the fire? Lisa: He's drawing on the most interesting part and relating it to himself, what he knows about it. Lisa: Interesting that he changed his expression for the mouse (story dialogue) when his reading is quite monotone // Bev: It's lovely when he puts the intonation in	**Data cluster 1 (DC1)**
	Kay: He doesn't use intonation for other animals' speech – just the mouse // (Alison moved to scaffold Ben's re-reading of a word by pointing to the word "go" in the text after Ben read it as "get".) Gayle: I wonder if he would have got that himself?	**Contradictory data cluster 1 (CDC1)**
	Kay: Those are the decisions you make // do you want the flow or the processing?	**Resolution attempt 1 (RA1)**
O	TL: So we are thinking about independence // what are some of the things you see going well? Gayle: He's asking questions (about the story) Kay: He knows how to read little stretches of meaning through the phrases […] is pulling the story along for himself. Di: He's not looking for confirmation after he has sorted something out.	**DC2**
O	TL: How would you describe what he is doing? Gayle: He went back to the picture, then to the beginning of the sentence then got the word (help) independently. Bev: He's re-reading little bits to support meaning.	
E	(Alison took Ben back to a point in the story where he had made an error and prompted him to have a think about the word.) TL: So you notice his initial reaction is to point to anything but after the prompt 'have a think', he takes time and can locate the error. Now is this part of the learning context? How is it supporting independence? Or is it? (Teachers observed in silence for a few seconds)	**CDC2**
E	TL: What do you think? Kay: Ah, so he has to read it wrong to self-monitor. Gayle: But when he read it initially she came in quite fast and pointed // it was as if **she** monitored it.	
	Kay: We are not sure yet whether he can do his own self-monitoring.	**RA2**
	(Alison was discussing with Ben an idea in the story about "who would help".) Jen: He needs to trip off a little bit more on his own // Kay: Do you think? Lisa: Maybe she is doing this so that tomorrow when he reads it again she can sit back and see if he notices // Jen: Maybe it's about understanding that you have to **go** and **get** the milk?	**Theorising 1 (T1)**
E	Lisa: Yes, that's quite a strange language structure. TL: So what has he learned to do then after all that conversation at the end of the story? What was the power of that interaction?	

		Kay: He is starting to ask her questions now […] he has picked up the idea of conversations around the book. Bev: Maybe […] if she had used the meaning more that might have helped him with 'go' and 'get' […]	
	E	TL: It might be really helpful to keep an eye to this idea of the conversation, what he's getting out of it, because you are having conversations for a purpose aren't you? (A number of teachers signalled agreement)	**Challenge One (C1)**
	E	TL: And the purpose is to support? Di: The meaning of the text //	
	R	TL: The meaning of the story, problem-solving, self-reliance //	
		Bev: We were saying that his idea of meaning is so strong, she set up a lovely scaffold […] if she had linked that more to the meaning he might have used it more to cross check with the visual. We were saying it might be something she might work on later (Ben continued to read the second familiar text.) Di: But it also shows he is thinking independently because […] it is showing he was engaged with the book.	**T2**
		Jen: I think he said 'Jolly Roger in a big box' Kay: Yes and he slowed right down and looked at her so there is some sense of self-monitoring // Jen: But maybe he thinks because she doesn't pick up on it //	**DC3**
	R	TL: So he notices something is wrong // Jen: he looks to her //	
	R	TL: Not quite sure what, he looks to her // Kay: Slowed down	
	R	TL: Slows down Jen: He carries on. (Ben stopped reading to say that "the pirate has only one leg". Alison said: "Great, keep reading and we can chat after". Ben continued to read. The reading pace increased.) Jen: he has a very good sense of the story, putting that understanding together. Kay: And the phrasing is still there isn't it? He's carrying that sense of meaning into the reading. (Ben stopped and appealed to the teacher for support). That's interesting isn't it? Lisa: Did he say 'Was that right?' Kay: 'Was that right'. He's thinking // '[….] too, said Big Pirate' // it's that structure // Jen: He thinks it's all part of the same sentence	
	M & E	TL: Is that giving you a cue into his thinking? He is saying 'is that right? What is that showing or telling you?	
		Jen: He's listening to himself // Di: That he can't self-confirm yet, he's not able //	**T3**
	E & SM	TL: OK now why might that be? Jen: because he doesn't know how it should sound. He's just starting to think it doesn't sound right but he can't confirm it. Bev: So it relates to his language structures? Di: I think it's because he's reading quite slowly so he is not hearing it as a whole chunk of meaning because "too" can mean so many things // when you just read it as one word you've got no idea if it's the right "too" in the right place or // Kay: His groups of meaning are quite small aren't they – two or three words?	
		Gayle: So if he re-read more could he confirm for himself instead of asking?	**Hypothesis One (H1)**

Teachers' data-gathering in this initial stage of the inquiry concentrated on signs of Ben's independence (Data Clusters 1 and 2) and where Ben was less independently monitoring his own reading (Contradictory Data Cluster 1). The TL mainly used *explanation* (E) and *observation* (O) *prompts* to facilitate dialogue. Individuals used descriptive data to challenge others' proposals and were prepared to consider alternative descriptions of the child's processing. Both *resolution attempts* in this sequence (RAs 1 and 2) were made by Kay and each time they generated further discussion.

Theorising (attempts to explain) Ben's approach to reading emerged out of dissonance when contradictory data surfaced - teachers variously proposed that Ben may not have been able to self-monitor (check on his own reading accuracy) because:

~ of his slow reading (Di); or

~ he was not hearing himself read long enough continuous sections of text (Kay); or

~ as a result of possible mis-matches between his spoken language and story language (Bev).

Theorising was tentative and different possible explanations remained available to the group at this point with no attempt to form a definitive response. In DC3, two teachers discussed what was happening at a point of Ben's difficulty with the text in an echo of the theorising about his ability to independently monitor his reading –

Kay: Yes and he slowed right down and looked at her //

Jen: But maybe he thinks because she doesn't pick up on it //

Kay: He carries on.

Jen and Kay's suggestions that Ben was waiting for confirmation from Alison, led another teacher (Gayle) to propose a possible teacher response with the first hypothesis (H1). In H1, Gayle suggested if Ben was independently re-reading (and being prompted by the teacher to do so), that might support greater independence in his self-monitoring at points of error or uncertainty. Rather than agreeing that hypothesis as a point of feedback for Alison, the group continued

to reflect through their inquiry, using H1 to further refine their observation and data gathering.

Second stage: Deepening the inquiry

After the development of the first hypothesis, teachers' dialogue became more focused on explanatory talk (theorising) and possible actions (hypothesising). Incidences of data-gathering decreased and became more specifically attuned to examining the prevailing hypotheses. Teachers were still observing the lesson and modifying their contributions in the light of what they observed but more of their dialogue was directed to noticing patterns across multiple child and teacher responses and proposing alternative actions. Four additional hypotheses (H 2 - H5) were developed during this part of the inquiry and there were many more incidences of theorising, which often involved contributions from several teachers. The TL played a key role in helping refine the inquiry, by increasingly challenging teachers to observe more closely or to explain their theorising or hypotheses. I characterised this as a shift from establishing to deepening the reflective inquiry.

Data in Table 8 follow on directly from the formation of H1 at the end of Table 7 and represent nine minutes of dialogue while Ben read a book that he had only read once before. Extended data sequences have been presented to make the complexity of the dialogue and relationships within it transparent. At this point in a lesson, the teacher's role is to assess a child's reading accuracy, fluency and any strategies used at points of difficulty or error, using a running record[19]. The teacher can prompt a child to try a word or can tell the child a word. The principle of teachers offering less help while taking running records, offered potential to continue to consider hypothesis one about Ben's re-reading, by observing what he could do independently.

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[19] 'Running records provide an assessment of text reading' (Clay, 2013:51). The teacher records the child's strategic behaviour on text for later analysis of accuracy, self-correction and aspects such as fluency.

Table 8: Deepening the inquiry

TL move	Sequential dialogue	Dialogue code
R	(Ben self-corrected an error) Kay: I think we are getting a sense now that he does self-monitor? Di: He's beginning to. TL: So you are talking about the beginnings of self-monitoring? Kay: Well we weren't sure in familiar reading but now we are getting a sense that he is.	DC4
	Bev: But he is appealing (for help) a bit by looking to her and I just wonder if she said 'You try' (a prompt which can be used during running records) whether he might take a bit more risk. I don't know // she might be keeping it going // Di: What has she helped him with? Bev: 'Spyglass' Di: No I think he got "spyglass".	CDC3
	Kay: I think we have to say it is not very often he does that and there are long stretches of good reading? Di: Yes there are.	RA3
C	TL: Good reading?	C2
	Jen: Yeah, he's very focused.	RA4
R & C	TL: So he's focused, he's engaged, it's sustained, he's getting a message but somebody talked about him reading slowly and not accessing language structures – is that an issue in developing independence?	C3
	Lisa: Yes Bev: To some degree //	RA5
	Jen: His general speech seems quite slow and it is difficult when a child's oral language is slow. Bev: That's true Jen: It's (the reading is) going to sound different.	T4
C	TL: And we know he's come a long way from not talking but in a sense none of that changes where we want him to get to does it?	C4
	Jen: So he needs to know how it could sound and if it did sound like that it would make (the story) more interesting and exciting.	Hypothesis 2
SM	Lisa: That wasn't quite so difficult for him was it? TL: Tell us about that. Lisa: He read 'shouted', then he went back and read 'Yes! Shouted the pirates.' Bev: Seeing (the word) 'shouted' made him go back and read it again and make it more expressive.	DC5
M	TL: Yes that is self-monitoring	RA6
C	TL: I'm finding it hard to understand – you are saying he is reading for phrasing. I'm thinking it sounds really word by word.	C5
	Kay: No there are some phrases in there. I think he has stretches of good phrasing and then stretches of slowing down more.	CDC4
SM	Jen: As someone listening to him it is hard to get a sense of the story and what's going on so you wonder how is he getting it? TL: Can you carry on with that? Jen: I think this book // the sentences don't always lend themselves to phrasing for a child like this because they are very long and can drag. Gayle: This feels like its dragging for him. Di: He's got stamina though hasn't he? Bev: Oh yes	T5

R & C	TL: So he's got reading stamina. My question is though // he's doing a lot independently // he's doing it all independently // it is that quick // he's noticing most of his mistakes // if he isn't aware of the vocabulary he is saying "I don't understand this, what does it mean?'" So the question is – Is this reading good enough? You know for (book) level 11?	**C6**
	(Teachers did not respond but continued to watch the lesson.) TL: Well that might not be the question but it just occurred to me. What do you think?	**RA7**
SM	Di: With him saying 'is it right?' That would be a great place to go back to, to give him another go at reading it fluently or model reading it fluently so he has an opportunity himself to decide whether it's right or not. TL: OK? Di: And then that sense of // But it is // I don't know how to teach fluency to a child who struggles to // speak or // slowly // like I am modelling right now! Yes it's a tricky one because you can't make them read as // he is reading as fast as he speaks.	**Hypothesis 3**
E R	Kay: But there is more a sense that as he is reading now the actual phrasing is gone and it is more word by word isn't it? So is it the more he kind of finds the story hard, the harder it is to put it together? I don't know // Di: Yes // TL: Or is it because the language in the book is kind of high frequency word, high frequency word, high frequency word, so it's not patterned in any way really? Kay: No, there's no structuring into it // TL: So it's more difficult in terms of sustained reading. Maybe the context supports but we know he can stay in there, we know he can attend, we know he notices his errors and mistakes // Di: We know he thinks it is an interesting story. There is a lot of talk about it and it is an exciting story.	**T 6**
R	(Ben initiated some discussion about the story, talking about how the characters feel.) Kay: Listen to him now // Bev: Oh that's wonderful. TL: So we are seeing this nice engagement and talking again which is driving the reading – on a deeper level he is really bothered about the book and the story.	**DC6**
	Jen: I wonder how he would sound on another text that lends itself more easily to phrasing?	**Hypothesis 4**
EP & C	TL: Is this (phrasing) going to be a crucial element in his emerging independence?	**C 8**
E	Kay: Definitely, it's essential. He wants longer stretches of fluent reading basically. And for him to be able to listen to himself that real sense of story driving him on. TL: Is that what we are aiming for? (Short period of silence) Kay: I think so. (Murmurs of agreement)	**T 7**
E	Jen: So at level 11 what type of text do we think would support him in this way? What books? We were talking about books earlier // (A number of teachers then suggested specific book titles.) TL: So what would the purpose be in choosing texts like that? Lisa: Lots of familiar concepts //	**T 8**
	(Ben was emphasising a character's dialogue in the text.) Jen: That's what he responds to "Yes" and "No". (Ben continued to read in a phrased way.) Kay: Oh listen to that //	**DC 7**

	Jen: So lots of speech and short sentences (in the potential book choices).	**T 9**
M	TL: So the theory would be that if the language is more natural, that you can hear the way words fall together more easily?	
	Bev: Unless there is a little more rehearsal of the natural language when she is introducing the books?	
C	TL: I mean, I am trying to think more broadly as a way of responding and not a specific thing you would do // because in a sense that's up to Alison. But broadly what we are trying to do is get some feel for what's happening and if we are wanting to get him to sustain that sense of engagement and enjoyment, all of those things, how can we make more of that? So one way has got to be, I would imagine //	**C 9**
	Jen: Choosing books that have a lot of phrasing and patterned language.	**T10**
	Lisa: Poems.	
C	TL: Maybe some rhyming text. But then will those **texts** do it?	**C 10**
	Di: Well, they will get him to hear what he sounds like when he is reading //	**T 11**
C	TL: What the texts will?	**C 11**
	Di: No his ability to read the shorter sentences with phrasing. The more you hear yourself being successful the more you are likely to replicate that because it is more fun to hear yourself reading like that.	**T 12**
M & C	TL: I agree with you. I think that is the principle but how did he read Magpie's Baking Day? (title of the first familiar book)	**C12**
	Di: With more pace that this book. Lisa: But not as good as it could be Di: Not as good as that but with more pace because it is broken up by the speech – the characters were saying more.	**DC 8**
	Jen: But the (book) language fights against your natural language //	**T 13**
	Bev: That's what's nice about 'The Jigaree' – those kinds of texts have really natural language […]	
C	TL: That's all valid, but what I am trying to get you to **think about** is do the **books** do it? They are part of the learning context, they might make it easier to hear the language but what are the requirements for the learning and what will shift him to do it more?	**C 13**
	Zoe: I think with those books he might be more likely to answer the question "is that right?" for himself – because it will either sound right or not.	**Hypothesis 5**
	Lisa: Because they would reflect his language.	
M	TL: So you can ask Alison about that.	

The TL made 24 contributions in this stage of the inquiry and over half were challenges. I noted various responses to challenges. A challenge may not be taken up, e.g. C2 (whether the reading sounded 'good') was side-lined by Jen's comment about Ben's focus on the task. A challenge did not immediately garner a response if the group was following another line of inquiry. For example, C6 (whether the reading was 'good enough') was a met with silence from the group then after a resolution attempt by the TL, they returned to their previous focus on Ben's phrasing. The TL's challenge about reading quality may not have been

sufficiently aligned with the group's theorising at that stage to be taken up. When a challenge had instructional intent (e.g. C8 which referred to the role of phrasing in conjunction with the session theme on developing a child's independence) teachers responded with further theorising.

Challenges created dissonance leading to further debate, a significant condition for reflective dialogue and inquiry. Teachers were willing to disagree with the TL based on descriptive data. For instance, Kay disagreed with C5 - that Ben's reading was word by word, and cited data evidencing his phrasing. From C9 to C13, the TL continued to challenge an emerging theory that an alternative book structure could help improve Ben's fluency -

- ~ C10 - TL: 'But then will those **texts** do it?'
- ~ C11- TL: 'What the **texts** will?'
- ~ C13 – TL: 'That's all valid but what I am trying to get you to **think about** is do the **books** do it? They are part of the learning context, they might make it easier to hear the language but what are the requirements for the learning and what will shift him to do it more?'

Despite the TL's clear signal (C13) to change the focus, Jen, Di, Lisa and Bev continued to debate the idea of selecting different books for Ben and responded to the TL's challenges with their rationales. Though silent throughout this debate, Zoe then proposed the next hypothesis based on book selection. Despite multiple challenges, in this example the group's thinking prevailed. Challenges could redirect the focus but there were occasions when the group discerned agency and responsibility to develop the inquiry in ways that related to prevailing topics.

In addition to an increased incidence of challenge as the inquiry was refined, a further feature was evident – some teachers followed individual lines of inquiry. For example, Jen developed her theorising over time about Ben's pace and phrasing in reading. In T3 (Table 7), Jen began to theorise about Ben's reading pace and phrasing. In T4 (Table 8) she made a connection with the pace of his speaking and proposed Hypothesis 2 suggesting Ben might benefit from some modelling of phrased reading. In T5 (Table 8) she suggested Ben might be losing

meaning because the sentence length is making it hard to find the phrases and proposed Hypothesis 4 (selection of books with shorter phrases). This was Jen's second hypothesis, each different and shaped by the prior discussion. In theorising exemplified by instances T8 to T13, Jen continued to consider book selection with a rationale of finding texts with natural language patterns which could be used to model and scaffold more phrased reading.

Teachers following individual lines of inquiry were also prepared to alter their theorising and hypotheses in conjunction with new data from the lesson. For example, Kay made several contributions about Ben's reading pace and phrasing in CDC4 and DC 6 but later in T6 she commented – 'now the actual phrasing is gone and it is more word by word isn't it?'   Kay had initially countered the TL's challenge with contradictory data of phrased reading by Ben. Later she changed her mind as she continued to listen to Ben - a moment of individual dissonance as her earlier contributions were contradicted. Her theorising then shifted to address Ben's difficulty in maintaining phrasing over longer stretches of text. Kay's theorising closely followed events in the lesson and was thus, more flexible and responsive to noticing child responses in ways that align with descriptions of adaptive expertise (Schwartz et al, 2005) and expert noticing (Ross and Gibson, 2016).

In the first stage of establishing the inquiry, the TL mainly followed the group's thinking, prompting them to gather data and facilitating the discussion. In the second stage, to extend the inquiry, the TL increasingly challenged teachers to examine or justify their theorising and hypotheses. Challenges were often underpinned by literacy theory and in that way the TL used theory rather than opinion to take an authoritative stance in the dialogue.

Sequences of talk with theorising, resolution attempts, challenges and hypotheses followed conventions of dialogic talk and contributed to the group's inquiry. In individual practice, a teacher may develop habituated patterns of response but the thinking and talk in the sequences in the tables above, were indicative of teachers being required to expose and debate their theorising using data from the lesson and to consider the potential of alternative actions and

decisions. They had to think and respond quickly, mirroring the fast decision-making required in practice as suggested by (Clay, 1991; 2009).

By the point in the observation and discussion indicated by the end of Table 8, four different hypotheses had surfaced. These were that Ben could be supported by -

1. Being prompted to re-read more (H1) - Gayle: 'So if he re-read more could he confirm for himself instead of asking?'

2. Being prompted to notice when his reading lacked pace and phrasing (H2) - Jen: 'So he needs to know how it could sound' (when phrased)

3. The teacher modelling fluent reading could help promote Ben's self-monitoring (H3) - Di: 'With him saying 'is it right?' That would be a great place […] to give him another go at reading it fluently or model reading it fluently so he has an opportunity himself to decide whether it's right or not.'

4. Being given books with language structures which could facilitate phrasing. Two teachers formed hypotheses about this focus: (H4) - Jen: 'I wonder how he would sound on another text that lends itself more easily to phrasing?' and (H5) - Zoe: 'With those books he might be more likely to answer the question 'is that right?' for himself'.

All four hypotheses related to the focus on independence, but also resulted from chains of reasoning in the group's discussion about the lesson. Teachers evaluated observational data from their understanding of theory and principles in Reading Recovery and literacy intervention and their experience of teaching similar children. Different teachers took on the role of synthesising the dialogue into hypotheses - two different hypotheses were formed by Jen supported by Zoe in the second sequence. One each were proposed by Gayle and Di. The fourth hypothesis about the importance of book choice was challenged by the TL during the discussion. Yet Lisa and Zoe maintained their hypothesis that alternative book choice was a possible decision for Alison. Of the four hypotheses, revising book choice was a practical response in line with routine decision-making, while the other hypotheses inferred change to Alison's decision-making about scaffolding learning. Shaping and reflecting on the latter may have been more significant in

developing adaptive decision-making (Schwartz et al., 2005) and taking a critical stance to considering alternatives (Brookfield, 2005). Despite a strong focus on book choice in the discussion, that hypothesis did not re-surface in the plenary discussion.

Next, I discuss opportunities for the group to extend their inquiry an deepen their reflective talk about independence in literacy processing.

Third stage: Expanding the inquiry

There were two main opportunities for the inquiry to be expanded. These were when hypotheses about reading independence resurfaced during the writing segment of Ben's lesson, and when Lily's literacy processing in reading and writing was observed in lesson two.

Expanding the inquiry – testing hypotheses about reading by considering Ben's writing

Observing Ben's writing was significant in expanding the inquiry. Four different hypotheses had been generated about Ben's reading. As the inquiry was expanded during the writing segment of the lesson, the group chose to revisit the hypothesis (H1) about re-reading.

Initially, teachers seemed surprised when Ben independently began to write his composition because that contradicted previous theorising about his independence. Jen quickly hypothesised that Ben's independence in writing could be fostered if Alison reduced the level of her support – 'The more she sits back in the writing the more he gets on'. Soon after, Jen offered another tentative hypothesis, this time connected with her theorising in the reading part of the lesson about pace – 'I think he has to // he has to speed up // in lots of ways and I think at the moment it's not happening. I think […] there is too much talk about this bit and that bit […]. We are not seeing him firing himself //'.

Teachers could have extended Jen's hypothesis. However, it was their earlier hypothesis about re-reading, which became the focus. Di's description of Ben as – 'not re-reading' what he was writing, generated further discussion. While observing Ben's reading, Di' had hypothesised that modelling phrased reading would help him. However, when observing the writing task, Di reprised a colleague's hypothesis that Ben could benefit from more consistently re-reading to self-monitor (Gayle, H1). Gayle and Jen then supported Di's hypothesis through further description/data-gathering and theorising, including Jen's contention that re-reading would have a reciprocal benefit, i.e. it would support Ben in both his reading and his writing.

These data were significant in illustrating how, through the dialogue, teachers were encountering, considering and accepting or rejecting alternative responses to teaching the observed child. The collaborative element kept open a range of alternative decisions and the role of the TL in challenging without becoming a sole authoritative voice was also significant.

Reading Recovery CPD includes the observation of two lessons in a PD session and this afforded potential for teachers to further expand the inquiry.

Expanding the inquiry – testing hypotheses by considering the case of reading and writing by another child

Hypotheses about re-reading to support phrasing remained salient in teachers' conversation as they compiled new data in lesson two (Kay and Lily). Emphasis on the re-reading hypothesis in lesson one developed prominence because Ben wasn't consistently monitoring his reading. In contrast, during lesson two, teachers described instances of successful re-reading by Lily. For example, Lisa noted - 'So for "hungry" then, Lily just re-ran (re-read) and that helped her […] so Lily can see that her own effort paid off'.

In lesson one, the group hypothesised that Alison might prompt more or create space for Ben to do more re-reading. In lesson two, teachers commented on the

impact of prompting and creating space as they observed Kay encouraging re-reading and making space for Lily to successfully self-monitor.

> TL: And what's Kay's strategy here?
> Lisa: Just confirming things for her //
> TL: Ok?
> Lisa: And also giving her a lot of space to attempt.
> TL: Tell me a little more about that. It's early on (in the child's lesson series) and it's not always easy to do is it? So how is she creating space for Lily to learn about her own independent control?
> Zoe: She doesn't jump in straight away.
> Gwen: She's giving her time to let it happen on her own.
> TL: OK?
> Zoe: But then not too much time because otherwise she is going to lose sense of what she is reading.
> TL: And it's variable isn't it? Sometimes she gives more time than others.
> Zoe: Mmm
> TL: And it's kind of linked to what Kay wants her to work at and what she knows she might be able to do.
> Jen: And she is praising her noticing. Lily didn't necessarily do anything (didn't attempt to remedy her error) but she notices it wasn't 'cat' and she notices something is wrong but she praised that (noticing) and so now you can build on that.

The TL played an active role in this talk sequence, linking the provision of space with developing a child's independence. Taking a more authoritative stance in the talk was an instructional intervention to direct the group's attention to how self-monitoring was being fostered through a fading out of scaffolding from the teacher.

Observing two lessons deepened teachers' inquiry. They observed one child having difficulty despite receiving frequent support and another child functioning more independently with less support. The second lesson provided a testing ground for hypotheses developed during inquiry into lesson one.

Fourth stage: Synthesising and generalising from the inquiry during the session plenary

In chapter four, I discussed teachers' participation in the event plenary. Here I briefly indicate ways in which hypotheses resurfaced when the observers discussed the lessons with the observed teachers. The post-lesson discussion was not a replay of the entire dialogue but was shaped both by the theme of independence and by hypotheses formed through the reflective dialogue.

Although the group recognised how Lily's independence was being fostered by Kay's decisions about scaffolding, the most productive discussion arose from thinking back to lesson one where Ben had struggled more, and the group had worked harder at their inquiry and developing hypotheses. From the hypotheses generated across both lessons, the one which resonated most was the generative potential for independence of a child's self-monitoring through re-reading in both reading and writing tasks.

The hypothesis about re-reading was formed during Ben's reading in lesson one, reinforced during his writing activity and then highlighted by observing Lily's successful re-reading in lesson two. This hypothesis subsequently became the main focus in the plenary discussion. Zoe noted – '[…] in both lessons when we talked about what are the elements of independence we noticed how they begin to self-monitor by saying 'oh was that right?' or by stopping and going back and self-correcting'. The TL attributed significance to this comment by reminding teachers of their hypothesis that re-reading would also support Ben's writing, leading Di to briefly reprise some of the group's discussion about re-reading as having a reciprocal benefit to both reading and writing –

> […] so with his writing, because it is big chunks of his own composing, he would get used to hearing those structures and how they sound so that then he will ask himself if it sounds right more when he is reading.

In this way, the hypothesis about re-reading was reinforced. Thus, discussion in the session plenary synthesised outcomes of the inquiry and generalised the group's responses in ways that seemed to have a twofold purpose – on the one

hand the discussion could develop the observed teachers' understanding but it mainly seemed to create opportunities for the observers to learn.

In summary, four stages within the inquiry were identified from analysis of the dialogue during the observation of two lessons. Firstly, the inquiry was *established* by focusing attention on what the child and teacher were doing in the lesson and by identifying some aspects of interest to the group and in relation to the theme - how teachers might scaffold a child's learning to develop their independence. Next the inquiry was *deepened* through an intensive section of dialogue where teachers responded to patterns of teacher/child behaviours by offering rationales to explain what they were seeing and hypotheses to propose possible actions. This was where the main work of the inquiry occurred and the role of the TL was to keep the discussion focused but more importantly, to prompt and challenge teachers to extend and clarify their explanations or justify their hypotheses.

In the third stage, the inquiry was *expanded* as some of the hypotheses were tested by checking to see how they held up in other cases of learning as the same child was involved in a writing activity and when a different child was observed reading and writing in the second lesson. The fourth and final stage involved *synthesising and generalising* from across the 75 minutes of dialogue to revisit hypotheses and theorising which were most salient from the discussion and in relation to a broader theory about teaching in ways that facilitate a child's independence, which was examined in the session introduction.

Participatory behaviours signifying an inquiry stance

Earlier I discussed moves used by the TL to lead the group's dialogue. I conclude by briefly considering two participatory behaviours which enabled teachers to maintain their inquiry and were indicative that teachers were adopting an inquiry stance (Cochran-Smith and Lytle, 2009; Wells, 1991).

Across the opportunities for descriptive data-gathering, theorising and hypothesis-building discussed in this chapter, I found that many of the talk contributions were made tentatively. In addition, teachers mostly talked about the child rather than directly referring to the teacher. Here I briefly consider those behaviours.

Tentative contributions as a way of keeping the inquiry open

Making tentative judgements and responding flexibly to a child's performance is a principle in Reading Recovery teaching (Clay, 2005). It is also a key aspect of adaptive expertise in reading teaching (Duffy *et al.,* 2009; Gallant and Schwartz, 2009; Ross and Gibson, 2010). Talking tentatively in this context fostered the inquiry in three important ways. It enabled teachers to think responsively in the moment, to maintain an openness to alternative explanations (theorising) or alternative teacher decisions (hypotheses) and to avoid overtly passing judgement on the observed teacher's actions since doing so may have shut down the inquiry.

Tentative talk as thinking responsively

Individual teachers shared partially formed ideas matching the pace of their thinking to the pace of a lesson, trailing off to a pause (e.g. Lisa – 'It was as if she monitored it and then he //') which invited other contributions. Several teachers compiled data through runs of short contributions such as the following example of sequential talk in lesson two -

> Di: You know sometimes I wonder if they think - "but I don't know that word so it can't be where but I know went so it must be went".
> Jen: That's good to be aware //
> Lisa: So she is using some of the initial information in the word //
> Bev: Now she is speeding up //
> TL: Now the pointing is really precise isn't it?
> Bev: Well not quite but it's fast.

Maintaining openness to alternative explanations

Teachers frequently invited alternative explanations using scaling language (Ruch, 2015) such as 'wondering', e.g. Jen: 'I wonder if he would have self-monitored // got that himself by monitoring'. They actively sought alternative opinions e.g. Gwen: 'I think perhaps the stories are quite long […] would she have needed to do the whole book?' Teachers also indicated uncertainty e.g. Kay: 'The actual phrasing is gone now and it is more word by word isn't it so is it the more he kind of finds the story hard, the harder it is to put it together? I don't know //.' In addition, they openly changed a point of view e.g. Zoe suggested a problem with Lily's one to one correspondence through finger-pointing early in the lesson but having watched more of Lily's reading Zoe decided that finger pointing was not interfering with the child's reading accuracy – 'Well, even though her finger was all over the place on the first word she did notice it didn't look right and she self-corrected'.

Avoiding judgement

Some individual teachers verbally acknowledged the observation as a snapshot within a longer sequence of lessons and deferred to the observed colleague's more detailed prior knowledge of a child if they noted a departure from Reading Recovery procedures. For example, Jen presumed Kay had a clear rationale for the departure from a convention of introducing key vocabulary before a child reads a book for the first time (Clay, 2005), Jen: 'Kay's telling her some words – instead of going through them all in the introduction. She is just telling words at the point of reading because she is confident of the words Lily knows'.

Talking directly about the child and indirectly about the teacher

A second behaviour facilitating the inquiry, was that teachers mostly referred directly to the child's responses in the lesson where the child was perceived to be having more difficulty but spoke more directly about the teacher in the lesson where the child was perceived as having more success. Kay's decisions in lesson

two were more directly described. For example, Lisa noted a positive outcome of Kay's prompting – 'With 'hungry' I think she (Kay) gave her about five seconds? She (Lily) was looking at the picture and then Kay jumped in and talked about the meaning […]'. Because Lily seemed to be both using and being supported to use effective strategies in reading and writing, it seemed easier for the group to directly describe teacher moves which translated into a child's effective processing.

In lesson one, teachers described more directly what Ben was achieving or finding difficult. However, when the talk predominantly centred on the child's acts, that still implicitly put into the frame whether the teacher's scaffolding was meeting the needs of the child. In the following example, potential for change in Alison's decision-making was implicitly discussed by talking about what Ben might need –

> I worry that <u>he is not being given the space</u> to go back and re-read it so he is generating the next word for himself and I get that […] because of <u>a lot of space was given to talk,</u> and he's had trouble articulating it for himself, but <u>with so much space for talk, there needs to be a rebalancing</u> now so he has got the space to re-read.

Di inferred that Alison's over-emphasis on talking with Ben could have contributed to his inconsistency in monitoring his writing by re-reading what he was writing. Talking mainly about the child where the child struggled more and by default, where the teacher's decision-making was not perceived to be helping, enabled the group to maintain their inquiry. Most teachers demonstrated understanding of the purpose of the talk as to keeping open their own reflections on the lessons in the light of others' perspectives. In that way, teachers were not so concerned with evaluating the observed teacher – instead they were evaluating decision-making about teacher actions and receiving and processing other viewpoints and the actions in the lessons as feedback on their own thinking. These behaviours simulated the kinds of thinking required in practice by adaptive experts.

Summary: Developing reflective inquiry in practice observation

By exploring how talking in this context developed this group of teachers' reflective inquiry into their own practice in this chapter, I extended the focus on teachers' participation in observational talk. I identified talk moves used to lead the dialogue. I found that teachers were supported in maintaining an inquiry stance by their collective understanding of the value of talking tentatively and talking about the child first and foremost. These were significant behaviours which enabled teachers to rehearse, test, agree or reject hypotheses based on authentic problems in practice. Through tentative contributions, teachers were able to bring multiple thought processes and perspectives to problems in practice; to encounter alternative explanations and to test the efficacy of alternatives through their inquiry.

From analysis of longer sections of dialogue, I proposed that inquiry unfolded naturally in four identifiable stages - *establishing, deepening, expanding* and *synthesising and generalising*. In the stage of *establishing* the inquiry, descriptive data-gathering was most prevalent. Thereafter, when *deepening* the inquiry, most of the talk involved teachers offering explanations or rationales about the data (theorising) or proposing tentative decisions (hypotheses) about decisions a teacher could make in the light of the theorising. Both of those activities align with the kinds of thinking and decision-making required in adaptive expertise (DeArment *et al.,* 2013; Darling-Hammond, 2006; Darling-Hammond and Bransford, 2005; Schwartz *et al.,* 2005; Timperley, 2011) - that is careful noticing (Lose, 2007; Ross and Gibson, 2010) and considered decision-making about the kinds of scaffolding which could offer just enough of the right kind of support (Brownfield and Wilkinson, 2018; Rodgers *et al.*, 2016) to lead to productive effort by the child.

Theorising remained tentative as the inquiry was *expanded* to test hypotheses for relevance firstly in the reciprocal nature of reading and writing for the same child and then in both reading and writing in a lesson with a different child. Finally, the terms of the inquiry were *synthesised* and *generalised* during the plenary

discussion where salient hypotheses surfaced in a form of further theorising. This stage signalled some understanding of what teachers were learning through their inquiry and that theme is extended in chapter six, where I present the outcomes of my analysis of transcripts from individual and group interviews conducted following the CPD session.

Chapter Six

INDIVIDUALS LEARNING FROM REFLECTIVE INQUIRY - 'Remaining tentative', 'talking high' and 'big ideas'

Introduction

In this chapter I discuss how teachers and the TL reflected on their learning and participation in talk in this and similar CPD events. Data are from one semi-structured group interview (GI) with the teachers immediately following the observed session and semi-structured individual interviews (II) at a later point. I referred to observation transcripts where relevant, to compare teachers' reported participation (their espoused theories) with how they participated (their theories in action/use) (Argyris, 1991). I discuss specific teacher cases in more detail to explore individual variation and responses from an individual interview with the TL to establish perceptions and intentions of leading and managing the talk.

Through the interviews, I set out to explore two broad areas relevant to my research questions – teachers' perceptions of participant roles within this CPD context and awareness of individual learning resulting from the talk while observing. The following research questions guided the final stage of the research: **Which kinds of learning do individual teachers ascribe to their participation in dialogic inquiry?** Additional questions guiding the analysis of the data were:

- Which ways of participating in talk while observing contribute to or act as barriers to learning?
- In what ways does leadership of observational dialogue support or hamper teachers' learning?
- How do teachers characterise application of their professional learning from reflective inquiry in a CPD context?

I begin by presenting and discussing my analysis of individuals' reflections on their participation. Secondly, I discuss their reported perceptions of learning.

Participation in dialogue as practice inquiry

Teachers' participation was influenced by prior experience of CPD in the context and by the ways in which the TL (Chris[20]) lead the talk in the observed and prior sessions. While two teachers were less active in the dialogue, most reported being comfortable with contributing. From analysis of the interviews, I discerned three main themes in teachers' reported participation as follows: 1) thinking quickly, thinking aloud and sharing partially formed thoughts; 2) responding to challenge and dissonance by considering alternative perspectives; and 3) tentative theorising and tolerating 'not knowing'.

Thinking quickly, thinking aloud, sharing partially formed thoughts

Dialogic inquiry linked to lesson observation offers an authentic purpose for thinking about practice as part of Reading Recovery CPD. Most participants connected the flexibility of responding which I had observed in the CPD session, to the actions required of them when teaching. However, participation was not deemed straightforward by all individuals. Despite experience with the practice, two teachers reported difficulty in making fast and partial contributions.

I explore some of those differences here. For example, Gwen, very experienced in Reading Recovery, maintained it was difficult to attend to both the lesson events and the conversation – 'I miss quite a bit if there's too much chatter going on // somebody's speaking over here and I'm trying to hear what that child is saying and I actually miss it because of the impact of the other opinions' (GI)[21]. For Gwen, individual data gathering was counterpoised to collective theorising.

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[20] A pseudonym is attributed to the leader in this chapter for ease of reference where teachers comment on what the leader says or does.
[21] GI - Group Interview; II - Individual Interview

Gwen also positioned herself as less able than others to use the language of the group, noting that one or two of the teachers were 'very good at […] using all the big words in a very textbook manner', By contrast, she said her tendency was 'just to describe' what she was seeing (II). She described her participation in the quick-fire talk in deficit terms, noting aspirations to contribute in ways she had observed in others.

In contrast, Di suggested her initial reticence in sharing ideas had been overcome by time and experience, along with trust in colleagues -

> I do feel that it (thinking on the run) is something that you come to be able to do. When I was in my (first) year's training, it makes you feel quite vulnerable to just throw your opinion out there. I guess it's been a few years that we have all been here now and […] over the years you learn that this is a safe place to explore your thinking and that it's alright to say something (Di, GI).

'Thinking quickly' and 'thinking aloud' were common descriptions of how teachers characterised their participation. They perceived that observing the lesson in real time had value in shaping their thinking 'on the run' and expressed confidence in sharing partially formed thinking – 'Sometimes you are talking on the run – you haven't quite formulated what you want to say'. (Jen GI). Gayle pointed to a reciprocal connection between talking and thinking – 'I think I need to have a chat because that stimulates the thinking // if we are watching (without talking) too long, then maybe my thinking stops (GI)'. She also noted the need for fast responding –

> […] the lesson is so quick and if you don't say it, then it will have moved on to the next bit of the lesson and the next discussion and you've missed it. You haven't got time to think about and formulate what you want to say, you've just got to say it (Gayle, GI).

Although sharing partially formed thoughts could risk being evaluated or challenged, Gayle described thinking quickly and reported confidence that colleagues would build on her partially formed proposals and help 'clear up (her) thinking' during the CPD -

> I like being able to think as a team and just splurt out what I'm thinking as it occurs to me […] behind the screen […] it's gone in an instant and you are on to something else and you kind of have to just bare all and

> say it as you are thinking of it. You don't necessarily have to finish your sentences because someone else will chip in and clear up your thinking and I like that. (Gayle, GI)

Gayle also proposed that thinking aloud and quickly, and making and questioning decisions about the observed lessons, prepared her for similar fast thinking and decision-making in her daily practice -

> […] to focus on that child and make the judgements, just snapshot judgements and raise questions […] sort of thinking aloud and that process that we go through one to one with a child [in a lesson] and if you are doing it as a group you have to talk and think quite quickly (Gayle, II).

Responding to dissonance - considering alternative perspectives

Dissonance arose when individuals articulated contrasting interpretations of an observed moment in a lesson, or when prevailing hypotheses were challenged. Teachers mostly referred to an overall level of challenge to their thinking as coming from the TL rather than peers, although I had identified points of challenge triggered by teachers within the transcripts of talk in chapter five.

Di proposed that challenge did not constrain potential for a range of opinions - 'The quality of challenge is high – Chris can be provocative without causing offence and that's become the style of the group, people are free to have their opinions and free to disagree '(Di, II). Chris reflected on a goal of leading the talk as – '[…] finding the right words to kind of push and keep it (the discussion) open' (II). Chris (II) also reported playing devil's advocate or intentionally challenging the group through questions to think again or more deeply or to justify their theorising. As established in chapter five, an increased rate of challenge correlated with deepening and expanding the inquiry.

Encountering or creating dissonance highlighted a norm of participation which was evident from the analysis discussed in chapter five. I asked teachers if they felt it was okay to disagree with others. Kay suggested it was okay '[…] because

we are couching it in terms of inquiry' (II). In this exchange (GI), Jen and Di indicated the importance of debate and preparedness to change opinions –

> Jen: […] when we are talking […] we are **building** and when we **do** say something that people don't agree with, it's not personal // it's a professional discussion and it's moving things forward. And it's not about being right or wrong but it's about **thinking**.
> Di: And I love that about it because nine times out of ten if I see something, I always massively think I'm right // but it's having the freedom to put it out there and know that I can get contradicted that I can change my mind, whereas when you are just observing a lesson you've got no-one else's opinion to share it with so I personally would just assume that everything I thought was right.

Di's self-reflection on a tendency to assume her own views were correct, highlights a role for group observational talk as a stimulus to reflect on alternatives. Lisa noted she might intentionally choose language to indicate that her contribution was tentative – 'I don't feel worried about what I say unless it's something I'm unsure about and then I might say – I'm not sure about this but //' (II). Zoe claimed – 'If I disagree with my colleagues, I will say that too' (II). Although fewer contributions from Zoe are evident in the observation transcripts, her inputs often triggered dissonance leading to further discussion.

In general, teachers suggested that encountering differing views in the CPD was a positive aspect. Perceived benefits from moments of dissonance, included developing flexibility of their responding and being prompted to reflect both on the observed lessons and in their own practice. These responses are characteristic of potential for transformative learning because they involve reflection Schőn (1991); they involve what Mezirow (1991) described as disorienting dilemmas; and they suggest an openness to what Brookfield (2005) construes as considering alternatives. Critical discourse with others is seen as an essential to transformative learning in helping individuals to examine their own assumptions (Brookfield, 2005; Cranton, 2016; Mezirow, 2012; Taylor *et al.,* 2012).

Tentative theorising and tolerating 'not knowing'

Remaining tentative rather than reaching definitive conclusions was an evident behaviour identified in the analysis in chapter five. It was also a consistently

recognised aspect in the interviews. For example, Jen reported actively taking a tentative stance to hold back from privileging her own views – 'If you stop being tentative you start telling' (II). Jen also proposed that practising tentative thinking in observational talk, was connected to remaining tentative about decisions in her teaching. Tolerating 'not knowing' or not reaching definitive conclusions was significant in how teachers managed challenge, enabled diverse views to surface and evaluated a range of alternatives.

Yet remaining tentative may have been perceived by some teachers as failing to resolve the issues of problem-solving set in train by the CPD session. A few teachers were certainly less tolerant of ambiguity. Although Bev (GI) espoused the goal to – 'remain tentative' her talk contributions suggested 'evaluation' and 'critiquing' as purposes of the observation. She proposed a correct analysis might be achieved as a result of '[…] friction - you know "are we right?" and then […] "that's it" and so we come to the conclusion'. Gwen also expressed a need for a solution - getting it right (her own understanding) and giving advice to colleagues (II).

From the perspective of the TL, Chris claimed some difficulty in managing the talk arose from dominant contributions such as Bev's. Chris noted (II) - 'You can see that the newer people coming in are more focused on what you do and in a sense its quite new for them I think hearing some of the wider elements and I find it quite hard to control the dominance'. Yet neither Bev nor Gwen were newcomers to the group and their responses may have been due to individual factors or perceptions of the role of the talk.

Zoe, who was a newer member, admitted difficulty with sharing tentative ideas. Considering her own contributions was identified as a barrier and she described pre-examining – 'you don't want to say something that is obvious to everyone else'. She explained wanting – 'to be sure that what you say is really happening because you don't want to get the whole group in the wrong direction' (II). She reported sometimes thinking first about what she wanted to say but recognised the time constraints – 'sometimes you are just bursting to say it and you will just

say it straight away or the moment is gone'. Zoe's reflection contextualised observations of her minimal participation and indicated some of the problems individuals encounter in developing an inquiry stance.

Chris (II) suggested a pattern in Zoe's contributions, of aiming for a definitive explanation and attributed that to her level of experience – '(She) gets very anxious about her own talking and I see that in the way she generates it she kind of like comes in and it's like // the whole thing has to be sorted out and that's the stage she's at'. Yet teachers participated in different ways. Not all were able to offer fast responses but Zoe's quiet observation and partial participation stimulated others' thinking. Her contributions were infrequent, usually longer than others' and less indicative of thinking on the run. Despite this, Zoe's talk also included hypotheses and opened new lines of inquiry for the group.

Chris compared Zoe's responses to personal experience of learning to lead the talk, noting that taking on a more tentative approach as TL had been a learning journey too, one which developed over time to focus on the possibilities of the collaborative inquiry –

> What she's got to learn is that actually she doesn't have to have it all sorted and I can really echo that because that's the journey that I've gone on // thinking that you have to know and then just backing away to the fact that you don't and if you don't, then they (teachers) know and so something different is created.

This reflection resonated with my analysis of Chris' participation in talk during the CPD event. How Chris chose to lead, model and facilitate tentative talk was significant – avoiding explicitly stated opinions created potential for generative learning with less emphasis on definitively 'knowing'. Some teachers referred to the importance of leadership wisdom or knowledge of the leader – '(Chris) can steer it well – I think it's the clarity and the focus that means it is done well.' (Jen, II). Yet Chris expressed confidence in the group's hypotheses and indicated that their level of experience influenced decisions to prioritise their thinking – 'I don't value my own contribution in the way that I might do with a less experienced

group'. Chris articulated a goal that the group would – 'move over and take the space to fill in in some way, to learn to soundboard each other, at the same time getting some evidence' (from the observed lessons) (II).

At two points in the interview, Chris reflected on the difficulty of holding back from talking, while arguing for the value in prioritising teachers' thinking:

~ 'Am I trying to build it in the image of what I think is happening or really giving them space to open things up? And that's the learning for me all the time'.

~ 'So it's very significant // the way in which you hold the space for people and I've learned a lot about that over time because my natural thing in the early days was to do the kind of //' (mimed "talking a lot").

Kay's comment – 'I feel like a colleague of Chris' (II) seemed to indicate some success in the strategy of remaining tentative, and accordingly creating the necessary space for individuals to develop their own thinking.

To summarise, variation existed in how teachers discerned agency to participate and those differences were not always aligned with length of experience. Yet most teachers were comfortable sharing their thinking in time with the lesson pace and in response to others. Participation was both demonstrated and described as thinking aloud and quickly, talking tentatively and considering alternative possibilities arising from dissonance. In other contexts, offering solutions and advice is often a key purpose of PD. However, in the research context, talking tentatively fostered an inquiry stance. Being comfortable with 'not knowing'; holding back from certainty while exploring alternatives and testing hypotheses constantly through data-gathering from the observations enabled teachers to maintain an inquiry stance. Active modelling of a thinking stance by the TL seemed to be significant in creating a thinking stance amongst the teachers.

The role of reflective inquiry in individual learning

The final analytic focus on interview data was directed to how teachers discerned talking and inquiry as a learning process. Most teachers perceived the primary function of the talk as learning for the observers rather than the observed teachers. Lisa (GI) drew a distinction between observation in her school – to make a judgement about the observed teacher – and observation in Reading Recovery PD – to promote learning for the observers – 'The person being observed is there to act as a way for us to learn'. Similarly, Kay (II) offered a rationale for talking while observing and the importance of her talk for her own learning –

> We are used to being observed. The purpose is to really make you reflect and take the learning further. I still get something from it. When I was training I was really quiet and now I'm the opposite. I could talk the whole way through. You are expecting teachers to really push themselves forward, to get that really strong discussion. I push myself forward so I can learn.

Establishing a learning environment with trust and respect, was seen as critical. Some teachers discussed their nervousness at teaching behind the glass but proposed a feeling of safety and trust because it was seen as an opportunity to learn –

- ~ Lisa: 'everyone's in it together '(GI)
- ~ Zoe: 'you know that they are not going to judge you – they are all just in it to help each other learn' (II)
- ~ Gayle: 'the goal and intention is moving the child on. It's not an ego trip. Not a judgement like Ofsted. The child is a motivation (for the discussion). That's what makes it safe for the teacher' (II).

To understand more about what teachers claimed to learn and its potential to transform their later teaching, I analysed teachers' interview responses, also drawing on their participatory behaviours discussed in chapters four and five. In group and individual interviews, teachers suggested a number of benefits for their individual learning including – a) developing wider case knowledge of a range of

children's learning; b) practical learning – 'what and how'; c) shaping 'big ideas', and 'talking high', to make theory-practice connections; and d) remaining objective and learning to critically reflect. I turn to discuss those here.

Developing wider case knowledge

Reading Recovery teachers work with individual children, identified through assessment as working below the expectations of other children of their age in reading and writing. Di noted – 'we see lots of different children and different difficulties and how different teachers deal with it' (II). At several points in her interview, Gayle attributed importance to seeing variation in children – 'watching someone who is doing what you do but doing it differently […] seeing lots of different children […] seeing twelve lessons over a year with different children and different difficulties'.

Zoe also noted that collaboratively observing children's lessons prompted her to review her own practice – 'You may become aware of things you are doing that need to change. You can lose the bigger picture so it makes you stop and look at the child in a different way' (II). Jen proposed that by discussing live lessons, she was constantly reviewing her own practice because – '[…] no child is the same. You do identify with the teacher in there and sometimes watching something makes it blatantly obvious to you that [something] doesn't work // and you think well that's what I do // so it's quite a humbling process' (Jen, II).

Teachers also claimed observing a range of children improved their observational skills in daily practice. Gayle explained – 'It (observing lessons) really stimulates your thinking about the child and you become more observant of what the child does – we need that in daily practice' (II). Di reported thinking about connections between her own students and other child cases observed during PL sessions. She also noted that the observations increased her motivation –

> […] hearing the back story of the child (the teachers' case introduction), what has been put in place and […] seeing the child's progress increases your motivation to focus because you can help the children you work with and help yourself to become a better teacher (II).

Some teachers indicated value from talk about practice with others facing similar challenges about the phenomena relating to problems they encountered in their own teaching. Zoe explained – 'When you have really difficult children […] you need others who understand and who you can bounce ideas off' (II). Gayle described seeing children's success in the observed lessons as motivating her to 'keep going' – '[…] feeling a huge joy when you see children behind the screen – you are gobsmacked at how brilliantly they are doing and you recognise that in your own children'.

These data indicated that teachers valued the widening of their case knowledge as a way of extending their thinking and flexibility and maintaining high expectations when teaching a child with very low literacy levels. Their comments also related to Kemmis and Smith's (2008) notions of praxis – critical reflection and action with a moral dimension. They reported that reflecting critically on the observed lessons and common dilemmas enriched and extended their practice. This is significant evidence of reported learning from CPD involving reflective inquiry, being transferred to later teaching by the participants.

Practical learning – developing routine expertise

A few teachers in the study perceived the live lesson observation as mostly a practical learning opportunity and focused on 'what' the teacher does and what procedures or materials they use in a pedagogical repertoire. For example, Gwen claimed the observations reminded her of ideas for activity in lessons –

> I come away every time […] having learned something new or been reminded of something that I have ceased to do […]. For example 'write me a word' – at the moment they come in 'write me a word' […] and I thought why do I not do that? (II)

Gwen's talk during the observations was partially in line with group inquiry about the child's demonstration of independence but predominantly she discussed practical responses. At interview, she reported liking to watch how others structured lessons and noticing mismatches with her own practice. Bev was

unavailable for interview but her responses in the lesson discussion also focused on the practical. Despite Gwen and Bev's long experience of talking while observing, their focus on the 'what' of practice was more aligned with the development of routine expertise (De Arment *et al.*, 2013; Schwartz *et al., 2005)*) compared to other teachers whose focus was on synthesising ideas from the talk as I discuss next.

'Big ideas' and 'talking high' - making theory-practice connections

Most teachers discerned the purpose of their talk as inquiry, focused on theory building. Kay labelled that kind of discussion as – 'talking high', then explained – 'Chris keeps the focus on the big picture and I get annoyed if the talk is dragging down. Occasionally the talk does slip down and it's how we as a group then get back to that deeper learning' (II). Chris described actively trying to help teachers to link descriptions of practice to broader theoretical concepts. Reflecting on discussion in lesson one about supporting the child to re-read, Chris noted –

> […] it only seemed worth it (talking about) when I tried to get them to think about it in relation to (the theme of) independence and the development for each child. The impact of that small procedure, if you thought about it strategically, would be doing things so much bigger than what we were talking about (II).

In both group and individual interviews, a number of teachers referred to what they learned as 'big ideas.' Kay reported that she remembered 'the big ideas' from a session and attempted to make changes in her practice. She offered an example – 'teacher-child relationships // I think am I being tough, too easy on that child?' In the group interview she noted – 'I love a theory, I like the deep thinking, like 'from acts to awareness'[22] (a concept discussed earlier in the session). I keep those big ideas in my head. Those big early discussions really fire me up'. Zoe indicated that as she observed live lessons she would – '[…] always take away the big principles of what I observed. We might be talking about the agency of

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[22] A theory proposed by Clay (1998) that studying observable behaviours of learners when reading and writing signalled change in their psychological processes such as perceiving, linking and decision-making - a shift from 'acts' or behaviours to understanding or 'awareness'.

the child and I think am I making sure children have agency in my lessons?' (II). Setting up the theme in the session introduction played a role in shaping these 'big ideas' but teachers also seemed to synthesise individual big ideas, relevant to their practice and stimulated by the dialogue.

Chris proposed that observing two lessons enabled the group to find contrasts or begin to generalise rather than focusing on the detail of one lesson -

> Most talk and most valuable development comes where there are two lessons because of the contrasts and you are aware that having one lesson is a compromise because in a sense it isn't extensive enough and one lesson // what it seems to do, is direct people more specifically to detail rather than getting a feel for linkage or global concerns (II).

Kay also articulated a benefit from developing inquiry across two lesson observations – 'Having two lessons is good // really important // it carries the theme. You can talk about it in one lesson and it's kind of your evidence isn't it? You test it in the second lesson' (II). In chapter five I concluded teachers had indeed developed hypotheses on the problems with re-reading by the child in lesson one, which were confirmed by seeing a child in lesson two actively re-reading to monitor her understanding.

Although discussion in the CPD was shaped by a theme (learner independence), the nature of the 'big ideas' that reportedly stayed with teachers represented a more synthesised idea of the discussions rather than simply the theme. The 'take away' or learning from a session could thus vary by individual. My analysis suggests that being able to move beyond description into theorising during the talk aided teachers to generalise towards 'big ideas' for their own practice. Individuals who played very active roles in theorising during the observations were able to articulate that role and their learning very clearly in interviews. Jen was one of those teachers and for that reason, I discuss Jen as a case of how a teacher's 'big ideas' might be formed and be used to inform their subsequent practice.

An individual case of theory-practice transfer – Jen

A more detailed analysis of Jen's interview suggests transfer from theorising to acting in practice. Jen claimed – 'It's the big ideas I take away. I make a note of them and put them on the wall back in school and I try to teach with those things in mind in the next lessons' (II). Her comment valued observation as a learning tool in these terms. Jen proposed that grappling with ideas in the talk led her to 'big ideas' which she used to inform subsequent teaching –

> The conversation stays in your head, the shift that happens in the conversation. The hard bit is we are sort of grappling at something and we don't give up. I still come away and take what I have scribbled – key things and key phrases – come back and put them up and revisit them. Sometimes you go back and think that's what I really need to focus on now. It's during the session that the light bulbs come on and then I go back (to teaching) and I want to put that into practice. (II)

The idea that the 'conversation stays in your head' suggests something of the range of alternatives from the group's examination of decision-making stayed with Jen, along with hypotheses that she or the group developed while observing.

Jen was responsible for many contributions of theorising. Returning to track her individual contributions in lesson one offered further insight into her thinking. She assembled data by directing attention to acts of the child and teacher. She theorised in different ways about what she was seeing. Though awareness of her own articulated understanding and by responding to others, she synthesised her individual understanding into hypotheses about pace of processing. She also reflected on how a teacher's decision-making could help or hamper a child's learning. In the post lesson discussion, Jen articulated her own 'big idea' of learning from the observation as thinking about closer observation of the child as feedback to the teacher which could lead to contingent decisions about where and when to support and prompt -

> I think that looking at both lessons, looking at how the teachers teach from the child, interact with each other and how they react to the child noticing or not noticing or re-reading // it's that relationship that you build as the lessons go on and knowing when you step back and when you get back in and knowing when to say something. It's just // seeing

how the child takes that on, thinking this is where I have to act, this is where I have to make a decision (Jen, session plenary).

Her comment summarised personal theorising and encapsulated a generalised 'big idea' which had developed from the group's discussion about support and scaffolding for a child's learning. Jen's capacity to synthesise patterns of action in the lesson and theorise about those patterns in the ways demonstrated above, is in my terms, a sign of a critically reflective stance to pedagogy.

Remaining objective and learning to critically reflect

The relevance of reflection to the development of an inquiry stance was the final theme from analysis of the interview data. Participating in reflective inquiry can contribute to individuals' reflection on practice by maintaining their objectivity about individual children's learning. Jen noted that – 'Working with a child day in day out, the objectivity can go' (II). In the group interview, Jen had also discussed the role of dialogue in reflecting on and evaluating her own practice –

> Every child we see is different and no child I have seen here (at PL) is the same as a child I have taught […] you have to keep thinking. You work with these children every day and you have go from teaching one child who works a certain way to another child and you have to have that flexibility […] to be thinking and changing and this (the observational discussion) supports that […]. It sharpens you up and keeps you questioning yourself. It's about reflecting and re-evaluating all the time and that's what you have to do when you are teaching every day, […] and when we are here (at the PL), this is where that thinking is supported. Jen (GI)

Like Jen, three other teachers indicated that listening to others "talking high" deepened their own reflection on practice. Di proposed that as she observed she would often think – 'I see the way they are working with the language structure and I think that is something that I can do' (II). Being aware of what others were saying also triggered reflection e.g. Gayle indicated that her own talk about the observed lessons might be significant in prompting her to self-evaluate – '[…] am I doing these things that I'm observing that are good? Am I not? What do I need

to do? […] it just gets me to question that more'. Kay described a connection between observing the practice and her reflection about change in practice –

> It's the theory into practice and it's all meshing together. You've got the high-level thinking and you've got the practice and then there is something about seeing that together with your theory that sort of convinces you that // yeah // this is going to make a difference (II).

Gayle proposed the talk stimulated her thinking and raised questions and that while watching a lesson, she reflected on and made connections with children she was teaching –

> I have two things going on in my head – one is the child that I am watching behind the screen and I think I have a parallel thing that is going on in my head that is about what is happening at that moment with any of the children that I work with (Gayle II).

Thus, Kay and Gayle articulated the purpose of observational inquiry as a personal reflective process or self-evaluation. For instance, Gayle admitted it was possible to – 'get a bit sloppy' with her teaching over time and that the observations served to – 'wake me up' (II).

It was evident that dialogue enabled at least some teachers to articulate and bring to the fore, thoughts that would normally come automatically during their own teaching without further reflection or action. Through collaborative dialogue, their thoughts were expressed, and their interpretations challenged, both by others and self. Talk while observing modelled the reflective, meta-cognitive thinking processes required of teachers in practice. Hearing others think aloud can thus aid development of an individual's metacognition about pedagogy. Teachers' reflections also resonated with the metacognitive component Wells (1999) attributed to dialogic inquiry – 'through reflecting on what is being or has been constructed, and on the tools and practices in the involved in the process' (ibid: 124).

Individual participatory differences were aligned with differing perceptions of learning. For instance, those teachers less inclined towards tentative, theorising talk also tended to suggest more definite practical learning goals for observing

i.e. to develop teachers' routine expertise. Teachers who contributed tentatively to the talk and actively theorised about both conceptual and practical aspects seemed to reflect at a more generalised level about implications for practice. Teachers reported that the presence of the child was a significant motivator for authentic thinking and problem-solving.

Taken as a whole these comments suggest that an individual's 'big ideas' may be provoked by what is most pertinent to that particular teacher in that moment, or relate to a problem in their own practice, or act as a prompt to reflection based on recognition of what looks like an unhelpful practice that may be similar to their own. From these reflections, it was apparent that teachers can be encouraged to make changes in their practice by observing and reflecting through dialogue on how theoretical principles play out in practice in authentic lesson contexts.

Chapter summary: Individuals learning from reflective inquiry

Analysis of interview data enabled me to draw some conclusions about how individual teachers perceived their participation and learning through collaborative inquiry. Simultaneous observation and discussion of practice in Reading Recovery CPD is a social practice with potential to generate inquiry and reflection on practice. It also proves difficult for some participants.

Teachers identified several learning outcomes. Seeing and engaging in thoughtful dialogue based on authentic examples of practice increased teachers' motivation to make changes in their practice. Such motivation is proposed as an essential factor by Opfer and Peddar (2011). In line with Schmitt *et al.'s* (2005) suggestion, teachers were also increasing their case knowledge of individual children with literacy difficulties, including in Ben's instance the kind of tough cases that Ward *et al.* (2018) propose to be significant to adaptive expertise. Teachers proposed that such case knowledge prepared them to react to individual children rather than following programmed teaching moves. Building or

refining a practical repertoire was discerned as important by a few teachers, and those teachers talk during the CPD mostly focused on practical responses. This suggests a challenge for the Reading Recovery context to consider whether teachers have sufficient preparation for reflective inquiry through talk and whether some teachers' responses are more influenced by frames they bring to the context from other forms of observation in school.

Nevertheless, most teachers perceived the value of the activity lay in terms of the observers' inquiry and learning. Those teachers reported learning at a conceptual, or 'big idea' level which was generative for future decision-making in practice. They claimed to be able to synthesise instances of a child's responses across a lesson, discuss patterns of data from child/teacher interactions and reflect on their own practice. Teachers who discerned the activity in those terms reported making general rather than specific changes in their subsequent practice as a result of reflection stimulated by the talk.

Overall the analysis indicates that learning from observation and dialogue was shaped by teachers' diverse experience, their prior knowledge of theory and hypotheses developed through their collaborative inquiry. Some teachers pursued individual lines of inquiry. Ways in which the TL conceived a role in leading the talk were significant in affording learning agency to teachers. The focus on 'talking high', which teachers perceived as important, was fostered deliberately by the TL who discerned a role in prompting teachers to consider theory and challenging them to justify hypotheses. The TL modelled a thinking stance and proposed value in the group being able to develop their discussion as a way of learning from the observations.

In the following chapter, I synthesise my findings and consider implications for practice in both the field of Reading Recovery and in the wider context of teacher learning.

Chapter Seven

CONCLUSIONS – TEACHER DIALOGUE AS A TOOL FOR REFLECTIVE INQUIRY IN CPD

Introduction

The central problem addressed by this study concerns teachers' talk, and its role in reflective inquiry during CPD. Talk about practice is often directed towards school and system improvement goals (Datnow and Parks, 2019; Desimone, 2018; Earl 2008; Lai and McNaughton, 2013) rather than concerns from individuals' practice (Opfer and Peddar, 2011). Teachers' talk was not an evident focus in the research into CPD (Van Lare and Brazer, 2013). However PD contexts which harness teachers' talk have the potential to create what Roskos and Bain (2010) characterise as intellectual engagement and models of thoughtfulness; what Harpaz and Lefstein (2000) refer to in their research into classroom talk as communities of thinking; and what Wells (2001) calls knowledge-building dialogue, dialogic inquiry and the mediation of meaning that underpins learning and thinking (Wells, 2007).

The main research questions guiding this study were:

- **In what ways does talking while observing lessons, offer potential for teachers' learning within a CPD context?**
- **In what ways does teachers' talking while observing develop reflective inquiry?**
- **Which kinds of learning do individual teachers ascribe to their participation in dialogic inquiry?**

Through three layers of analysis I have discussed how specialist reading teachers conducted reflective practice inquiry. In chapter four, I outlined talk topics across a CPD event, establishing the relevance of descriptive and theorising talk. In chapter five, I mapped dialogic relationships using a deeper analysis of longer

sequences of talk; identified stages within the reflective inquiry; and explained how descriptive and theorising talk shaped hypotheses. I also discussed moves used to lead dialogue and some teacher behaviours which enabled an inquiry stance.   In chapter six, I reviewed the research problem from the perspective of the participants, drawing on group and individual interview data to discuss teachers' reported learning.

In this chapter, I synthesise the analysis. Firstly, I summarise the key findings. Next I discuss a figure which sets out my interpretation of RRTs' talk in the context of CPD. Then I discuss overall themes in the findings before considering some implications and limitations of this study.

Key findings

1. Teachers' talk about practice can act as reflective inquiry under certain conditions. These include:
    a. Leading dialogue in ways that maintain a clear focus and provide challenge whilst leaving space for teachers to collaboratively construct understanding.
    b. That participating teachers understand their role in the dialogue as co-constructing, talking tentatively and responding productively to dissonance.
    c. Keeping the inquiry open by focusing discussion on what children are doing and what scaffolding they need as a way of considering the effectiveness of teacher decision-making.
    d. Attending to whether dialogue enables teachers to collaboratively establish, deepen, expand and to generalise from their inquiry as well as focusing on individual concerns, to impact their practice.
    e. Allowing for dissonance, since challenge from a leader and the surfacing of different points of view is essential in deepening the inquiry.

f. Teachers can reflect on their own thinking by having to articulate it and by hearing other explanations and rationales.

2. Reflective inquiry through dialogue, in the terms identified here, certainly has the potential to develop adaptive expertise (Schwartz *et al.,* 2005) by deepening teachers' professional knowledge and honing their decision-making skills. Adaptive expertise can be developed by collaboratively examining decision-making about scaffolding, testing hypotheses, hearing the rationales of others and debating alternative viewpoints from a critical standpoint based on what would best support a child. However, developing routine expertise may remain important even to experienced teachers.

3. Authentic focuses on practice are essential for transformative learning developed from reflective inquiry through dialogue. Where theory and practice come together in meaningful ways, teachers are motivated to solve the problems from practice in PD which involves them in reflecting-on-action (Schőn, 1991). Rehearsing decision-making by reflecting-in-action (ibid) enables teachers to form generalised ideas which trigger evaluation in their own practice.

The investigation of reflective inquiry through talk in CPD

Figure four represents key elements and relationships in the contribution to knowledge in the field developed through this study in my professional context of Reading Recovery PD. These aspects can also be generalised to other CPD contexts. I present the figure below and then discuss the aspects and relationships it represents.

Figure 4: Mapping the path of reflective dialogic inquiry

Individual variation

A Session introduction:

Constructing a theme

Assembling what we know – theory, pedagogical processes, experience of practice

B Case introductions:

Problems in practice framed by the teacher

Adding to what we know

Individual inquiry

Co-constructed inquiry

C Lesson observation:

Examining what we know

a. Descriptive data-gathering
b. Theorising
c. Developing and testing hypotheses

Stages of inquiry:

1. Establishing
2. Deepening
3. Expanding

D Plenary:

Reframing what we know

Stage of inquiry:

4. Synthesising the inquiry and generalising from it

Co-reflection with observed teachers

Individual reflection

E Transfer to practice:

Using what we know

4. Synthesising the inquiry and generalising from it

'Big ideas'

Individual learning

Leading inquiry:

Modelling a thinking stance

Challenging

Facilitating dialogue – prompting to observe & explain, marking, revoicing, tracking the inquiry, withdrawal, silence

Teacher behaviours keeping the inquiry open:

Thinking aloud
Co-constructing
Talking tentatively
Focusing on the child
Responding to dissonance

The continuous nature of the PD determined that participatory norms were already established. The session introduction (A) directed teachers' discussion towards a theme to frame the observation. Case introductions (B) contributed authentic problems in practice through which the theme could be explored. Dialogue during the observations (C) referenced both the lesson activity and the theme, with recursive references to the case introductions. In the plenary (D) salient ideas from the dialogue were revisited.

Both individual and collective responding is highlighted. In chapter two I argued that individuals' dispositions and practice dilemmas can be overlooked in CPD. Here, individual knowledge and experience of practice were valued and drawn upon comprehensively in the session introduction (A). The authentic problems in practice of two teachers were foregrounded in the session through case introductions (B) of two children with literacy difficulties. The case introductions and lessons were important mediational tools (Orland-Barak and Maskit, 2017) for inquiry. In other PD contexts, video-recorded lessons, notes from observation of practice or artefacts such as work samples might be used to mediate teachers' learning. However, the literature discussed in chapter two indicated that most research in the field to date has explored structures for using such tools, rather than how teachers talked about practice.

Teachers followed individual and collective lines of inquiry during the reflective dialogue about the observed lessons (C). Teachers, not the leader determined how the dialogue was synthesised in the plenary session (D) by sharing some of their theorising and hypotheses. From the plenary discussion and interviews, I found individuals generalised from the discussion to form 'big ideas' (E) relevant to reflecting on their own practice.

Whilst individuals had agency within the dialogue, the reflective inquiry was co-constructed. Descriptions, theorising and hypotheses contributed to an ongoing debate on the topic of maximising the independence of a child, and consequently what scaffolding could be beneficial. Thus, knowledge was constructed in dialogue through the four sections of the event – beginning with existing

understanding (*what we know*) in A (Figure 4); *adding to what we know* (B) by articulating new problems from practice; *examining what we know* through the lesson observation dialogue (C); *reframing what we know* in the session plenary (D); and *using what we know* (E) as individuals generalised from the dialogue to consider focuses for their subsequent teaching of similar children.

I have identified four aspects of talk in this context which could be transferable to other contexts seeking to explore how dialogue can mediate teacher learning – types of talk within the dialogue; factors influencing the deepening of inquiry; teacher behaviours which indicate an inquiry stance, including how they respond to the dissonance necessary to reflective inquiry; and the importance of leadership of the dialogue. In addition, these findings offer the Reading Recovery field greater insight into an established but under-researched practice. I also discuss tentative conclusions from study about the role of reflective inquiry in transforming teachers' practice.

Reflective dialogic talk – describing, theorising and hypothesising

Much literature about CPD concludes collaboration and therefore dialogue is beneficial to teacher learning but research has focused less on how talk functions in PLCs. Dialogic talk patterns were evident throughout the CPD event according to principles derived for classroom talk (Alexander, 2006; Lefstein, 2010; Mercer, 2000; Nystrand, 1997). From this study of adults' dialogue, I have identified features of what I have termed reflective inquiry through dialogue. Three main types of talk enabled teachers to develop a reflective group inquiry while observing two lessons in real time during the CPD - a) *describing* to gather data from the lessons, b) *theorising* to construct multiple explanations or interpretations and c) generating *hypotheses* which could be tested and refined by further observation and teachers' knowledge of theory and pedagogy (Figure 4).

Descriptive talk, or data-gathering (a) (Figure 4*)* occurred as teachers noticed single acts or patterns of response in what the teacher or child was doing and/or

the interaction between the two. Giving time to articulating 'noticing' is in line with Ross and Gibson's (2010) claims that expert teachers notice significantly more detail in observed lessons. Thus, data-gathering had two benefits – underpinning the inquiry and honing teachers' 'noticing' of child responses; and assembling verifiable data about the lesson. This contrasted with use of description in many PD contexts, e.g. to outline lesson procedures or report on past lessons. Here, teachers noticed and described acts by both teacher and child and through description they identified patterns of child behaviour, and teacher response to scaffold the child's learning. However descriptive talk alone is insufficient to inquiry. Significantly, this study identified interaction between theorising and developing hypotheses.

Theorising (b) involved teachers in attaching meaning to single events or patterns in the lessons and offering explanations or rationales. The flexibility required was highlighted because the talk followed the pace of unfolding lesson events. A critical stance was also evident as teachers considered multiple explanations and strengthened or changed their rationales in response to further descriptive data from the lessons. These behaviours are significant indications of rehearsal for making adaptions in practice as an aspect of developing adaptive expertise (De Arment *et al.*, 2013; Schwartz *et al.*, 2005; Sherin *et al.*, 2011).

Hypotheses (c) were formed after sequences of data-gathering and theorising. Different hypotheses were contributed, and different teachers formed them. Hypotheses were tested and either strengthened or abandoned after further evidence. Gheradi (2012) uses a metaphor of a medical diagnosis to describe this kind of thinking as 'a negotiated process of confirmation, reformulation and elaboration' (ibid: 108) and proposes that the 'interactive practice of mutual checking and questioning' relates to 'the development of a reflective capacity within a community of practice' (ibid: 119). Whilst a considerable body of research has explored classroom dialogue, the dynamics and purposes of teachers' dialogue are different and have had minimal research attention. The analysis in this study attributes importance to dialogic interaction between

describing, reasoning/explaining and forming/testing hypotheses. This lens is transferable to exploration of teacher talk in CPD contexts more generally.

Factors influencing the deepening of reflective inquiry

I identified four stages (Table 4) within the reflective inquiry. However, I caution against perceiving them as a structure which could then become imposed unhelpfully on collaborative PD. In this study, noting the stages helped me to establish how the inquiry was developed and deepened and how participation in it enabled teachers to form some generalised ideas that could impact their later practice. The inquiry stages were:

1. Establishing
2. Deepening
3. Expanding
4. Synthesising and generalising

The stages occurred naturally within the dialogue. *Establishing the inquiry* (1 Figure 4) mostly involved descriptive data-gathering by describing acts by both the teacher and the child. Description was initiated by the observed teachers' case descriptions and in that way their voices were included in the discussion.

Whilst descriptive talk was prevalent in establishing the inquiry, a move to *deepening the inquiry* (2) was signalled by increased theorising with a parallel increase in instances of challenge from the TL. Significantly, the debate in this stage of the inquiry enabled the group to construct several hypotheses about how to scaffold the learning more productively. In the study context, teachers theorised about scaffolding children's learning and were challenged to justify or refine their thinking. Indications that the inquiry was being *expanded* (3) included the testing of hypotheses formed about a child's reading when the child was writing and when a second child was observed.

In the final stage of *synthesising and generalising* the inquiry (4), some themes from the dialogue were revisited and teachers elected to discuss just some of

their hypotheses about how to refine scaffolding of the observed children's learning. Several participants characterised their learning as one or two 'big ideas' that could be generalised to their own subsequent practice. Perception of the big ideas of students' understanding is proposed as important in guiding teacher decision-making according to Ross and Gibson (2010). This study contributes understanding on how teachers achieve that goal.

Thus, reflective inquiry in this context began with setting a lens for observation by revising pedagogical understanding and posing authentic problems in practice through two cases of child learning. Description of the interaction of teacher and child generated further data which led to the generation of several hypotheses which were then tested through further dialogic observation. Hypotheses deemed most generative for the child's learning surfaced for further discussion in the plenary but what teachers learned from the reflective inquiry could differ according to how individuals generalised from the dialogue in relation to self-review of their own practice.

Next, I discuss the participatory behaviours which enabled the reflective inquiry.

Participatory behaviours which foster reflective inquiry

Four behaviours fostered teachers' reflective inquiry. These were approaching the task as co-construction, talking tentatively, focusing talk on the child and responding productively to dissonance.

Co-constructing meaning - 'If you don't say it the time is gone' (Zoe)

Most teachers understood participation as thinking aloud and thinking quickly and some also identified this as rehearsing what they needed to do in practice. They responded others' ideas in spontaneous turn-taking; they perceived agency to contribute and to propose contradictory explanations; and they changed their viewpoints based on listening to alternatives, or in response to new data from the

lessons. A key finding was that teachers recognised what they said was contingent and could change over the period of observation; and multiple interpretations were held in tension during the inquiry. Wegerif (2008) proposes such flexibility characterises children's exploratory talk through group members' willingness to 'change their minds, reflectively criticise ideas they themselves put forward and admit lack of understanding (ibid: 356). These behaviours were essential to developing a reflective inquiry amongst adults as the teachers worked to collaboratively construct meaning and to do so from a critical standpoint as suggested by Lefstein (2010).

'You need to be tentative or you stop listening and start telling' (Jen II)

Being tentative enabled the group to maintain the inquiry. Tentative hypotheses enabled the group to consider a range of alternatives rather than fixing on the first hypothesis and moving quickly to advice-forming. Thus, the strength of individual hypotheses was evaluated by considering new data from the lessons and/or through debate within the dialogue. Talk in the plenary continued in a tentative vein, with only minor direct feedback to the observed teachers. It was apparent that the reflective dialogue was mainly a learning opportunity for observers. However the observed teachers were involved in the plenary and had agency to consider what they could generalise to their own practice.

Talking tentatively not only facilitated the inquiry, it was recognised by a number of teachers as a rehearsal space for the flexibility of thinking required of adaptive experts, to balance innovation with efficiency in practice as proposed by Schwartz *et al.* (2005). Keeping contributions tentative was one way that an inquiry stance (Cochran-Smith and Lytle, 2009) was maintained. Some individual differences were evident - whilst most teachers reported valuing tentative theorising and hypotheses, two discerned the task as finding solutions and giving advice.

Responding to dissonance - 'We might disagree and we might have a little bit of friction' (Bev)

Responding productively to dissonance (Festinger, 1962) was an important behaviour. Dissonance was found by Lefstein *et al.,* (2017) to inhibit teachers' dialogue and may be intentionally avoided according to Vangrieken *et al.*'s (2017) review. Here, dissonance was intentionally created by challenge from the TL and also occurred naturally when teachers noticed new or contradictory lesson events. Further dissonance arose when theorising surfaced contrasting views. Dissonance was embraced and teachers were prepared to revisit their hypotheses as a result. Brookfield (2005) proposes this capacity to consider alternatives is key to critical reflection. Teachers' willingness to consider multiple opinions about alternative courses of action was perceived as both acceptable and necessary to learning in this context.

How talk was enacted resonates with Wegerif's (2013) description of a 'dialogic space' where different perspectives are held simultaneously in the dialogue and where tension between perspectives opens the space for making meaning (ibid). Creating a dialogic space could infer endless possible conclusions including unhelpful ones. However, I found that through a progression of stages of *establishing*, *deepening* and *expanding* then *generalising*, teachers had agency for individual conclusions about what could make a difference in their daily practice. Eraut (2002) suggests little is understood about what teachers learn from PD. This study found that focusing on what teachers talk about in PD, was indicative of their learning.

'Seeing yourself with that child' (Jen) 'The child as the crux of the learning' (Gayle)

Teaching struggling readers was the daily work of teachers in this study. By closely observing a child and testing possible decisions through the dialogue with colleagues, these practitioners were exercising the fast, on-the-run thinking needed in their practice as suggested by Schmitt *et al.* (2005) as a key goal for

the activity. Hattie and Timperley (2007) suggest that teacher awareness of and response to feedback from the child as part of the process of shaping learning is important. Close observation of the child is also suggested by McNaughton (2018) as a way of more closely matching prompts and scaffolding to the child's needs.

Talking mostly about the child's responses in the lesson where the child had more difficulty, was a strategy that enabled the inquiry to continue while also putting the teacher's decision-making into the frame. The inquiry was strongest in that lesson. Both the child's difficulties and the teacher's decisions about scaffolding were productive in creating authentic problems for discussion. Talking mainly about the child allowed the teachers to simulate decision-making and to hear responses from others about their ideas about decision-making without overtly evaluating the teacher.

Along with teacher behaviours, an essential role for leadership of the dialogue was apparent.

Leading reflective inquiry – 'It's very significant [...] the way in which you hold the space for people' (TL)

The TL's role in shaping the dialogue as reflective inquiry was significant. Several functions were evident and though these were identified in a Reading Recovery context, they are transferable to other PD contexts.

The TL modelled a thinking stance and operated as a co-thinker, affording teachers agency for talk in pairs and small groups and the whole group; using questions to stimulate discussion; prompting for contributions and creating space for teachers' problem-solving by sometimes remaining silent. The TL used facilitating moves but the most significant moves prompted teachers to explain; observe more closely, or elaborate on their theories and hypotheses. Modelling tentative thinking throughout the event was one way the TL kept open the space for multiple perspectives and problem-solving from the group.

Modelling a thinking stance and providing a level of challenge, were confirmed by the TL as intentional behaviours with confidence that the group could develop their thinking through the talk. The teachers also commented on the critical role for a TL to challenge their thinking, keep the discussion on track and to maintain what they called 'talking high' and what I termed theorising and hypothesis-building.

The inquiry was deepened when the TL created tension (Lefstein, 2010) or dissonance (Festinger, 1962) by challenging for more clearly articulated theorising from teachers. Challenge and dissonance was significant to the learning environment. Without it, the group's talk may have fallen into norming of responses. Dissonance kept the inquiry functioning and framed an inquiry stance by signalling that more alternatives could be explored.

As such, the TL's role was significant in creating potential for transformative learning (Cranton, 2016) by requiring teachers to revise understanding or newly interpret meanings to guide their further understanding and action (Mezirow, 2012; Cranton, 2017; Taylor and Cranton, 2012). It can be problematic for individuals to respond to their potentially unconscious personal perceptions and biases (Fenwick, 2000), to reflect in action (Schőn, 1991) and to 'imagine alternatives which require breaking with existing patterns of thought and action' (Brookfield, 1987:117). The TL played a significant role in lifting the dialogue and enabling teachers to reflect on their practice. This strategy was not successful with all teachers, but most described how talking prompted their reflection and synthesis of 'big ideas' about change in their subsequent practice.

These findings of how leaders can facilitate collaborative talk may add to existing knowledge in the field. Creating challenge and managing dissonance is essential to transforming teacher learning and this study indicates was in which a leader can do so. Acting as a co-thinker rather than an expert created potential for dialogic inquiry as knowledge construction (Wells, 1999; 2001) rather than knowledge transmission which is frequently a feature of teacher PD.

I conclude the discussion of findings by considering indications from this study that reflective inquiry is transformative of teachers' practice.

Learning from reflective inquiry – 'For me it's the big ideas really' (Kay)

I propose that participation in reflective inquiry impacted teachers' later decision-making in practice. The lessons were unpredictable and authentic examples of daily practice of the teachers. To that end, they had to think aloud about each child's literacy processing similarly to how they do in daily practice. How teachers characterised their learning varied. It seems that even experienced teachers still focus on practical aspects to develop routine expertise with pedagogy. However, most teachers described their learning as a synthesis of the dialogic inquiry into one or more 'big ideas' which could stimulate further reflection on their own practice.

The big ideas stimulated by the dialogue developed into hypotheses about a child's learning, generating a number of possible teacher responses which were debated. Individual's ideas could be distinctly different i.e. not a compromise agreed by the group which Lefstein *et al.*, (2017) describe as synthesis or 'both/and' thinking but something arising from their own thought processes while talking, hearing perspectives of others and with their own problems of practice in mind. Discussing multiple lessons in CPD increased teachers' case knowledge, and seeing authentic lessons i.e. real children, increased teachers' motivation to improve their own practice and helped them to remain objective about individual children.

I propose reflective dialogue played a role in developing teachers' adaptive expertise as they drew on theoretical knowledge and used it to develop a fluency of understanding between instructional moves and student responses. This prepared them for what is described as contingent decision-making (Wood, 2003; Lose, 2007). Coburn (2001) notes teachers make adaptions to what is intended

by curricula and it is suggested that one way to mitigate instructional risk is to develop teachers' adaptive expertise (McNaughton, 2018). The session structure encouraged participants to consider the instructional risk of teacher scaffolding, for example the risk of too much support, reducing the child's independence or too little support, making the task beyond the child (McNaughton, 2018).

The findings of this study add new insight to existing research into Reading Recovery CPD through the detailed analysis of teachers' talk and findings of how their dialogue challenges them to examine and extend their practice. Talk while observing is proposed to enable Reading Recovery teachers to build theories (Askew, 2009), become more flexible, alter their assumptions and challenge their thinking (Clay, 1997) and that they develop analytic and reflective processes through dialogue (Bodman and Smith, 2013). Gaffney and Anderson (1991) also suggest the role of leading the talk is critical. This study contributes to gaps in existing research in the Reading Recovery context by indicating how these goals can be achieved in practice. It offers greater understanding of the dynamics within reflective dialogue, effective moves in leading teachers talk and some language to use with teachers to discuss participatory goals.

By detailing how talk develops as reflective inquiry, the study also adds to a limited body of research which considers teacher talk within CPD more generally. Much of the research into collaborative CPD in the wider field has focused on collaborative designs and structures (Datnow and Parks, 2019; Stoll *et al.*, 2006; Van Lare and Brazer (2013), with a lesser focus on how talk facilitates in inquiry, for example in lesson study or video-reflection. When talk has been a focus it has been found that teachers' may use it to reinforce the status quo of practice (Dobie and Anderson, 2015) and fail to transform their viewpoints (Lefstein *et al.,* 2017) or can escalate into conflict Vangrieken *et al.,* 2017). Talking tentatively and embracing dissonance are highlighted by this study as potentially useful approaches in PD more broadly.

Alexander's contention that discussion and dialogue impacts cognition (2008) aligns with Mercer and Littleton's (2007) concept of 'interthinking' or using

language to think together as features of talk with children. These proposals have arisen from classroom talk but this study indicates they are also applicable to talk between adults. This study adds to the limited existing research into teacher dialogue. Although several hypotheses surfaced during the dialogic inquiry in this study, the observers' learning did not simply relate to those hypotheses. Teachers who described what they learned pointed to a role in the CPD for reflection on and in action (Schőn, 1991). While seeing and discussing lessons, teachers also made connections with their individual practice, reflecting on that practice more critically because of thoughts triggered by seeing the lessons and considering them in the light of the session theme but even more importantly, through constructing and debating decision-making in the lesson. Hearing their own contributions was also significant in triggering reflection.

Metacognitive processes were evident since many teachers could describe how they contributed to the dialogue, and how that impacted their learning. Wells (1999) suggests that a community of inquiry is distinct from other COPs because of this ability to reflect on the tools and processes of the talk. Mercer *et al.,* (2008) also suggests a key role for metacognition in reflecting on how the talk is used for learning. Edwards and Mercer (1987) frame this as a – 'turning around on one's own conceptions' to scrutinise what is known (ibid: 164). The reflective inquiry developed through talk had potential for transformational learning (Cranton, 2016), at least for some participants.

In this study, participants responded in ways aligned with inquiry as stance (Cochran-Smith and Lytle, 2009) or what Earl and Timperley refer to as learning conversations (Earl, 2008; Earl and Timperley, 2008a; 2008b). Many of these features also align with the centrality of inquiry in PLCs (Groundwater-Smith and Mockler, 2009) and thoughtful engagement with student learning (Datnow and Parks, 2018). Observation in CPD often focuses on what teachers do in conjunction with an expected pedagogical repertoire (Coburn and Stein, 2010). This study demonstrates that a focus on child learning can stimulate the kinds of learning conversations which Earl and Timperley (2008a) suggest are important in developing an inquiry habit of mind and can also contribute to case knowledge

which is proposed as essential by Ward *et al.* (2018). Sachs' (2011) proposal of effective PD as 'reimagining' is aspirational. However, this study has demonstrated that many of her criteria are possible in practice when the goal is learning to improve though open and trusting dialogue, where teachers are prepared to innovate, inquire, reflect based on evidence of child learning and take account of when changes make a difference to the child.

Implications of these findings for PD leaders and teacher educators

At a time when teacher PD is increasingly a macro-concern, linked to accountability and system improvement via teacher improvement, it is important to consider ways in which the design of teacher PD might account for teachers' concerns about the micro-processes in practice. Design, content, timing and process are common considerations in a macro-view of PD design with a lesser focus on how teachers talk about and inquire into their practice. Where communication is central to PD approaches, such as coaching, video-reflection, learning rounds or lesson study, a greater emphasis could be placed on the nature of the dialogue that teachers engage in and how that dialogue is led. Recommendations arising from this small-scale study, for those leading and designing teacher PD include –

- Make space for teachers to talk in meaningful ways about practice and create contexts which value teachers' practical and theoretical knowledge in genuine dialogic exchanges.
- Develop more deliberate leadership of teacher dialogue.
- Bring together multiple perspectives in dialogue linked to reflection on practice, structuring it as data-gathering integrated with theorising and hypothesising to develop authentic inquiry into practice. This would involve paying attention to talk moves and maintaining an openness to alternative decision-making by talking tentatively and embracing dissonance.

- Shift the locus of learning of experienced teachers, away from evaluating and advising the observed teacher, to instead privilege the learning of the observers.
- Examine the nature of experienced teachers' talk during PD and aim to lead it in ways that privilege the development of authentic inquiry over training or instructing.
- Be aware of individual differences in participation and learning from talk during PD.

Implications for Reading Recovery professionals

In addition, those leading Reading Recovery PD might more specifically consider the following –

- Making goals for reflective inquiry during live lesson observation more explicit to teachers.
- Using a meta-language to mark instances of data-gathering through description, theorising explanations and hypothesis-building in the talk since these ways of talking mirror the kind of thinking in practice which signifies the development of adaptive expertise. Doing so would also help teachers to better understand and develop their participation in the dialogue.
- Monitoring approaches to leading the talk and considering how the talk of experienced teachers can be led in ways that foster the development of an inquiry stance.
- Considering the observed teacher's need for feedback about their lesson and how that is balanced by the overall goal of learning by the observers.

Further research

Research into teacher dialogue is less developed compared to the large canon of research into classroom talk. Having identified some significant ways teachers

can develop reflective inquiry through dialogue in this small-scale study, I suggest a need for further study into teacher talk as a mediational tool of reflective inquiry in CPD. Researchers might specifically focus on dynamics within teacher dialogue and how it is led within existing collaborative inquiry-focused PD designs such as video-reflection and lesson study. Having found and named dialogic structures, leadership moves and participatory behaviours in one context of Reading Recovery, this study has added to the limited research about the role of talk in Reading Recovery PD. Further studies could extend and test the findings of this case on a larger scale. Reading Recovery practitioners might also carry out action research in their own contexts to explore ways in which dialogue is developed and led with the aim of continuing to improve the potential of dialogue for reflective inquiry.

Reflections on the research process and its limitations

I chose a flexible research design to explore my research questions and used grounded theory methods of analysis of a case of professional learning. Flexible designs enable researchers to develop a study in response to what is learned along the way about the idea which forms the research problem (Robson, 2011). A disadvantage may be that the theoretical framework is not clear from the start (ibid). I was simultaneously doing research and learning to do research. Under those circumstances, a vision of better or different decision making may occur when it is too late to change the research pathway. Looking back at the research process from this vantage point, and knowing what I do now, retrospectively I might have made different decisions about the study design. Nevertheless, I conclude that this has been a valuable study which has achieved its aims.

I wanted to explore the phenomenon of teacher talk about practice. To do that, I selected a site in my professional context where I had previously observed expert practice with participants who would be able to inform my study. The site is only partially representative of Reading Recovery PD and only partially representative of teachers' talk about practice more generally. Statistical generalisation is not

appropriate to flexible designs (Robson, 2011). I don't make claims from this case study for external generalisability but the ways in which I designed and carried out the study were consistent with aiming for 'internal generalisability within the setting studied' (Robson, 2011:160). My aim was to understand and explain what was happening in the context and to develop theoretical generalisation to support understanding of other cases or contexts (ibid).

Trustworthiness can be jeopardised by researcher bias in selecting what to attend to in the data. I attempted to mitigate this by providing a detailed presentation of data and recognising its limitations as part of my analysis. For example, I have inferred patterns of cognition from teachers' talk and I rely on their reports of learning. Not following teachers into their practice to look for connections between their espoused theories in the interviews and CPD session, and their theories in action (Argyris, 1991) was a weakness in design. However, there were logistical reasons for not doing so and had I been able to observe their practice, the research goal of developing a detailed analysis of the talk in CPD may not have been realised.

The study was set in my professional context and within a professional doctorate. One challenge was finding ways to both moderate and use my Reading Recovery insider status to interrogate and discuss data in ways that communicated to the wider field. Conversations about the analysis, with Reading Recovery outsiders including my supervisor, shaped a more critical stance. I was aware of the need to mitigate potential bias. The process has challenged me to respond to general problems in qualitative research design, methods and analysis through an apprenticeship which has equipped me to be a better researcher.

Overall the study has several strengths enabling me to contribute to the field. To conclude, this study demonstrates that studying teacher talk is an important way of establishing what teachers learn from CPD and that more research into this topic is warranted. Based on the findings, it is evident that behaviours in leading the talk are critical, along with teacher dispositions towards dialogic inquiry including a willingness to reflect in and on practice, to respond productively to

dissonance and to consider alternative hypotheses. Reflective inquiry is facilitated in a context where trust has been established and teachers collaboratively problem-solve based on authentic examples of practice. Reading Recovery professionals could consider how to more clearly articulate to teachers the goals of talk in CPD. Others involved in teacher PD could consider whether talk facilitates new learning and how to create the productive dissonance that is a sign of reflective dialogue and inquiry.

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APPENDICES

Appendix 1: Layout of the room for a typical RR CPD session
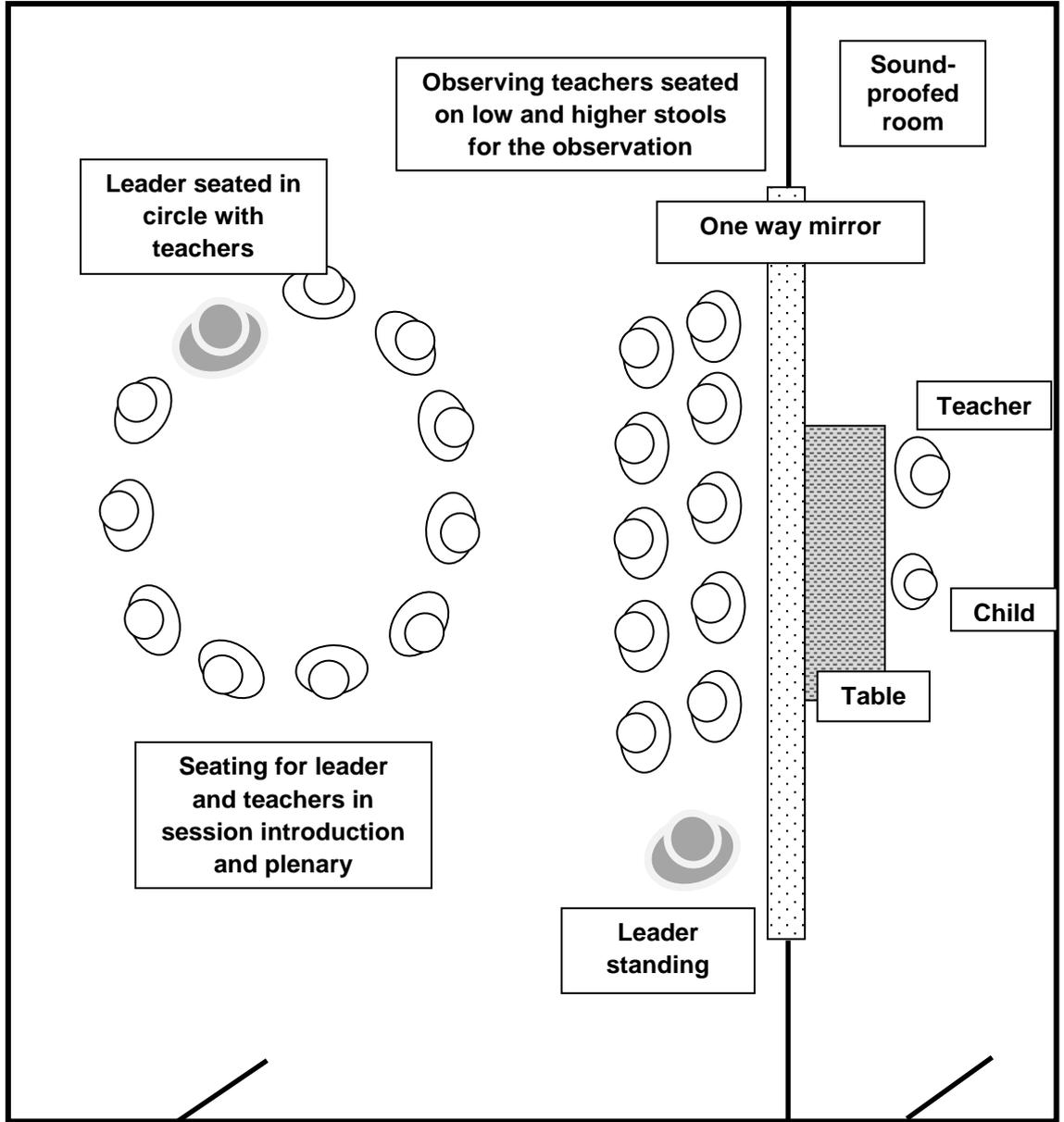
Appendix 2: Semi-structured group interview framework[23]

Can I say a big thankyou to both of you (Kay and Alison) and also to the group. It's such a privilege to be here so thank you very much for dealing with the added pressure of my presence and my tape-recorders. What I am trying to do is to try to dig into what goes on here, not so much the lesson – that gives us the fuel for thinking, but I'm really interested in the dynamics of it all. It would kind of be a reflection on the learning that you are doing from this (PD) that might be helpful to my research but might also be helpful for you to think about why you are doing this // the rationales. My first thing really is to think about this as a learning tool and what kind of role this plays in your learning. Many of you – how many years have you been doing this now? Quite a few // so you are mostly a very experienced group. I'm aware that it can become a bit 'easy' but it didn't feel easy today when I was sitting there listening to you //

- What are you taking away then // if you are taking away something into your own practice? Are you taking a way a thing that you saw someone do // or? What is the take-away?
- Interesting. What are the challenges // I was reflecting right at the beginning - there was quite a long period of silence – Chris didn't say anything, you didn't say anything, I thought this is really interesting // this quiet, because we talk about 'talking at the screen'. Can you talk a bit about what do you think was happening there?
- OK so you are talking about the way that you were offering 'bits' and that it felt comfortable to offer a bit about what you were observing // I don't know if you can say any more about that?
- If you were talking about those lessons now, would you have the same kind of conversations? What can you recall now about the lessons when you think about them?
- Could you not do it another way // because of the challenge is to get children to lessons?
- Do you think your perceptions of this as a learning activity have changed as you have become more experienced with it? Can you remember back to when you were first asked to talk at the screen and what you felt about that and whether that's different now?
- I kind of heard that tentative theory building (teacher name) you were saying "well I'm not sure what is happening here with this" and then there was some discussion and then Chris came back to you with "and what are you thinking now" and there were quite a few places where some of you were starting to build something, getting some feedback from the group, getting some feedback from behind the screen and then shifting your ideas again – is that something you are aware of // that thinking process?
- And yet some of you asked questions I noticed, of each other // kind of puzzling questions prompting other people to look, some of you were quite tentative

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[23] These are the prompts used in the focus group interview, taken from the transcript.

about what you were saying; some of you were a little more definite and then you modified your ideas that and I wonder if that is something that the group does for you in the space of talking?

- I'm also wondering what kind of challenges there are in creating that environment. How come you trust each other? How come you work like this? Is there anything else that helps you be a communicative group? What else do you know and share?

- Let's just finish with that then. So if I said to you, you can't go to PD sessions because you are experienced now would you agree? Are there the rationales for doing RR PD that you might share with other people?

  That's great – thank you all so much. I'd like to share with you as I go further on in the research and if you are interested I will share some of my preliminary analysis with you – it may be of interest to you to reflect on as you continue to develop as a group of professionals. Thank you very much and have a great weekend.

Appendix 3: Semi-structured prompts for leader interview

1. How would you describe the role of live lesson observation in Reading Recovery?
- Can you talk a bit about how you see your role in leading the talk?
- What are the challenges for you? How do you respond?
- How do you know when the discussion is going well or not so well? What are your responses at those points?
- How do you plan ahead to lead the observation?

2. What role do you think the group talk plays in individual learning from the lessons?
- Can you think about how different or similar the talk is in this group to your groups last year? How do you account for that?
- Are there differences in the types of talk in your Continuing Professional Development (CPD) and Initial Professional Development (IPD) groups?
- How do you adapt the way in which you lead the talk to account for that?
- The term 'scaffolding' is used a lot in Reading Recovery – what do you understand that to mean in terms of your role in tutoring the talk?

3. What connections are there between theory and practice in the professional development sessions you lead?
- In what ways does live lesson critique support those connections?
- What are the challenges for you in shaping teachers' knowledge?
- How do you decide what to focus on in the lesson observations?

4. How well prepared did you feel after your MA year, to lead live lesson observation and critique?
- How have you continued to learn about and shape this aspect of your professional practice and what continues to puzzle you?
- How do you explain the rationales for live lesson critique to new Reading Recovery teachers and head teachers?
- Bringing children to their lessons at the screen takes a lot of organisation - do you think it is worth making that effort? Why?
- Are there any barriers to this kind of professional learning? How do you try to overcome them?

Appendix 4: Semi-structured prompts for phone interview

Introductory script: Thank you again for agreeing to talk with me individually, about your understandings and perceptions of the role of live lesson observation in Reading Recovery.
If at any time, you need to stop that will be fine. Let's agree a time when you need to be back to your other work and activities….
Just a reminder - I will be recording the conversation so that I can get back to key points but the recording will not be shared with anyone else and will be deleted once I have finished the research. If I use what you say, I will use a pseudonym, not your real name. Are you OK to continue? If you change your mind later, that is fine, just let me know.
As you are probably aware, my research is about exploring, not looking for particular answers. I am interested in gathering a number of different ideas which can help me understand more about how it feels to learn from live lessons.
Just remind me – how many years have you been a RRT?
Always in this CPD group?
How do you describe your role to others?

Live lesson observation: How might you explain to others why RR has live lessons in PD sessions?
- How did you come to understand the role of live lessons in the PD? Your own role as a participant?
- How might the work at the screen relate to what else is happening in the PD?
- In what ways is RR PD similar or different to other kinds of PD?
- Are there any ways that the PD approach in RR could improve or change?

Participation: **In what ways do you like to participate in the lesson discussion**?
- How do you feel about talking while observing?
- Does anything feel challenging as you talk and observe?
- What might you be thinking or doing in the moments when you are not actively involved in talking in the lesson observation?
- How comfortable might you feel about disagreeing with the ideas of others or if someone disagrees with you?
- How do you perceive the role of the TL?

How does it feel to be the teacher working behind the screen?
- What do you learn from those experiences?
- How easy or difficult is it to contribute to the group on the days when you are also teaching? Why might that be?
- If you are teaching the second lesson are there any influences from what has been seen and discussed in the first lesson?

Learning: Is the live lesson approach worth the effort needed to bring in children?
- Can you think of particular ways in which the PD session affects what you do in your own teaching?
- What do you take away from the PD?
- Could anything change about the PD?
- Are you able to use your learning in your school context?
- Have you thought at all about the role of the child in teacher learning?

Anything else - that you would like to add?
Many thanks again for your support with this project. It's been really interesting to talk with you today. If there is anything else that you think of later, please feel free to email me.

Appendix 5: Memo-writing example

Advanced memo 6 - Comparing how it feels to teach behind the screen with perceived benefits of observing lessons

'I don't like the build up to teaching behind the screen but once I'm behind there I lose all of that. It's a bubble, just you and the child. You know the lesson is going to go ok but you are always a bit concerned about what the child might say or do on the day. You tune in more to what the child is doing in the lesson. It's not a performance but maybe you are extra careful in planning. I still find it useful.'(Kay) Kay's reaction seems typical of reactions of many of the teachers I've talked with and observed participating in live lesson observation. Teaching behind the glass is very exposing of practice, particularly since the teacher cannot see or hear reactions of the group. It would be natural to be anxious about personal performance. CS said it was *'still frightening, but getting to see others is like no PD I have ever had – it is integral to what we do as Reading Recovery teachers and it's what makes the difference to outcomes.'*

I asked Kay if she was ever conscious of the group while teaching? *She said* 'Occasionally but mostly I'm really focused on the child – wanting to do a good job – no one wants to be seen in a lesser light. I've had a couple of experiences where the child was a bit off and I worried what people were thinking – also really aware of the time. Every now and then you can hear people talking and you think oh they are talking, so they might not be really focusing on you' (laughter).

Most teachers I have encountered have echoed similar sentiments to those expressed here about wanting to do a good job, with the heightened sensitivity of colleagues observing. They often say they are very nervous and display signs of anxiety before and after the lesson observations. It is pertinent to reflect on whether the activity of live lesson observation is perceived as 'evaluation' by teachers, although that view isn't represented clearly in the data. It does seem that anxiety and nervousness dissipates for some teachers with greater experience of PL.

Both Jen and Zoe reported that their nervousness has dissipated over time. Zoe says that getting to know the group has reduced the nervousness and that 'You know that they are not going to judge you – they are all just in it to help each other learn. Lisa says she mostly can let go of the thought of being watched and doesn't consciously do anything different from her other lessons in school – she said 'offering a lesson is giving back to the group, not evaluation'. It is possible that teachers can tolerate the nervous feelings if the quality of learning from the experience is high and if trusting relationships are developed within the group. Gayle says she understands the goal and intention as 'moving the child on. It's not an ego trip. Not a judgement like Ofsted. The child is a motivation (for the discussion) – that's what makes it safe for the teacher'.

Some of the participant teachers have been filmed teaching Reading Recovery lessons and those lessons have been used as an additional resource in PD contexts. Zoe was one of the teachers filmed and she had also offered lessons for observation by groups of teachers or teacher leaders whom she didn't know. When she spoke about those experiences in conjunction with reflecting on nervousness at offering lessons for observation, she noted – 'when I went to the IOE and I had TLs observing me I didn't have a problem with that (nervousness) so maybe….I don't know…so maybe it's just that I'm a bit more experienced now'. I might have expected nervousness to be more salient when offering lessons for strangers rather than for colleagues within a trusting learning community. It is possible that the respect amongst the learning community

focuses teachers on doing right by the child and by their colleagues – Kemmis' ideas about phronesis as an aspect driving praxis? Whereas, when offering lessons outside the group, there is less vested interest in the learning of that group.

Observation in different forms is integral to Reading Recovery practice and professional learning and many teachers appear to feel more at ease with it over time. There seems to be some payoff in the learning from observation that enables teachers to tolerate some discomfort in being observed as typified by Kay who offered an explanation of the purposes of lesson observation and the importance of it in her own learning -

'We are used to being observed - the purpose is to really make you reflect and take the learning further. I still get something from it. When I was training I was really quiet and now I'm the opposite, I could talk the whole way through. You are expecting teachers to really push themselves forward, to get that really strong discussion. I push myself forward so I can learn. I'm so hungry for the learning. It's my twice termly injection.'

Despite feelings of anxiety linked to exposure, Kay claimed value for her own learning from the talk. She has been a RRT for many years, yet she still claims to benefit from a strong discussion which can make her reflect and take her learning further. She seems to be able to tolerate any difficult feelings about being observed because she sees the group observation and talk as worthwhile. Jen maintained that 'you can't observe behind the screen unless you are prepared to teach (behind the screen)' but 'it's important that it's done well and that you have good guidance'. She talked about trust in the group and how the observations are led – 'I definitely trust my colleagues and […] we know why we are there […] there is no room for wishi-washiness and if that comes we get straight back to the point and the focus – how do we take things forward'. It seems that quality and focus in the handling of the observational learning are central in mitigating how teachers feel about sharing lessons.

Appendix 6: initial coding process
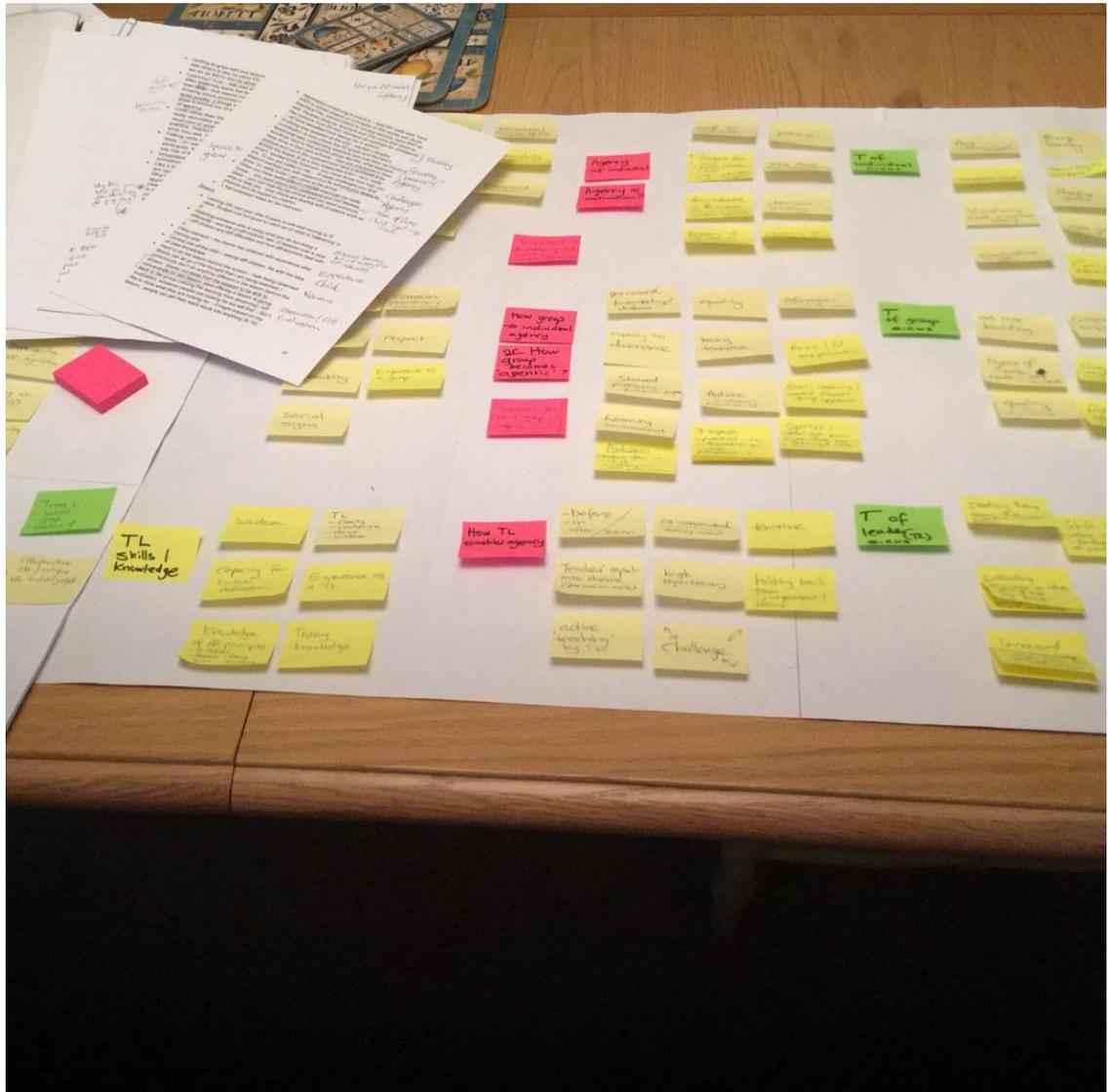
Appendix 7: Revised codes

Data categories revised June 2017
Based on all data fields (observation of the PD, group interview, TL interview, individual interviews, researcher notes/reflections)

Broad data categories	Sub-categories	Relevant 'in vivo' quotes or observations
Knowledge and the individual	Expressions of 'knowing' Practical knowledge – acts, procedures Applicative knowledge Thinking work Self-regulation Big ideas – newly formed theory Theory / practice interaction Loss of objectivity in own practice Case knowledge of child In the moment response Developing a praxis stance Perception of knowing more or less than others Authentic reasons for observing	'I'm so hungry for the learning' 'my twice termly injection'
Group talk and knowledge building	Common language Able / less able to participate Perceived hierarchy Kinds of talk - tentative talk; brewing, thinking aloud; describing; Talk as instruction Talk sequences as signs of enquiry Authentic purposes for observing Listening Silently observing Discussing critically Differing viewpoints Using the shared terminology	'we are building' 'critique shaped as enquiry' Occasionally the talk slips down and it's how we as a group get back to that deeper thinking 'disagreeing but couching it in terms of inquiry' 'Big words I don't know'
Group relationships	Shared problems Trust Mutual respect Social signs Perceived equality / lack of equality Responsibility (to group, observed teachers, child) Regulation of the group	'We lose objectivity
Leading the talk and critique	Wisdom Knowledge of the leader Offering challenge High expectations Focus / clarity Capacity for critical reflection Experience Following / diverting from guidelines for RR PD Acting as co-learner Shared moral purpose	

	Modelling meta-cognition; tentativeness; critical reflection	
Affect and the individual	Vulnerability / exposing practice Nervousness Safe to contribute Difficult to contribute Lesson as performance	'a humbling process' 'like to show best you can do' 'I don't like the build up to teaching behind the screen but once I'm behind there I lose all that. It's a bubble, just you and the child' Despite exposure lessons seen as valuable
Relationship to evaluation	Seeking / developing advice Seeking / offering approval Voluntary participation in talk Benchmark – RR S & G not NC	Holding back from judgement / telling Less helpful to individual teacher to have feedback on the lesson
Signs of mimetic learning	Practical advice Leader telling/teaching Procedure reinforcement /revisiting Seeing lessons as a demonstration Learning what not to emulate	
Perceptions / signs of agency	Levers / barriers to participation Choosing how to participate Choosing what to take away Shared control of the direction of the talk	
Signs of transformational learning in the individual	Self-reported practice shifts Big picture thinking Connections to own practice Metacognitive view of teaching Responsive to impact / lack of child progress Self-regulation Willingness to engage in this research Enhanced role within other community (own school) Self-report on changed perspectives Practical advice / experience sharing Seeing learning as ongoing Visualising teacher-self in observed lessons	'never finished learning' 'teachers are noticeable in their schools
Signs of transformational learning in the group – can the group learn?	Theory building and evidence testing Imagining alternatives / creativity Suspending own world view Quality of the discourse	
Signs of transformational learning in the leader	Seeking additional theory about live lesson observation Extending the principles of live lesson obs to other PD approaches Increased case knowledge – refining what is important to observe at the big picture level	

Appendix 8: CPD session handout

Continuing Contact for trained RR teachers
Friday 13th March 2015. 9 – 12.15

Developing Reading Independence

*"The more teachers can allow themselves to
hold back and allow the student to do his own
learning, the more effective and better judged
will be their interventions when they are
needed."*

Cliché; The Inuit have at least 100 words for snow to express
the range of ways that it occurs in the environment.

(That is a landscape central to life, living and sustenance.)

Similar multiple vocabularies describe key issues central to a
range and variety of science, arts, environmental   and
cultural concerns across the globe.

Cloud Atlas, types of sea, variations in thought processes.

How would it be if Reading Recovery professionals had
multiple descriptions or vocabularies for independence, or
states of independence, that we observe during the process
of learning to read.

Continuing Contact for trained RR teachers
Friday 13th March 2015. 9 – 12.15

Agency, self -reliance, item knowledge, habituated control, remembered, erratic, noticing, natural, limited,

letting go ……………

Try to develop the list with a view to capturing aspects of independent literacy control that we may over look.

This can then help to shape our discussion behind the screen and observation of our children from day to day.

Now think generally about observing a reading recovery lesson. How would progress and independence be aligned?

What would a good learning context be that supported the development of independent control in reading and writing?

"Faced with a puzzling pupil, teachers brainstorm possible ways to work with a child, maintaining a peak level of tentativeness and flexibility.

These are by words of Reading Recovery Instruction.

Teachers need to be tentative in their judgements and must easily and quickly change the emphases of the instruction in response to interactions with learners."

Continuing Contact for trained RR teachers
Friday 13th March 2015. 9 – 12.15

"The child's progress can be described and recorded in some detail within a constructive theory that allows for an adult to share the complex task. Gradually the teacher will become less helpful as the learner locates more of the information in print and takes on more of the processing and problem solving.

The reader shift from meaningful acts to cognitive awareness of how these things can work together, and how to use new learning from this task in another context.

Behind the Screen.

- How does the learning context provide opportunities for each child to progress their independent control in reading and writing?
- How does each child make use of the opportunities provided?

Appendix 9: Information and consent proformas

(i)   *Letter to teacher leader*

Dear

As you are aware, I am a National Leader in Reading Recovery and I work with Reading Recovery teachers and teacher leaders to help improve their literacy teaching. I am also a researcher working on a Doctorate in Education at the Institute of Education, London. The focus of my research is the case of live lesson observation and how this is used as a tool for professional learning. I am mainly interested in how teacher leaders think about and use the approach. I hope that the findings from the study will lead to a better understanding of how the approach works and how it might be shaped in the future learning of new teacher leaders or contribute to better understanding by those already in the field.

As part of my research, I would like permission to visit one of your professional development sessions with Reading Recovery teachers. I would like to observe as you lead the lesson discussions and make a voice recording of the talk by yourself and the group. The recordings I make will be transcribed into word documents which will not include your name as I will use a pseudonym for any times I need to refer to or describe a moment in the discussion which is important to refer to in my written thesis. I will also make notes about moments in the discussion which we can review to facilitate a short discussion either straight after the session or at a time convenient to you. This will form part of a semi-structured interview which I would also like to record and transcribe.

I will not be sharing the recordings with anyone apart from my supervisor but may share transcripts of the discussion as part of my written thesis where you would only be identified with a pseudonym. I will be sharing a short report on the study with all participants when it concludes and I hope that this research will add to our understanding about a central aspect of Reading Recovery professional learning.

I would be grateful if you are able to sign and return this letter if you agree to participate in the research and please contact me if you would like further information or to ask any questions. If you agree, I will be in contact soon to arrange for a visit date.

Kind regards, Helen Morris

I agree / do not agree (circle one) to participate in the observation and interview. I understand that I can change my mind by contacting the researcher up to a week before the agreed visit date.

Name: _____

Signature: _____   Date: _____

(ii)   *Letter to teachers who participate in the observed session and group interview*

Dear,

My name is Helen Morris. I am a National Leader in Reading Recovery and I work with Reading Recovery teachers and teacher leaders to help improve their literacy teaching. I am also a researcher working on a Doctorate in Education at the Institute of Education, London. As part of my research, I will be visiting the training centre which you attend for professional development. I will be observing and talking with the group of teachers and the teacher leader to find out more about how you learn from watching and discussing live lessons behind the glass screen.

On the date when I have arranged to visit the group, I will be making a voice recording of the group discussion. I will mainly be focusing on what the teacher leader and the group of teachers say as they discuss the lesson. The recordings I make will be transcribed into word documents which will not include your name as I will use pseudonyms for any times I need to refer to or describe a moment in the l discussion. I would like to ask for your permission to include your contributions during the lesson discussions and to refer in my study to relevant cycles of talk. I would also invite you to join in a short group discussion about the CPD following the session. I will not be sharing the recordings with anyone apart from my supervisor but may share transcripts of the discussion as part of my written thesis.

I will be sharing a short report on the study with all participants when it concludes and I hope that this research will add to our understanding about a central aspect of Reading Recovery professional learning. I would be grateful if you are able to sign and return this letter if you agree to participate in the research and please contact me if you would like further information or to ask any questions.

Kind regards, Helen Morris

I agree / do not agree (circle one) to have my contributions included in the research.

I understand that I can change my mind by contacting the researcher before the session

or indicating on the day of the visit.

Name: _____

Signature: _____   Date: _____

(iii)   *Letter to two teachers teaching behind the screen during the observed session*

Dear

My name is Helen Morris. I am a National Leader in Reading Recovery and I work with Reading Recovery teachers and teacher leaders to help improve their literacy teaching. I am also a researcher working on a Doctorate in Education at the Institute of Education, London. As part of my research, I will be visiting the training centre which you attend for professional development. I will be observing and talking with the group of teachers and the teacher leader

to find out more about how you learn from watching and discussing live lessons behind the glass screen.

On the date when I have arranged to visit the group, you have been invited to lead a lesson behind the screen with one of your Reading Recovery students. I will be making a voice recording of the teachers' discussion which is likely to also capture your voice as you teach the child during the lesson. I will mainly be focusing on what the teachers say as they discuss the lesson. The recordings I make will be transcribed into word documents which will not include your name as I will use pseudonyms for any times I need to refer to or describe a moment in the lesson which led to discussion by the group of teachers. You will be involved in a discussion with colleagues following the lesson as normal following the lesson.

I would like to ask for your permission to record the discussion during your lesson and to refer in my study to any vignettes of decision-making during teaching which promote discussion by your colleagues. I will not be sharing this recording with anyone apart from my supervisor but may share transcripts of the discussion as part of my written thesis.

I will be sharing a short report on the study with all participants when it concludes and I hope that this research will add to our understanding about a central aspect of Reading Recovery professional learning. I would be grateful if you are able to sign and return this letter if you agree to participate in the research and please contact me if you would like further information or to ask any questions.

Kind regards, Helen Morris

I agree / do not agree (circle one) to have my contributions included in the research.

I understand that I can change my mind by contacting the researcher before the session

or indicating on the day of the visit.

Name: _____

Signature: _____ Date: _____

(iv)   Letter to parents of child selected to have a lesson at the centre during the observed session.

Dear Parent/Carer,

My name is Helen Morris. I am a National Leader in Reading Recovery and I work with Reading Recovery teachers and teacher leaders to help improve their literacy teaching. I am also a researcher working on a Doctorate in Education at the Institute of Education, London.

In my professional role of offering support to teacher leaders, I will be visiting the training centre where your child's Reading Recovery teacher attends for professional development. I will be mainly observing and talking with the teachers and the teacher leader to find out more about how they learn from watching and discussing lessons.

On the date when I have arranged to visit the group, your child has been invited to attend the Reading Recovery centre for a lesson with their usual Reading Recovery teacher. I will be making a voice recording of the teachers' discussions which is likely to also capture your child's voice during the lesson. I will not be identifying your child in my research and will mainly be focusing on what the teachers say. The recordings I make will be transcribed into word documents which will not include your child's name or what they say.

I would like to ask for your permission to audio-record the lesson which your child has with their teacher in the Reading Recovery centre. Please discuss this with your child and indicate your response below. Please contact me if you would like further information about this research project.

Kind regards, Helen Morris

I agree / do not agree (circle one) for my child to have a lesson at the Reading Recovery Centre while the research project is taking place. I understand that I can change my mind before the planned lesson by contacting the teacher leader one week before the date of the lesson.

Child's Name   _____

Parent/Carer Signature _____   Date _____

Appendix 10: Reading Recovery guidance for CPD sessions

Institute of Education
International Literacy Centre

UCL

Planning CPD sessions
Teacher leader information

This conceptual framework can be used to plan CPD sessions with experienced continuing Reading Recovery teachers.

Think of a title
Something conceptual that links reading and writing and processing across the lesson

Work out your aims
What do you want to achieve in this session (with regard to the teachers)?
What content? What sorts of group process? Which understandings?
If you get this clear the planning is much easier as it will guide decisions of how you manage activities and talk across the session

Plan an introduction (@15 - 20 minutes)
What would help get the teachers prepared for what you want the focus for looking to be?
What sections from *Literacy Lessons Designed for Individuals* (2nd Ed)? Maybe a short activity?
How are you going to manage that to encourage the group process you are thinking about? (pairs? larger groups? The whole group?)

Shape the introduction to teaching (@10 minutes max)
Are you going to prepare your teachers to give short focused intros? If so, how? How long will you ask them to be?

Prepare the observation of teaching and critical dialogue (@ 1hr 10 with changeover)
What will you be looking for opportunities to work with, as linked to your over-arching theme?
Will you also be working for a group process (everyone speaking? Challenging each other? Linking and building ideas?) Will you prepare and rehearse main points to take to the discussion for the group? Or ask/expect them to do it?

Shape the specific discussion (feedback - shorter than with IPD - @10 - 15 minutes max)
How will you manage this? In 2s? in larger groups? The whole group? Will you feedback to each lesson? Or speak to themes across both? Or?

Prepare to lead a general discussion (@15-20 minutes)
How will you deepen understanding of your session theme? Will they investigate a section in *Literacy Lessons Designed for Individuals* (2nd Ed)? If so how will they feedback to the group?
Will they have a practical activity? How will you manage that?

Reading Recovery Europe

Appendix 11: Reading Recovery guidance - facilitating talk in PD

READING RECOVERY

Teacher leader information

**INTIAL PROFESSIONAL DEVLOPMENT (IPD) SESSIONS:
FACILITATING THE TALK**

Improving understanding of literacy processing

Fostering articulation and interaction among teachers

Try to find out what the group knows as they interact with each other - identify what their understandings are. Elicit as much as possible from the teachers. Listen carefully to what they are saying and then decide what to do. Ask yourself, where do I need to go with this group at this time? Be persistent in lifting their thinking about literacy processing. Help them all to participate fully.

Note, such teacher leader facilitation should reduce as the year progresses.

Some techniques to explore
Openers
- What are you noticing?
- How is it going?
- What's happening?
- Comments?
- Talk about this
- So... Well...
- What do you think?

Eliciting more
- Be silent (shows you are expecting more)
- Anything else?
- And...and...and...
- You are on the right track (affirming/eliciting)
- Come on...there's more (important when talking about literacy processing)
- You are not finished
- Keep building on that
- Keep going
- More?
- Mmmm.....
- You've missed something important
- Talk more about this

IPD – FACILITATING THE TALK

RRNZ
2017

Appendix 12: Example of transcription – Section of lesson one used in Table 7 (Chapter Five).

1   **TL: Can everyone hear?**
2   Positive responses. Teachers settling into position behind screen. Burble of talk
3   – feels like excitement / anticipation. One teacher is talking, comparing it to
4   'being in the theatre'.
5   TL: A big thankyou to M (TA who brought the child to the RR Centre) for
6   bringing Ben in to the centre today for this lesson. M is one of our reading
7   coaches who qualified last week so we a have a group of experts in the room
8   today. Thank you for bringing him.
9   Ben begins reading some word cards. Sounding out and slow. Prompted to do a
10   slow check. Then more confident. Ben says: "You said I wouldn't remember that
11   but I did!"
12   Kay: That's nice isn't it?[24]
13   Di: That was independent
14   Kay: He's got control of that
15   (Alison introduces first book: "How about Magpie's Baking Day?" Ben repeats
16   the title. A: "And who is your favourite character there?" B: "Jim the mouse." A:
17   "Of course, it's the mouse. 'Sit up tall when you are reading." Ben: "How do you
18   make fire?" A: "We can chat about that later shall we?")
19   Lisa: Wow a real sense of engagement – he asked how do you make fire?
20   (A: "Make the reading nice and smooth today." Ben, pointing to another on the
21   table B: "And can I read that one book". A: "Yes but let's read this one first.")
22   Lisa: He's really engaged with these books isn't he?
23   (Ben begins reading and adds expression as he builds up some meaning from
24   the text.)
25   Bev: Ah that's lovely (Ben reading expressively)
26   Kay: For him to think about the fire too, he's kind of delving in - that's such a
27   strange phrase 'who will make the fire?'
28   Lisa: He's drawing on the most interesting part and relating it to himself, what
29   he knows about it
30   (Ben is reading accurately but methodically.)
31   Lisa: Interesting that he changed his expression for the mouse when his reading
32   seems quite monotone //
33   Bev: It's lovely when he puts that intonation in //
34   (Ben continues reading and repeats a phrase where he had made an error (get
35   / go and get) after a physical prompt of the teacher pointing at the word "go".)
36   Gayle: I wonder if he would have got that himself?
37   Kay: Those are the decisions that you make – do you want the flow or do you
38   want the processing? It's quite hard isn't it?
39   (Ben continues reading - is prompted on hesitation; did that sound right? He re-
40   reads accurately and adds the mouse's voice again towards the end of the
41   page. Teachers murmur - in recognition of this aspect of prosody?)
42   TL: So we are thinking about independence // what are some of the things you
43   see going well?

---

[24] Underlined text is presented in Table 7: Establishing the inquiry

44 Gayle: He's asking questions (about the story).
45 Kay: He knows how to read little stretches of meaning together through the
46 phrasing // you can see that. So he is pulling the story along for himself.
47 Di: He's not looking for confirmation after he has sorted something out.
48 (Ben has continued to read during this discussion.)
49 TL: How would you describe what he is doing?
50 Gayle: He went back to the picture and then to the beginning of the sentence
51 then he got the word ("help") independently.
52 Bev: He's re-reading little bits to support him getting the meaning.
53 TL: OK so you notice that his initial reaction was to just come in and point to
54 anything but the prompt 'have a think' so he takes the time and can locate the
55 error. Now this is part of the learning context – how is it supporting
56 independence, or is it?
57 (Teachers observe in silence for a short time.)
58 TL: What do you think?
59 Kay: Ah so he has to read it wrong to self-monitor. The first time he read it right
60 so he has to read it wrong to self-monitor
61 Gayle: But when he read it initially she (Alison) came in quite fast and pointed //
62 it was as if **she** monitored it and then he //
63 Kay: So we are not sure yet whether he can do his own self-monitoring
64 (Alison was discussing with Ben an idea in the story about "who would help".
65 Jen: He needs to trip off a little bit more on his own //
66 Kay: Do you think? (Alison is helping Ben to rehearse how to check a word).
67 Lisa: Maybe she is doing this so that tomorrow when he reads it again she can
68 sit back and see if he notices?
69 Jen: Maybe it's about understanding that you have to "**go**" and "**get**" the milk?
70 Lisa: Yes that's quite a strange language structure
71 TL: So what has he learned how to do then after all that conversation at the end
72 of the story? What was the power of that interaction?
73 Kay: He is starting to ask her questions now. (Much laugher from the group.)
74 Because that's what you do, you ask each other questions, you know "what
75 would you do" So he has picked up that idea of conversation around the book.
76 Bev: Maybe when she was trying to get him to think about his learning // if she
77 had used the meaning more that might have helped with 'go' and 'get' // you
78 know you were saying // that might be helpful
79 TL: What might be really helpful is just keeping an eye to this idea, the nature of
80 the conversation, and what he's getting out of it because you are having
81 conversations for a purpose aren't you? (General murmurs of agreement from
82 teachers)
83 TL: And the purpose is to support?
84 Di: The meaning of the text
85 TL: Yes the meaning of the story, problem solving, self-reliance //
86 Bev: We were saying was that his idea of meaning is so strong, she set up a
87 lovely scaffold // what were you thinking and all that // if she had linked that
88 more to the meaning he might have used it more to cross-check that more with
89 the visual. We were saying it might be something she would work on later.
90 (Ben continues to read the second familiar text.)

91	Di: But it also shows that he is thinking independently because even if that bit
92	he was asking a question about isn't answered in the book, as to what the
93	pirates are doing it is showing that he is engaged with the book
94	Jen: I think he said 'Jolly Roger in a big box'
95	Kay: Yes and he slowed right down and looked at her so that is that same
96	sense of self-monitoring
97	Jen: But maybe he thinks because she doesn't pick up on it //
98	TL: So he notices something is wrong //
99	He looks to her //
100	TL: Not quite sure what, he looks to her //
101	Kay: Slowed down //
102	TL: Slows down //
103	Jen: He carries on //
104	Kay: Carries on, yep
105	(Ben stopped reading to explain that the pirate only has one leg. A: "Great, keep
106	reading and we can chat after". Ben continues to read. Pace is better.)
107	Jen: He has a very good sense of the story, really putting that (understanding)
108	together with the print
109	Kay: And the phrasing is still there isn't it – he's carrying that sense of meaning
110	into the reading. (Ben stopped and appealed to the teacher for support) That's
111	interesting isn't it?
112	Jen: What did he say? Did he say was that right?
113	Kay: "Was that right", he's thinking […] "too said big pirate" // it's that structure //
114	Jen: He thinks it's all part of the same sentence
115	TL: Is that giving you a cue into his thinking? He is saying 'Is that right?' what's
116	that showing you or telling you?
117	Jen: He's listening to himself;
118	Di: That he can't self-confirm yet, he's not able
119	TL: Ok now why might that be?
120	Jen: Because he doesn't know how it should sound. He's just starting to think it
121	doesn't sound right but he can't confirm it
122	Bev: So it relates to his language structures
123	Kay: His groups of meaning are quite small aren't they – two or three words,
124	two or three words //
125	Gayle: So if he re-read more could he confirm himself instead of asking?

Appendix 13: MARRLL course document: MA LLD: Teacher Leader
Professional Development Programme 2009-2010) (Burroughs-Lange)

<u>Teacher Leaders as Teachers of Experienced Professionals</u>

What Teacher Leaders do works!

If the ultimate test of the effectiveness of a teacher professional development programme is the raised achievement of their pupils, then demonstrably Reading Recovery teacher training is highly successful. So we might be forgiven for claiming that Teacher Leaders concomitantly must know how to provide teachers with those effective professional development opportunities. But to date, we have very few descriptions of what those effective professional developers do (Lyons, Pinnell & DeFord, 1993 is the only one of note), and not one published account of **why** it works.

But why does it work?

Clay (1998) claims that Reading Recovery is "the very opposite of a prescriptive programme". Whilst lesson components in Reading Recovery provide a common structure for teaching and learning, what occurs within each part of the lesson is individually designed, implemented and monitored by the teacher to meet each child's diverse learning needs. So how do Teacher Leaders equip teachers to provide each "superbly sequenced programme determined by the child's performance"? (Clay, 1993, p9)

Roscos and Bain writing about professional development as intellectual activity, refer us to Schön's ideas, namely that "knowing how does not mean knowing why, which is critical to the flexible and adaptive use of procedural knowledge in ill-structured situations", (1998, p90). In terms of the uniqueness of the challenges each child presents to the teacher, Reading Recovery teacher development has to empower them to act decisively in such "ill-structured situations". To prepare them for these tensions between flexibility and clarity of purpose, repeated opportunities are provided for teachers to observe and critique lessons. Teacher Leader leadership has to harness these learning opportunities to develop teachers knowing not just the 'what' and 'how' of what they do, but also, and most importantly, the 'why'.

It is reasonable, therefore to expect that Teacher Leaders also know about more than the what and how of their work with teachers but also 'why'. To help in developing our capacity to describe, theorise, reflect upon and justify what Teacher Leaders do as 'teachers of experienced professionals', a theoretical model of the tutoring process during lesson observations would seem to be a good place to start.

What does it look like when it is working?

What follows is a description of how lesson observations during inservice sessions provide the context for Teacher Leaders to 'lift' the understanding of teachers in ways that impact not only on their practice but also on their teaching and learning philosophy. The descriptive model is developed from repeated observations of experienced and effective Teacher Leaders and Trainers. If it is a valid model it should feel familiar, although perhaps not always consciously driving what you do.

Managing a 'Tutoring Event': The Teacher Leader Teaching / Teacher Learning Cycle during Lesson Observations

Additional/
Extraneous Comment

| Observational Trigger e.g. Pick on a phrase 'Sitting back' | Teacher Leader Question Or Challenge | Call for Knowledge/ Understanding | New theory/ Insights/ links | Satisfactory Outcome = 'lift' |

1   2   3   4   5

Acknowledged but allowed to 'drop through'

Theory

6
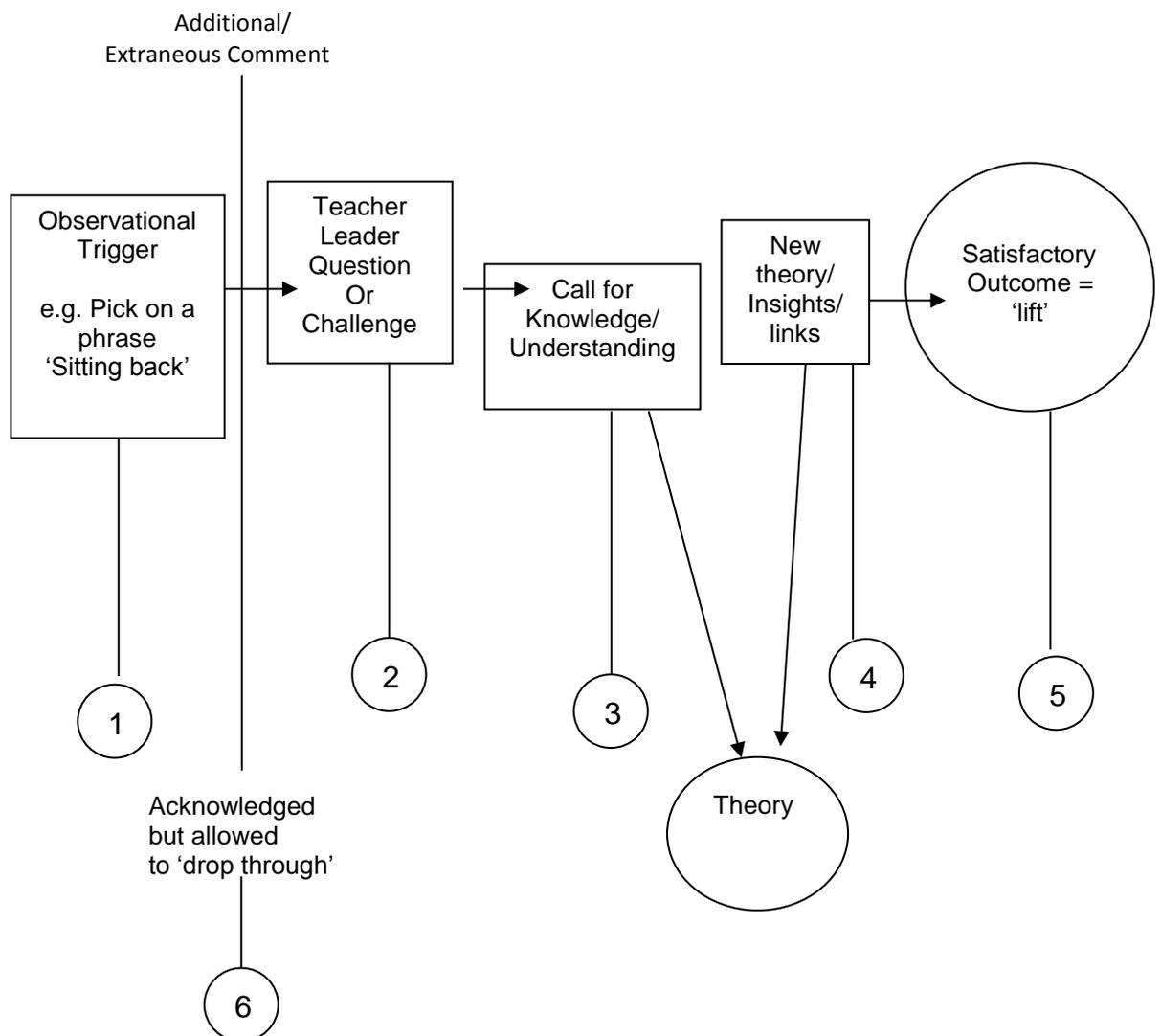
The numbered sections described below relate to the numbers on the diagram. They generally occur sequentially except item 6, which may come at any time.

1. **Triggers/Starters**

   This is the initiating comment relating to something observed. These triggers may come from a member of the teacher group which the Teacher Leader picks up or from the Teacher Leader him/herself. Examples of triggers/starters include;

- Teacher Leader (or tutee) picks on a phrase e.g. "She's sitting back";
- An evaluative comment e.g. "Oh! it was going so well!";
- Integrative comment e.g. linking an observation to a procedural point;
- Observational e.g. giving a fine grained observational description;
- Affirming e.g. implying the group needs to keep going/go further;
- Re-stating a comment possibly adding rhetorical questions;
- Gaps/pauses can present as a significant opening depending upon what went before;
- Directing observation e.g. possibly to some detail "Quick, look at the picture, did you see what she was doing?";
- Being adamant/confrontational;
- Teacher Leader directing focus e.g. from own agenda relating to evaluation of the group's developmental needs.

2. **Teacher Leader Question or Challenge**

The Teacher Leader comments in a way that signals to the group that this trigger is significant/intriguing and worth exploring. Their intervention initiates the tutoring event. Not all talk becomes a 'tutoring event' of course. Many comments may get brief attention and be allowed to close and move on, particularly where an easy consensus exists or the Teacher Leader judges the topic to be either beyond the group or relatively unimportant for them at this stage (given that it will be revisited many times as per Bruner's spiral).

3. Call for Knowledge/Understanding

The Teacher Leader shapes and monitors talk with the goal of getting the group members:

- to identify an appropriate knowledge area to which to relate what they are seeing;
- to bring to the forefront of their mind, any relevant 'bits' of that knowledge;
- to articulate, assemble and arrange those 'bits' in a cohesive way;
- to review and evaluate what they (collectively) know in the light of what they are observing;
- to reveal gaps, mismatches, inappropriate assumptions and inferences.

The Teacher Leader's role in this review and evaluation talk activity is to support ways of getting the knowledge 'out there' where it can be examined. S/he does this initially by accepting 'literal' knowledge but, in being given an opportunity to 'see' what the group knows, s/he can by reiterating and re-focussing, call for elaboration, extension

and refinement. Refinement is generally achieved through grounding the talk in theory and observational evidence.

4. New Theory/Insights

It is only through theorising about 'the practical' that transfer of knowledge into individuals' own context can be expected to occur. The theorising supported by the Teacher Leader, may relate to seeing new connections between what is already known or may include an element of 'NEWness'. The Teacher Leader may introduce a new idea/concept/theoretical explanation at this point to achieve 'lift' in the level of the group's thinking about what is being observed and the principles, of which it is but one example. When Teacher Leaders refer to "telling" the group things it is in support of this kind of 'lift' in understanding rather than 'telling' answers to initial trigger questions.

5. Satisfactory Outcome

When the Teacher Leader decides to adopt a triggering occurrence as a tutoring event, s/he, through a knowledge of the group's current understandings, already has a sense of what would constitute a 'satisfactory outcome' in terms of learning. Their management of the tutoring event is aimed at this level of outcome. Reviewing the group's knowledge within the cycle has enabled the Teacher Leader to check on his/her initial estimation of the appropriateness of this learning goal. Closure of the tutoring event will relate the new/refined insights back to the original trigger. The Teacher Leader, or group, or both, sum up succinctly what was learnt. The Teacher Leader generally re-directs the focus back to the observation and may call for further confirmation or disconfirmation of the group's conclusions as an ongoing watching brief, but which is now backgrounded in favour of the next 'tutoring event'.

6. Additional/Extraneous Comment

At any time during the tutoring cycle, members of the group may offer observations or comments relating to what they are observing. The Teacher Leader always acknowledges these contributions (with the intent of encouraging members to continue contributing!) but makes an instantaneous judgement to let the comment **'drop through'**. This judgement regards the additional comment as;

- not building on/moving on this particular tutoring cycle;
- side tracking an already identified purposive focus for talk;

At another time such a comment might have been regarded as a 'trigger' or it may now be put 'on hold' to revisit later in the lesson, (although unlikely, as the action will have moved on), or during the discussion section of the inservice session.

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An Article written by Dr S. G. Burroughs-Lange for the Networker