

Supporting the Development of Dialogue
in Children aged 4-8 Years:
The Impact of Participation
in a Professional Learning Community
on Teachers' Knowledge and Practice.

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Declaration

I hereby certify that this material, which I now submit for assessment on the programme of study leading to the award of PhD is entirely my own work, and that I have exercised reasonable care to ensure that the work is original, and does not to the best of my knowledge breach any law of copyright, and has not been taken from the work of others save and to the extent that such work has been cited and acknowledged within the text of my work.

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List of Abbreviations

Abbreviation	Explanation
ALT:	Adult Learning Theory
APPG:	All-party Parliamentary Group (UK)
A/AV:	Audio/Audio Visual
CK:	Content Knowledge
DCU:	Dubin City University
DE:	Department of Education
DEIS	Delivering Equality of Opportunity in Schools
DES:	Department of Education and Skills
DES:	Department of Education and Science
DTA:	Deductive Thematic Analysis
EYEI:	Early Years Education Focused Inspection
IRE:	Initiate-Reply-Evaluate
IRF:	Initiate-Respond-Feedback
ITA:	Inductive Thematic Analysis
MKO:	More Knowledgeable Other
NCCA:	National Council for Curriculum and Assessment
OL&C:	Oral Language and Communication
PCF:	Primary Curriculum Framework
PCK:	Pedagogical Content Knowledge
PDST:	Professional Development Service for Teachers
PL:	Professional Learning
PLC:	Professional Learning Community
PLC/CTB:	Primary Language Curriculum/Curaclam Teanga na Bunscoile (NCCA, 2015)
PLCM:	Professional Learning Community Meeting
PLS:	Plain Language Statement
PMC:	Primary Mathematics Curriculum
PRM:	Post-recording Meeting
P4C:	Philosophy for Children
REC:	Research Ethics Committee
SBR:	Shared Book Reading
SCT:	Socio-cultural Theory
TA:	Template Analysis
ZPD:	Zone of Proximal Development

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Abstract

Deirdre Walshe

Supporting the Development of Dialogue in Children aged 4-8 Years: The Impact of Participation in a Professional Learning Community on Teachers' Knowledge and Practice.

The significant contribution dialogic engagement makes to children's development is widely documented (Alexander, 2018; Wells, 2007). Its place in classroom discourse is also accepted with teachers playing a central role in supporting its advancement (Michaels & O'Connor, 2015). It is agreed that without their support, children would be unable to sustain this type of engagement. There is, however, limited information available regarding the approaches taken by teachers in lower primary classrooms in Ireland, to support the development of dialogue with and amongst their children.

This study, in its adoption of Vygotsky's (1986) socio-cultural theory of learning, sought first to identify teachers' knowledge and practice with regard to developing dialogue with and amongst their children. Secondly, it examined how participation in a professional learning community (PLC) could facilitate teachers in reflecting on and advancing their knowledge and practice in this area.

This study operated within a subjective paradigm that celebrates the complexities of human engagement. Data gathered from interviews, observations, recordings of meetings and audio/audio-visual recordings of practice served to create a case study that featured the experiences of nine teachers in two schools over the course of one academic year. A PLC was established in each school and over six cycles of engagement teachers were facilitated by the researcher in examining their knowledge and practice.

Inductive and deductive analysis of the study's data revealed that while initially teachers were unsure about how to develop dialogue amongst their children, their knowledge and practice was positively impacted by their participation in a PLC. The study's findings suggest that adopting a speculative stance assisted teachers and children in their endeavours to engage dialogically. With regard to teachers' professional learning, it appears that the facilitation available within the PLC may have been insufficient to bring about changes in practice, and it may have been the opportunity to avail of coaching that assisted participants in reflecting on and altering their practice. Recommendations arising from this study include the need for further investigation regarding the place of dialogic engagement in lower primary classrooms, and the investment in a cohort of teachers within schools who will nurture inquiry through dialogue and facilitate reflective practice.

Chapter 1

Introduction

The aim of this study is to first investigate what teachers know about supporting the development of dialogue with and amongst young children. Secondly, the study aims to explore how participation in a professional learning community (PLC) might impact teachers' knowledge and practice as they work to support the development of dialogic engagement in classrooms.

This chapter situates this study within a changing sphere in primary education with children being encouraged to engage dialogically with curriculum content as part of a rights-based approach to education (Alexander, 2018; National Council for Curriculum and Assessment (NCCA), 2019). This repositions teachers as facilitators and defines knowledge as something that is co-created (Michaels et al., 2008). The expectation is that teachers will respond to their children's curiosity, facilitating inquiry within a dialogic space.

In this chapter I begin by providing a context for the study. The importance of oral language and communication (OL&C), that is 'meaningful interactions' that result in learning (Primary Language Curriculum/Curaclam Teanga na Bunscoile (PLC/CTB), NCCA, 2019), and dialogue are signalled in terms of cognitive development and their place in a democratic society. With authenticity central to this engagement, teachers' perceptions of their role in its development are explored. Justification for this study features the reported difficulties of teachers in the development and assessment of OL&C. Increased content knowledge (CK) (what is known about a concept), and pedagogical content knowledge (PCK) (the means by which it is taught), are proposed as supports for teachers (Shulman, 1986). The need for research in this area is identified along with current expectations around teacher reflection. I suggest a professional learning (PL) model to support the process, with reference to recent curricular changes. The purpose of the study is presented, including two research questions which I aim to answer. I provide the study's scope, its theoretical framework and reference its design. I end with my role as researcher and an overview of the following six chapters.

Context of the Study

Language is positioned as fundamental to learning (Alexander, 2018; Bruner, 1983; Wood, 1998), and academic achievement (Dobinson & Dockrell, 2021). Regarded as 'an

imperative' in terms of enhancing one's self-esteem and confidence (Cregan, 2019), the acquisition of verbal and non-verbal communication skills is a key concern of early years and primary education providers' nationally and internationally (O'Donnell, 2018). The PLC/CTB (NCCA, 2019), introduced in junior classes (Junior infants to Second class) in 2015, supports the significance attributed to OL&C, describing it as a means by which children can become 'effective communicators'. It recommends that OL&C receive "specific attention in the early years of primary school as it is fundamental to the development of reading, writing and learning across the curriculum" (NCCA, 2019, p. 15).

Definitions of oral language have evolved over the last sixty years. Vygotsky in the late 1920's warned against language being viewed purely as a means of communicating. He referred to the way it coordinated people's actions while also operating as a 'tool' for thinking (Van der Veer & Valsiner, 1991). For Vygotsky, cognitive development did not happen as a direct result of engagement in an activity. It occurred indirectly when people engaged using mediatory tools such as language. In her evaluation of a language enrichment programme in an early years setting, French noted the significant 'reciprocal correspondence' between communication and thought (2014, p. 20).

Wertsch (1979), in blaming inaccurate Russian-English translations of Vygotsky's work, suggested that perhaps the significance of social interaction as part of language acquisition may have been understated. He described how speech, as "a mechanism responsible for the child's progress" (1979, p.13), supported the 'language-game' that occurred between adults and children, within what has become known as the zone of proximal development (ZPD). Children's learning of new concepts within the ZPD (Harland, 2003) was therefore facilitated by child-teacher dialogue.

More recently, Mercer (2004) applied the term 'talk' to what he describes as a "joint activity to create a shared framework of understanding" (p. 8). Naturally co-operative, it relies on shared rather than individual intentionality with the role of a more knowledgeable other (MKO) perceived as central to its development (Tomasello, 2008; Wood, 1998). While Mercer's position on 'talk' recognises the role of the adult or teacher, the term 'dialogue' suggests a further refinement in terms of classroom engagement (Swart et al., 2018). Especially relevant to this study, 'dialogue' considers the roles of all involved and the quality of their engagement. Teachers are asked to reflect on their own talk patterns as well as those of the children with whom they engage. This study adopts the term children-teacher dialogue to describe the oral engagement between teachers and children and seeks to explore how it can be developed.

A Place for Dialogue

The positive impact of dialogue on cognitive development is widely accepted (Alexander, 2018; Lantolf & Thorne, 2006; Mercer, 2010; Nystrand et al., 2003; Patterson, 2018; Wells, 2007). It allows for the organizing and reorganizing of thoughts and the achieving of specific goals (Lantolf et al., 2015; Winsler et al., 1997). As “a form of intellectual activity – as a social mode of thinking” (Mercer, 2004, p. 141), dialogue is dynamic insofar as what emerges is unplanned (Mercer, 2008). The Professional Development Service for Teachers (PDST) (now Oide), in recommending practices for the development of OL&C, writes about the creation of dialogic classrooms where teachers “make time for open-ended questions and encourage inquiry” (2020, p. 22).

Described as one of seven key competencies that will underpin all curriculum change in Ireland into the future, the Primary Curriculum Framework (PCF) (NCCA, 2023) (operational in Irish primary and special schools since 2023), lists *Being a Communicator and Using Language* as one way of empowering children to act on learning across the curriculum and ‘connect’ with others. While the PCF does not use the term ‘dialogue’ in its reference to competencies and subject areas, it pays particular attention to children engaging with others, thereby implying its importance.

A recent policy statement on developing wellbeing in Irish schools (Department of Education and Skills (DES), 2019) recognises the importance of dialogic engagement, believing children to be ‘relational’ and claiming that “wellbeing is always realised in a community” (p. 10). Similarly, those who position education at the centre of democratic engagement also highlight the significance of dialogue in preparing children to engage in reflective and considered interactions. The PCF (NCCA, 2023) describes children as active citizens who can “question, critique and understand what is happening in the world” (p. 8). Likewise Wells believes in preparing children to “question the existing norms, explore alternatives and propose new ideas” (2007, p. 263). Therefore, developing children’s capacity to engage dialogically with others seems necessary at a political, educational and personal level if they are to thrive.

Michaels et al. (2008) reference increasing cultural diversity within societies and suggest that managing resulting issues will rely on our ability to come together and collectively identify solutions. At the same time, they describe current moves in education to cultivate dialogic classrooms where children deepen their understanding through what they refer to as ‘accountable talk’. It may be possible to accommodate both of these

perspectives if we frame classroom talk within an authentic ‘space’. By having children consider concepts that require investigation, and by encouraging teachers in their facilitation to support this through challenging children’s ideas, it may be possible to advance children’s skills of deliberation, as well as their thinking.

This may be difficult, however. A study by Grieshaber (2010) of children aged 5-8 years engaging in a computer-based task in an Australian elementary classroom exemplifies the difficulty with facilitating this type of dialogue within a collaborative task. She observed how a computer-based activity to develop critical thinking became a test when the teacher, with over twenty years’ experience, switched her focus to the end product. This was at the expense of authentic engagement that could have led children to challenge each other and draw conclusions. Similar tensions exist between adult-directed and adult-initiated initiatives for the purpose of language enrichment (French, 2014; Snow, 2017). It would appear, therefore, that central to the successful facilitation of dialogue in classrooms is how teachers perceive their role in terms of supporting its development.

Justification for the Study

Teachers can struggle with developing children’s OL&C (Mercer & Dawes, 2018; Millard & Menzies, 2016; Kirsch, 2021), lacking the necessary confidence and knowledge to support their practice (Dobinson & Dockrell, 2021). They report difficulties with recognising dimensions of children’s talk which could assist them in identifying attainment levels in oral language (Harris & Ó Duibhir, 2011; Macrory, 2001; Mercer & Dawes, 2018; Riley & Burrell, 2007). Curricular demands can then result in these areas that are difficult to assess being avoided (All-Party Parliamentary Group (APPG), 2020; Theobald & Kultti, 2012). Extant research identifies varying levels of language and communication in classrooms (Kirkland & Patterson, 2005), which along with the multi-cultural nature of classrooms, can challenge teachers attempting to advance oral language use (Riley et al., 2004). According to Kirsch (2021), addressing this ‘language diversity’ and oral language skills in general requires teachers who are suitably skilled. Dialogic engagement is also dependent on teachers’ skilful support (Kirsch, 2021).

Recognised by Soter et al. (2008) as sites of ‘rich reasoning’, children-teacher dialogic episodes are not typically cultivated in UK schools (Millard & Menzies, 2016). Hayes and Matusov (2005) propose that instead teachers in classrooms facilitate ‘verbal exchanges’ devoid of reflection. An Irish Inspector’s (DES) report on incidental inspections of English lessons in 2010 revealed that in almost a fifth of instances teachers

did not facilitate talk and discussion, and in over half of the lessons observed, collaborative learning was not evident. Whether this remains the case in Irish primary classrooms is unclear. If, however, according to the PCF, teachers are required to be “skilful, and agentic professionals, enact[ing] the curriculum by making decisions about what to teach, when to teach and how to sequence and pace learning” (2023, p. 20), then in terms of developing OL&C it would appear worthwhile to explore current classroom practice and consider whether teachers require further support.

Obstacles also exist in terms of perceptions and expectations with teachers incorrectly positioning children as egocentric and incapable of abstract thought (D. Kennedy, 2022), the result being a limited ‘space’ for the joint construction of children’s ideas (Phillips Galloway & McClain, 2020). This is despite the learning outcomes of the *oral language and communication* strand of the PLC/CTB (NCCA, 2019) providing identifiable features of dialogue for children aged 4-8 years within their *progression continua*. Kennedy (2022) provides examples of the opportunities available to teachers of children in lower primary classrooms (i.e. 4-8 years). He argues children may in fact be more readily available to think abstractly than the “sense-bound adult” (p. 125). However, believing children may not explore in this way without adult input, or be able to sustain dialogic engagement in groups independent of support, Kennedy (2022) suggests teachers need to consider it their role to support the development of group dialogue so that children can “clarify their thinking” (p. 128).

Curriculum knowledge, content knowledge (CK) and pedagogical content knowledge (PCK) influence how teachers perceive their role (Borowski et al., 2012; Piasta et al., 2022). Shulman’s (1987) original list of seven knowledge types discern between, for example, curriculum and content knowledge and pedagogical and general pedagogical knowledge. Borowski et al. (2012) refer to the link between CK and PCK and claim that regardless of the terms used, teachers with higher levels of PCK are more effective. This is reflected in Shiel et al.’s (2012) reference to teacher knowledge in terms of how spoken language is developed, how linguistic knowledge is assessed, and how and when spoken language is promoted. ‘Specific guidance’ (Shiel et al., 2012, p. 22) in what facilitates OL&C development and dialogue, for example, may help teachers resist possible pressures to focus on other more measurable curricular areas thereby “making ‘talk’ the chief content item on the curriculum” (Shiel et al., 2012, p.197).

Satisfied with the level of understanding around how language is developed in the early years (up to 5 years), Dobinson and Dockrell (2021) call for research into practices

suited to the development of oral language in primary classroom contexts. They consider the benefits of moving away from the interventionist's approach where specific skills are targeted, and towards 'universal' actions that include quality teacher-child interactions. It would appear that much of the international research into dialogue at primary school level features the work of teachers in middle and upper primary classes (Education Endowment Foundation (EEF), 2024; Piasta et al., 2022). *Socializing Intelligence through Academic Talk and Dialogue*, edited by Resnick et al. (2015), features contributions from many of the key researchers in this field, yet does not appear to consider in any detail, the possibilities of dialogic engagement for younger children in primary school. Whether some of what its contributors recommend in terms of classroom practice can be applied to children in lower primary classes is worth examining.

Teacher knowledge is clearly a prerequisite for effective classroom practice in developing OL&C and dialogue (Cregan, 2012; Shiel et al., 2012). However, the dated nature of research into Irish classroom practices around OL&C, and French and Lake's (2022) recommendation that the knowledge, beliefs and behaviours of those working in the Irish early childhood education and care sector be examined in terms of how they interact with children, would suggest that this study is timely.

The study aims to examine how Irish teachers of children in lower primary classes support the development of dialogue. It seeks to explore the extent of their knowledge of how dialogue develops or their CK, their related pedagogies or PCK, and their capacity to reflect on both (Cochran-Smith & Lytle, 2009).

Teacher Professional Learning

The study accepts the centrality of teachers to educational change (Cochran-Smith & Lytle, 2009; Cregan, 2012), while also appreciating the increasingly complex and demanding nature of their roles (Conway et al., 2009; Kennedy & Beck, 2018). It considers the implications for PL where adopting Cochran-Smith and Lytle's (1999) definition of teacher knowledge as knowledge *for*, *of* and *in practice*, places a significant emphasis on teachers' abilities to reflect on their engagements with children. It presupposes that knowing the curriculum and how best to implement it is underpinned by the skills to reflect on one's practice (Department of Education (DE), 2021), thereby adopting Cochran-Smyth and Lytle's (2009) inquiry stance.

A report carried out on behalf of the regulatory body for teaching in Ireland, The Teaching Council, posits that teachers "need to be able to grapple with their own

misconceptions as well as those of others in designing generative classroom learning” (Conway et al., 2009, p. 17). Walsh’s (2018) description of a constantly changing curriculum positions teachers as creators rather than ‘implementers’. The *Looking at Our Schools 2022* Quality Framework for learning, teaching and leadership in Irish primary and special schools (Department of Education (DE), 2024), makes similar demands of teachers in terms of school self-evaluation. With regard to statements of *effective* and *highly effective practices* it is expected that teachers will “consider the evidence available and arrive at judgements about the quality of aspects of a school’s provisions” (p. 19). The framework, presented as a ‘tool’ for reflection, recommends that teachers ask themselves what can be learned about the school from what is happening there. Such expectations presuppose a capacity in teachers to show agency, and a preparedness to adopt an inquiry stance as part of PL (Cochran-Smith & Lytle, 2009; Nelson et al., 2012). Agency, in this instance, reflects a SCT of learning (Clarke et al., 2016; Vygotsky, 1986), with teachers supported socially, personally and professionally to ‘take action’, thereby deciding the direction of their learning (Clarke et al., 2016).

However, extant research proposes that teachers can experience difficulty analysing and interpreting data (Bowe & Gore, 2017; Nelson et al., 2012; Kucan, 2007). They reportedly struggle with reflection (Beauchamp, 2015; Brown et al., 2021; Šarić & Šteh, 2017; Teo, 2018). If Shiel et al.’s claim is correct that developments in oral language in children in infant classes are ‘subtle’ (2012, p. 16), then support for teachers in terms of reflection and analysis would appear necessary.

Professional learning in education concerns itself with providing structures within which teachers can develop practices that result in improved learning outcomes for children (Darling-Hammond et al., 2017). PL in schools around the PLC/CTB (NCCA, 2019) provided by Oide (formerly PDST), for the most part reflected transmission models of PL. However, the DE recognises teachers as reflective practitioners and researchers (DE, 2022a), and the ‘central agent’ in curriculum design (Walsh, 2018) - a view that fits Cochran-Smith and Lytle’s (2009) *inquiry as stance* model, where teachers inquire systematically and intentionally *about*, *on*, and *into* their own classroom practice (Dana, 2015). The success of the School Self-Evaluation process is dependent on “a culture of critical reflection and enquiry” in collaborative settings (DE, 2022b, p. 9). If the assumption, therefore, is that teachers in their schools work collaboratively towards a more reflective model of curriculum implementation, then whether this is realistic would also

benefit from investigation. This study examines a PL model and its effectiveness in cultivating reflection within a collaborative context.

There are numerous models of PL that display group membership. Some show evidence of adherence to protocols and some rely more heavily on teacher autonomy (Doğan & Adams, 2018; Timperley, 2015). A PLC is described as a collaborative approach to improving children’s learning (Bowe & Gore, 2017; Doğan & Adams, 2018; Nelson et al., 2012; Stoll et al., 2006). It can be configured in various ways, and it is this flexibility that suggests a responsiveness to teachers’ needs (Doğan & Adams, 2018). The literature describes roles within the group and more particularly the facilitator’s role (Doğan & Adams, 2018). King et al.’s (2022) recommendation that schools be supported from the ‘bottom up’ to create teacher leaders from within their ranks, suggests a concern that without such preparation and leadership teachers may be unlikely to act as ‘agents of change’ (Kennedy & Beck, 2018, p. 849). This study examines facilitation as part of PL and how it supports teachers in developing their knowledge of OL&C and dialogue.

Bowe and Gore (2017) express concern for what occurs in the PLC. They recommend that the focus move beyond creating a community and towards a closer examination and analysis of what occurs between the child and the teacher. In this study, I establish two PLCs – one in each of the lower primary sections of two vertical schools. The work of the two PLCs features teachers’ analysis of children-teacher dialogue.

The Irish Educational Context

The PLC/CTB (NCCA, 2019), first introduced to schools in 2015, remained a focus of PL provided by Oide, up until the beginning of this study in 2022. It replaced the Primary School English Curriculum (NCCA, 1999b) and *Curaclam Gaeilge na Bunscoile* (NCCA, 1999c), with its *integrated language framework* which supports the development of both Irish and English in all Irish primary and special schools. It acknowledges the value of supporting home languages other than Irish/English, and accommodates the learning of specific languages, the learning of language across the curriculum, and the learning of languages as they relate to each other (Ó Duibhir & Cummins, 2012).

Described as ‘translanguaging’, a person engages their “entire semiotic repertoire” (Kirsch, 2021, p. 339), as common structures and strands are presented for both Irish and English in this instance, enabling teachers to help children “make connections across and within languages ... to support the transfer of skills between languages” (NCCA, 2019, p.

4). Inclusive of Irish sign language, it is intended that modern foreign languages will be introduced into schools from September 2025.

Previously the Primary School Curriculum (NCCA, 1999a) compartmentalised languages, paying limited attention to the language needs of children for whom English was an additional language (Ó Duibhir & Cummins, 2012). Despite this, reported advances in the area of oral language teaching revealed that 40.7% of teachers recognised its significance in terms of children’s cognitive development (NCCA, 2005). Almost 30% believed it to be the area in which they were most successful ensuring it preceded all other activities. Teachers noted its positive impact on reading, writing and children’s overall cognitive and social development. A later review found that oral language was reported to be a focus of learning in all subject areas (Shiel et al., 2012).

The same NCCA review of 2005, however, identified difficulties for teachers in balancing the implementation of approaches to language development with instruction in discrete language skills. More recently, Walsh, in preparation for the creation of an ‘overview’ to underpin newly developed curricula going forward (including the PLC/CTB (2019) and the Primary Mathematics Curriculum (PMC) (2023)), referred to an absence of “explicit pedagogical guidance” (2018, p. 9) in the Primary School English Curriculum (1999). Reflecting the ‘how’ of curriculum implementation, this would enable teachers to provide what Shiel et al. refer to as a “conscious, deliberate, focused systematic teaching of oral language in English and across subject areas” (2012, p. 30). As part of their review the NCCA (2005) also reported teachers’ difficulties with assessment of oral language, and in particular quantifying *competence* (NCCA, 2005). Teachers requested support in terms of recording their findings and “how to use their observations to make decisions about teaching and learning” (NCCA, 2005, p. 102). Unfortunately, while a 2010 Incidental Inspections Report (DES, 2010) outlined its concern regarding assessment in English lessons, it did not go beyond references to reading and writing. This suggests how OL&C might be assessed may not have been considered. Whether teachers remain uncertain regarding the assessment of OL&C twenty years on, and whether, as Walsh (2018) suggests, they may benefit from increased pedagogical support, is worthy of investigation.

The Primary Language Curriculum/ Curaclam Teanga na Bunscoile

This study adopts the curriculum framework presented within the PLC/CTB (NCCA, 2019) and the twelve learning outcomes listed in its *oral language and communication* strand for English medium schools. It provides a familiar point of

reference for more experienced teachers participating in this study, as well as those recently qualified.

If, as suggested earlier, developments in oral language are difficult to identify in the infant classroom (Shiel et al., 2012), it may be useful for this study to examine the impact of the practice of analysing children-teacher dialogue on teachers' knowledge CK and PCK. The three elements of *communicating*, *understanding*, and *exploring and using*, listed in the PLC/CTB (NCCA, 2019), contribute to this process.

The PLC/CTB (NCCA, 2019) reflects a socio-cultural theory of learning (SCT) espoused by theorists such as Vygotsky (1986) and Mercer (2004) who consider oral language as a means to an end. This study asks teachers to consider all attempts to communicate by children, other than that which is read or written and includes non-verbal contributions. Singling out particular groups of children such as those with English as an additional language, for particular treatment appears contrary to the principles underlying the PLC/CTB (NCCA, 2019), and a developmental view of language acquisition which is cognisant of individual differences (Shiel et al., 2012).

Aistear: The Early Childhood Curriculum Framework

Devised in 2009 as a framework for the provision of teaching and learning for children from birth to 6 years in Ireland, and updated in 2024, *Aistear: The Early Childhood Curriculum Framework* (NCCA) operates around four themes: *well-being*; *identity and belonging*; *communicating*; and *exploring and thinking*. While it remains the curriculum for children until they enter primary school (NCCA, 2024), the curriculum in infant classrooms is now guided by the PCF (NCCA, 2023). However, both the *Aistear* framework (2009; 2024) and the PCF (2023) promote the importance of playful learning for young children, thereby ensuring their relevance in this study. Playful learning experiences respond to children's curiosity, as teachers adopt 'intentional pedagogies' to support children's experimentation and deep thinking with others (French & McKenna, 2022).

The principles of the *Aistear* framework (NCCA, 2024) include the significance of the child as a citizen, the adult's role, and the provision of meaningful learning experiences. The framework reflects a SCT of learning as it advocates for learning experiences that recognise the child's connections with those around them, and the central role played by language and communication in learning.

Planning for Teaching and Learning

The DE in conjunction with the NCCA, the National Council for Special Education (NCSE) and the PDST published *Preparation for Teaching and Learning – Guidance for All Primary and Special Schools* (DE, 2021). The document highlights the significant role teachers' reflections play in preparing for teaching and learning. Previous practices emphasised written evidence of reflection. Following the 1998 Education Act (Government of Ireland), and as part of the 2000 Programme for Prosperity and Fairness, education partners including teachers' unions and the Department of Education and Skills agreed to the practice of whole-school development planning which is based on evidence of collaborative reflection. A review by the Inspectorate (Department of Education and Science (DES), 2006a) of thirty primary schools revealed that many did not typically record their 'action plans' in writing. In one third of schools curriculum planning was not monitored and in half of the schools teachers did not include their methodologies as part of their written plans. Later, in 2010, a report on the incidental inspections carried out in 450 primary schools revealed that almost one quarter of teachers did not present adequate written plans for the teaching of English (DES, 2010). While the emphasis has clearly shifted away from written planning to one that recognises 'invisible', 'visible' and 'recorded' preparation equally (DE, 2021), and this shift is welcome, reflection remains central to effective teaching and learning. One contributor to the online 'panel discussion' supporting the NCCA document's launch suggested that difficulties may arise in terms of some teachers' capacity to engage and reflect at the proposed 'invisible' level (NCCA, 2021). Informed decision-making and teacher agency, referred to as key pillars of the planning process, rely on reflection.

If curriculum is to be accepted as “a tool to bring about change and innovation in schools by offering new directions in terms of purpose, content, pedagogy and assessment” (Walsh, 2018, p. 3), then understanding how it is implemented by teachers would appear to be central to its success. As part of this study I aim to explore how the PLC/CTB (NCCA, 2019) might be used within a PL context and whether reflective practices can be modelled and cultivated within a community of teachers.

The Influence of Covid-19 on Education

The proposal for this study was submitted to Dublin City University in May 2020 while Ireland was experiencing a 'lockdown' implemented to manage the spread of the Covid-19 virus. School teaching and learning were reassigned to virtual classrooms and online child-teacher engagements.

BEACONS (Bringing Education Alive for Communities on a National Scale), a consultation involving children, parents, and teachers (NCCA, 2022), reflected the experiences of many children during this time. Participants reported that learning which happens with others is preferable to learning on one's own. Children valued being able to share ideas and talk with peers and teachers. Communication emerged as an important aspect of education amongst adults and children. These views provide a relevancy for this study as they highlight the on-going need in children and teachers to engage in dialogue.

Purpose of the Study

Asking what teachers know in terms of supporting children in their development of dialogic engagement and exploring the degree to which teachers can reflect on and change their practice, thereby increasing their agency, provide a rationale for the focus of this study.

This study considers OL&C development within a dialogic context (Alexander, 2018) and identifies teacher knowledge as the means by which children's dialogic engagement might be developed (Borowski et al., 2012; Hultén & Björkholm, 2016; Shulman, 1986). I attempt to identify the beliefs, assumptions and expectations that underpin teachers' development of dialogue in children in lower primary (i.e. children aged 4-8 years), and propose PLCs as suitable contexts within which PL might occur.

Professional learning communities, defined loosely by Doğan and Adams (2018) as “structures that bring educators together to improve student learning” p. 634), are widely accepted as supportive contexts for teacher PL (Cochran-Smith & Lytle, 2009; Doğan & Adams, 2018; Vescio et al., 2008). Recommended by the Teaching Council (2016) in an Irish context, I explore whether PLCs can provide a context for examining teachers' knowledge and practice around OL&C development and dialogue, thereby addressing the expectation identified earlier, that teachers engage in inquiry as they reflect on their practice. With these aims in mind this study poses the following questions:

What do teachers know about supporting the development of dialogue in children aged 4-8 years?

In what way is teachers' knowledge and practice regarding the development of dialogue in children aged 4-8 years impacted by participation in a Professional Learning Community?

These questions are validated by the findings of Vescio et al. (2008) in their review of eleven American and English studies of PLCs published between 1990 and 2005. Both qualitative and quantitative research designs were included and a range of school settings featured, including multi-site studies and single-school case studies. The authors established that in all eleven studies, teacher membership of a PLC resulted in pedagogical change. Key factors that underpinned successful communities included in some instances teacher control around the focus of the PL content and the capacity of members to collectively seek their own solutions to school-based issues, mirroring somewhat the expectations expressed earlier around school self-evaluation (DE, 2024). However, the authors reported difficulties in their attempts to identify specific aspects of PLCs that resulted in positive changes in school cultures and ultimately learning outcomes for children. These difficulties along with the complex nature of school cultures (Alexander, 2018; Thompson & Wiliam, 2008), suggest that while PLCs may be viewed in a positive light, a deeper understanding of what makes them successful in terms of teacher PL may be useful in increasing their effectiveness.

This study's investigation of the effectiveness of the PLC model will adopt the 'multiple components' recommended by French and Lake (2022), including analyses of community meetings, coaching opportunities and recordings of teacher practices. In identifying how teaching practices change following membership of a PLC, and in an attempt to explain the way in which PLCs support these changes, Vescio et al. (2008) commented on the lack of case studies carried out by individual teachers participating in their own PLCs. The small-scale nature of this study provides me, an individual teacher, with opportunities to examine the complexities of PLC membership in depth and their potential to impact teachers' practices.

Vescio et al. (2008) highlighted the cross-curricular percentile gains of some children where PLCs were in operation. This study, rather than considering the quantifiable gains of children, explores how teachers analyse children's work, a concern raised by Vescio et al. (2008), that will provide insight into how teachers reflect on their practice. This issue of reflection and analysis was the focus of research by Nelson et al. (2012). In their study of seven PLCs, described in Chapter Three, they considered the depth of teachers' collaborative inquiry and the role of teacher leaders or facilitators in this regard. In this study I adopt the role of facilitator and consider how facilitation can support teacher inquiry. I aim to investigate the degree to which PLCs can support PL generally, while at

the same time exploring the capacity of a small group of teachers in two schools to develop an inquiry stance around their practice (Cochran-Smith & Lytle, 2009).

Scope of the Study

The scope of this study is defined by the group of children at its centre and thereby, their teachers. It is also defined by instances of children-teacher dialogue - the aspect of teaching and learning under examination. Other features are noted later in Chapter Four and the limitations are outlined in Chapter Seven.

Defining the Group of Children

Reviews of oral language in early childhood and primary education in Ireland refer to children aged 3-8 years (Shiel et al., 2012) and 4-6 years (O'Donnell, 2018). The PCF (NCCA, 2019) groups junior infants to Second Class in their anticipation of a more integrated curriculum at this level. This study, therefore, focuses on children aged 4-8 years in Junior Infants to Second Class. The term I apply to this group is 'lower primary'.

The PLC/CTB (NCCA, 2019) has adopted nine-step *progression continua* as a means of identifying stages of learning for children. These *progression continua* reflect earlier recommendations by Shiel et al. for a "continuum of appropriate communication and language teaching strategies" (2012, p. 67) which would support differentiation for all children. While the continua may be more reflective of the range of abilities present in a single class, this study uses the first two stages outlined in the curriculum (i.e. Stages One and Two) to reflect learning up to and including Second class, thereby representing the cohort of children at the centre of this study, while also being cognisant of Stages Three and Four. The reason for not attending to the PLC/CTB's (NCCA, 2019) *progression continua* is noted in Chapter Five.

While children with varying levels of need and diagnoses will participate in this study, the nature of their needs are only considered in terms of their teachers' attempts to accommodate them. The focus of the study remains teachers' perceptions of their role in supporting the development of dialogue in their children. These limitations are examined in Chapter Seven.

Teachers as the Focus of the Study

While dialogue is essentially co-constructed between people, the argument for focusing on the teacher's role is upheld by authors like Shvarts and Bakker (2019). They explore the impact of scaffolding on learning and consider how the adult creates conditions

for engagement. In accepting the limitations of my decision to focus on teachers' efforts in facilitating dialogue with and amongst their children, I aim to provide an in-depth analysis of the teacher's role and how it impacts the engagement.

Language as part of Literacy

The PLC/CTB (NCCA, 2019) describes how “every lesson is a language lesson” (p. 7) and language is “fundamental to the development of reading, writing and learning across the curriculum” (p. 15). An all-party parliamentary group (APPG) report in the UK (2020), however, suggests that OL&C or oracy (i.e. purposeful classroom talk) would be given equal if not higher status than reading and writing. One might therefore question the wisdom of including it under the banner of literacy in the current and previous national strategy documents issued by the DE (DES, 2011; DE, 2023). This study considers its role in terms of the curricular area in which it occurs, but more importantly, in its dialogic form, recognises it as a life skill.

Theoretical Framework

This study is guided by two theoretical frameworks. Firstly, a SCT of learning (Vygotsky, 1986) proposes that learning happens through interaction with others (DeBruin-Parecki & Henning, 2002; Johnson & Golombek, 2020; Wenger, 1998). It is “a fundamentally social phenomenon, reflecting our own deeply social nature as human beings” (Wenger, 1998, p. 3), and language is part of this process (Lantolf et al., 2015; Winsler, 2003). The participatory nature of PLCs reflect the same SCT with teachers mediating concepts for each other, thus developing each other's knowledge (Johnson & Golombek, 2020; Bowe & Gore, 2017).

Adult learning theory (ALT), the second theory underpinning this research (Louws et al., 2017; Merriam, 2017), suggests a shape, content and structure to PL that supports teacher agency (King et al., 2022). Features include a collaborative arrangement in which teachers are facilitated to practice self-determination (Kennedy & Beck, 2018), as they take risks and engage in cycles of reflection and practice (Desimone et al, 2002; Desimone, 2009). This study seeks to facilitate teachers in advancing their agency, knowledge and practice so that they might support the development of children's dialogue through participation in a PLC.

Study Design

I adopt a qualitative approach to data collection in this study. An embedded case study design allows for an in-depth examination of context (Cohen et al., 2018). The context in this instance refers to the dialogue between children and their teachers, and the engagement that occurs amongst participants in two schools within their respective PLCs.

Data collection takes place in three phases (i.e. *Phase One* before the PL process, *Phase Two* during the PL process and *Phase Three* following the PL process). It includes the use of observations, interviews, audio and audio-visual (A/AV) recordings of children-teacher dialogue. Analysis of these recordings by participants will form the catalyst for discussions within the PLCs. Inductive thematic analysis (Braun & Clarke, 2006) is applied to information gathered during interviews and observations. Deductive analysis will feature in the examination of participants' practices evident in their recordings of children-teacher dialogue and explored during PLC and post-recording meetings. Template analysis (King & Brooks, 2017) will allow for further analysis of discussions as part of the PLCs and post-recording meetings. Data collection and analysis are described in detail in Chapter Four.

The Researcher's Role and Positionality

A case study researcher engages in an inductive process that allows for the development of theory that is borne out of the work of participants (Gillham, 2000). I, in the role of researcher, am intrinsic to the study as I make sense of events and provide you the reader with a narrative (Hitchcock & Hughes, 1995).

I am a teacher in one of the two schools in which the study takes place. Working with children in lower primary and in support settings for many years has given me a deep interest in what children have to say and the degree to which, as teachers, we are available to listen to them. I am also at a stage in my career where I feel confident to question professional practices and the supports available to teachers.

More fundamental to this study were, perhaps, my observations of my mother as she conversed with her grandchildren. The authenticity of her engagement was evident in the manner in which she listened intently to their stories and sought clarification. She waited for their responses as they ruminated and challenged their perceptions. These actions caused me to question the status of children-teacher engagement in my own classroom and the extent to which classrooms in general were dialogic.

I assume several roles in the data collection process. In *Phases' One* and *Three* I operate as a *complete observer* (Cohen et al., 2018) whilst carrying out classroom observations. While advantageous in terms of my proximity to the information source, my presence has the potential to alter participants' behaviours, thus impacting the findings (Gillham, 2000; Robson, 2015). As a teacher, I may, on occasion, include interpretations as well as observations.

During *Phase Two* and in the context of the PLCMs I act as a *participant-as-observer* (Cohen et al., 2018) which describes a conflict of interests if not carefully managed. My presence at meetings for example may cause participants to behave differently (Maykut & Morehouse, 1994). In “becoming immersed in a social situation” (Lareau, 2021, p. 140) my objectivity may be impacted, thereby confusing my role as observer and participant (Corbin Dwyer & Buckle, 2009; Nind 2003).

Tension can arise when the researcher as an *insider* investigates phenomena in her own field (Robson, 2015). In addressing the susceptibility of the information to this type of bias (Cohen et al., 2018) I provide a detailed description of the study and the methods I use to analyse the data. However, my insights into the phenomena and the complexities of the tasks faced by the study's participants can also impact positively on data collection (Lareau, 2021), and ultimately my answering of the research questions (Corbin Dwyer & Buckle, 2009; Luttrell, 2000). Behaving as an *outsider* also, and assuming the role of more knowledgeable other (MKO), creates a power differential (Luttrell, 2000) that positions me outside the cohort of teachers being interviewed and observed. While my role is specific in terms of guiding the PLCs as described in Chapter Four (Bettez, 2015), I also need to remember that as a colleague of participants in one PLC, I am readily available to answer their questions and offer reassurance. The participants in the second PLC are not similarly served. Whether this influences the data is explored in Chapter Six.

Rather than engaging in the insider/outsider debate (Bettez, 2015; Corbin Dwyer & Buckle, 2009), I adopt “a dialectical approach”, positioning myself ‘with’ the participants (Corbin Dwyer & Buckle, 2009, p. 60). I am genuinely interested in their experiences, appreciate the complexity of the behaviours being asked of them, and believe in the significance of their insights. I wish to present their stories as faithfully as possible.

Participant–Researcher Relationships

Building a rapport with participants assists in addressing the power differential that can exist between a researcher and participants (Cohen et al., 2018). I attempt to increase

the accuracy of summations and analysis, and reduce the possibility of misunderstandings, by collaborating with participants to interpret events such as their children-teacher engagements (Gillham, 2000). However, this is a lengthy and sometimes difficult process as exposing teachers' professionalism and practice is complex and political (Nind et al., 2016) and can necessitate considered and supportive methods of engagement (Alexander, 2018).

Rather than building meaningful relationships, I attempt to create a sense of communion (Bettez, 2015) and the notion of shared responsibility for learning that is an element of the PLC. Debates that arise from conflicting interpretations and cultural difference for example (Hastings, 2010), will be managed and responsibility for the success of the group will be shared. By adopting an agentic approach associated with ALT (Louws et al., 2017; Merriam, 2017), I position participants as decision-makers in the PL process who take responsibility for their practices.

Study Overview

This study's review of literature is presented across two chapters. In Chapter Two and over three sections I explore research in the area of OL&C development. *Section One* features an overview of OL&C in babies and the role of the 'other' in this development. In *Section Two* I present a theoretical framework that positions this study within a socio-cultural perspective (Vygotsky, 1986), whereby learning including OL&C development occurs through engagement with others. In *Section Three* I focus on OL&C and dialogue as they relate to teaching and learning. I compare a range of approaches to developing children-teacher communication and identify practices that reflect a dialogic approach.

Chapter Three presents the second half of the literature review where I examine models of teacher PL. In *Section One* I remain faithful to a SCT of learning (Vygotsky, 1986) while also adopting ALT (Louws et al., 2017; Merriam, 2017) to assist in the development of a model of PL that is fit for purpose. I consider in particular the creation of a PLC and explore issues associated with bringing about transformative PL (A. Kennedy, 2005; 2014). In *Section Two* I examine the potential for teachers' epistemologies to impact their pedagogical practices when attempting to develop OL&C and dialogue. I provide a conceptual framework of how I envisage teachers being supported in becoming reflective practitioners.

Chapter Four presents the approach I will take to carry out this study, its design, and the phased plan for data collection and analysis. I describe the data collection

instruments to be used and argue the appropriateness of a case study that facilitates two tasks: the in-depth examination of OL&C development and dialogue in context; and the examination of the PLC as a model for PL. Ethical considerations are outlined, and the study sample is described.

In Chapter Five I present the first half of my findings in response to my first research question, which is an exploration of what teachers know about the development of dialogue with and amongst their children. I explore this role over three themes.

The second half of my findings are presented in Chapter Six across two sections. They answer my second research question regarding the impact of membership of a PLC on teachers' knowledge and practice in supporting the development of dialogue in young children. In *Section One* findings regarding participants' CK and PCK following their engagement in the study are summarised. In *Section Two* I consider how the PL process impacts the participants and review the accuracy of my conceptual framework presented in Chapter Three.

Finally, in Chapter Seven I present my conclusions in two sections. In *Section One* I review my findings in relation to teachers' support of the development of dialogue in children aged 4-8 years and consider the implications for policy and practice. In *Section Two* I adopt a similar approach in terms of teachers' PL through PLC membership. The study's limitations are presented as I explore how I may have impacted its findings. I make recommendations for policy, practice and research in both areas and present my contribution to knowledge.

Conclusion

According to Mercer (2010), "education cannot be understood without due attention to the nature and functions of talk" (p. 3). This chapter introduced an argument for an in-depth examination of teachers' knowledge around the development of OL&C as it pertains to dialogue in children in lower primary classrooms. Within the context of an Irish primary education system that is undergoing curricular change I questioned if teachers have been provided with the necessary skills to advance their knowledge and thereby, support their practice in this area. I then considered the expectation that teachers' would engage in inquiry around their own practice as part of a PL process that was closely linked with self-evaluation. I suggested the establishment of a PLC model of PL that might support these processes. Chapter Two examines relevant literature in the area of

development of OL&C and dialogue, and teachers' knowledge of the same, in an attempt to support my investigation of my first research question:

What do teachers know about supporting the development of dialogue in children aged 4-8 years?

Chapter 2

Literature Review

Part 1: The Development of Oral Language, Communication and Dialogue in Young Children

Introduction

This chapter is divided into three sections. In *Section One* I look briefly at the origins of communication in babies and argue the importance of ‘others’ in its development. In *Section Two* I present a socio-cultural theory (SCT) (Vygotsky, 1986) of learning as a framework within which to examine oral language and communication (OL&C) as they relate to children-teacher dialogue. In *Section Three* I consider OL&C development and dialogue in terms of the implications for teaching and learning and present research highlighting effective classroom practices for the development of dialogue in young children. These discussions inform my first research question:

What do teachers know about supporting the development of dialogue in children aged 4-8 years?

There is evidence to suggest that children in lower primary can engage in children-teacher dialogue. Theobald and Kultti, in their study of children aged four to six years, found “meaning-making, sustained, shared thinking and extended dialogue” (2012, p. 217) occurred where teachers’ questions encouraged children to respond to the contributions of peers. Michaels et al. (2008) provide evidence of similarly-aged kindergarten children listening to and building on the contributions of peers with careful facilitation by their teacher. Paatsch et al. (2019), in their examination of pre-school and foundation year engagements, reported that when teachers’ responses related to children’s contributions, showing evidence of listening, the dialogic engagement lengthened.

However, research is limited in describing how dialogue is developed in lower primary classrooms (i.e. children aged 4-8 years) (Education Endowment Foundation (EEF), 2024; Piasta et al., 2022), particularly in an Irish educational context. For this reason, a significant proportion of this literature review is drawn from international research. These studies feature the experiences of early-years educators, teachers in more senior primary classrooms, and those working with learners learning English as an additional language.

Section One: The Early Development of Communication

How we view child development determines how we plan for it (Fleer, 2019) making it important that we understand how OL&C develops so that we can plan accordingly (Macrory, 2001). Adults, also referred to as listeners (Buckley, 2003), interpreters (Halliday, 1993), ‘agent[s] of culture’ (Bruner, 1983, p. 94), fosterers (Tough, 1985) and ‘others’ (Bruner, 1983), play a central role in the development of a child’s communication (Tomasello, 2008; Vygotsky, 1986). French and Lake (2022) argue that educators in early childhood educational settings and classrooms can adopt this role if equipped with relevant content knowledge (CK) and pedagogical content knowledge (PCK) (Shulman, 1986). Conversely, if not informed, teachers’ practices may result in children who engage dialogically at home “ceasing to ask ‘real’ questions at school” (Wells, 2007). In this section, I consider how our earliest attempts at communication involve other people and how oral language and subsequently dialogue evolve from this engagement.

Early Communication and the Role of the Other

Linked with the functionality of communication, pointing (Bruner, 1983; French & McKenna; 2022; Halliday, 1993; Tomasello, 2008; Vygotsky, 1986) can occur at three months. Purposeful pointing, which results in the ‘sharing’ of emotions and attitudes (Halliday, 1993; Tomasello, 2008), typically begins around an infant’s first birthday. By age two children can orally express themselves, imagine and hypothesise (Neuman (2022) cited in French & Lake, 2022).

The significance of the ‘other’ in advancing this communication is debated. Chomsky promotes the importance of ‘endowment’, and a child’s innate ability to develop language (Ford et al., 2020), with language acquisition following. Wells (2007) argues that Chomsky’s reference to this inbuilt ‘language acquisition device’ does not give due consideration to how meaning is constructed with others. Piaget’s place in this debate can be framed in terms of his staged development of children’s logic. By adopting a constructivist’s position he credits children with the capacity to advance through action (Fleer, 2019). However, inhabiting his ‘concrete operational stage’ between the ages of 7 and 11 years means for Piaget that children at this age are only beginning to ‘decentre’ or see things from another’s perspective (Fleer, 2019). This apparent lack of curiosity in terms of others’ views, or indeed empathy, would mean the children at the centre of this study would not be inclined to engage dialogically since dialogue recognises more than one perspective (Wells, 2007). In turn, this would reduce the significance of the ‘other’s’ role.

More recent research, however, disputes Piaget's claims, suggesting that when young children's actions are analysed in contexts familiar to them, difficulties with perspective for example, do not arise (Fleer, 2019).

A more contemporary eco-behavioural model of language acquisition (Ford et al., 2020) views language as something that can be impacted by 'others' (Bruner, 1983; French & Lake, 2022; Halliday, 1993; Tomasello, 2008). According to Bruner (1983), the child responds to their mother who offers a toy. In the game of 'peek-a-boo', children's requests become successful when adults assign meaning to early gestures, which without interpretation might not evolve into message-giving exercises (Bruner, 1983). If appreciated as an opportunity for the child and adult to share control which then evolves into a child-led activity, then the interpreter's role becomes about progressing the communication (Ford et al., 2020). Alternatively, Halliday (1993) and Tomasello (2008), place the child's intentions to the fore with the adult reinforcing the engagement, by responding. Regardless of which position one accepts, if the child has the capacity to change their environment (Fleer, 2019), the adult becomes a 'functional variable' (Ford et al., 2020, p. 247), with the quality of their engagement having implications for OL&C development.

Joint Attention and the Motivation to Communicate

The earliest attempts at communication, also known as the *Gricean Communicative Intention*, require an understanding that those involved have a common intention (Bruner, 1983; Tomasello, 2008). This bi-directional relationship presupposes that both infant and adult know something that will be useful to the other (Fleer, 2019). The infant and adult both look at the same toy. The infant reaches out and because the toy is present the adult can interpret the infant's desire to hold it. *Joint attention*, or the shared experiences of communicators who have a common purpose serves the development of OL&C as it facilitates requesting, informing and the development of vocabulary, providing 'hot spots' for labelling and language acquisition (Tomasello, 2008, p. 160). It also affectively supports and reinforces the child-other communication (Wells, 2007). *Joint attention*, the first learning outcome of the *Primary Language Curriculum/Curaclam Teanga na Bunscoile* (PLC/CTB) (NCCA, 2019), and how it contributes to OL&C development is therefore central to teachers' content knowledge (CK). How it might be established and maintained features as part of their pedagogical content knowledge (PCK).

Children use language not for its own sake but rather to purposefully complete tasks (Bruner, 1983; Tomasello, 2008; Wells, 2007), making *motivation*, the second learning outcome of the PLC/CTB (NCCA, 2019), important in the process of developing OL&C. Language, both verbal and non-verbal, as “a form of social action constituted by social conventions for achieving social ends” (Tomasello, 2008, p. 341), is embedded in social activity. It may therefore be useful to examine the opportunities teachers provide for OL&C and the extent to which they motivate children to engage.

The Arrival of Oral Language

Language is an ‘enabler’ that evolves typically during the child’s second year, building on existing methods of communication and gesturing, and where gesturing is no longer viable (Bruner, 1983; Tomasello, 2008). *Joint attention* and common ground are abstracted and achieved through a collaborative use of language (Bruner, 1983; Tomasello, 2008), and typically involve vocalisations. The child-adult partnership, described earlier, continues as adults imitate children’s early sound patterns (Buckley, 2003). Scaffolding the child means reducing adult involvement, as their attempts at “meaningful social engagement” (Tomasello, 2008, p. 161) increase.

A culture, constructed around the expectation that its members will collaborate (Tomasello, 2008), provides a social context for the language learning that follows (Vygotsky, 1986). An expression of enthusiasm, for example, is about seeking a response from someone (Tomasello, 2008), and in this way there is alignment (Gee, 2015) within the culture. Rather than, for example, accurate labelling or syntax being the focus of the communication, what evolves is a capacity to interpret and regulate “underlying social-cultural processes” (Bruner, 1983, p.128). Language learning becomes more about understanding (French, 2014; Gee, 2015). This has implications for how children’s OL&C is interpreted and assessed.

Rogoff (1998) (as cited in Flear, 2002) describes language assessment in terms of ‘planes’ or sites of engagement, thereby considering amongst other things the communicating partners and their messages. Snow (2017) extends the focus to include ‘knowledge of the world’, believing elements such as vocabulary develop within conversations and contexts that interest children. While assessment is examined in some depth in *Section Two*, it could be concluded that focusing on children’s understanding, their curiosity and their intentions may result in less emphasis being placed on more-quantifiable elements such as vocabulary (Snow, 2017).

It is clear some children will not develop their communication through the process outlined above. Those who do not vocalise, for example, might be supported using hand-signing systems such as Lámh (2018). However, whether the form the child-adult engagement takes is something other than oral, or it is perhaps augmented by technology, teachers need to consider their role. The significance of relationships, progressing engagement in an informed and purposeful manner, scaffolding interaction and creating meaningful contexts, have relevance for all children-teacher engagements.

The Reciprocal Nature of Communication that Leads to Dialogue

A maturational or developmental view of learning suggests the child's cognitive development will steer their engagement with others. Vygotsky's socio-cultural view opposes this perspective, suggesting that children learn language by engaging with more knowledgeable others (MKOs) (Slavin, 2003). Knowledge and attitudes are developed through dialogic encounters that as part of an inter-dependence or bi-directional interaction (Fleer, 2019; Ford et al., 2020) exist between the initiator and the listener, the child and the teacher (Dawes et al., 2000, French, 2014; Snow, 2017; Wells, 2007) or the child and more competent peers (Patterson, 2018). Whether child-other engagement is described in terms of "more frequent and longer interactions" (Ford et al., 2020, p.249) or increases in knowledge brought about by discussions (Snow, 2017; Wells, 2007), the quality of the engagement remains the concern of teachers.

Section One: Summary

The literature highlights the significant role played by an 'other' in developing children's OL&C and dialogue. The establishment of joint attention is clearly central to the engagement, and the dialogue which results provides a context for cognitive development. In order for teachers to appreciate the significance of their role as the 'other' and to understand how they might fulfill it, it may be useful to consider the nature of the CK and PCK they require (Piasta et al., 2020; Shulman, 1986). This is examined next within the context of a socio-cultural theory of learning (Vygotsky, 1986).

Section Two: A Theoretical Framework for the Development of Oral Language, Communication and Dialogue at School

Theoretical frameworks can explicitly or implicitly influence an investigation while also providing direction and justification in terms of what to explore. Vygotsky's socio-cultural theory (SCT) (1986) of learning proposes that for both children and adults, thought develops through language, and learning happens as we interact with each other (DeBruin-

Parecki & Henning, 2002; Fleer, 2019; Johnson & Golombek, 2020; Siraj-Blatchford & Manni, 2008). Therefore, SCT provides a suitable ‘lens’ through which emerging theories in relation to the development of dialogue in classrooms can be examined.

Referred to as the “intersection between the members and the group” (Van Lare & Brazer, 2013, p. 384), SCT helps to explain how language, learning and social interaction become interconnected (Bruner, 1983; Wells, 2007). Here in *Section Two* I reflect on language as the primary ‘tool’ (Wood, 1998) or mediator of culture for the learner, with SCT allowing us to explore why it holds such importance. I examine how SCT positions the teacher as listener and interpreter as referenced in *Section One*, and ultimately the MKO. In recognising the existence of a ‘zone of proximal development’ (ZPD) in the context of developing dialogue – a construct described by Vygotsky (1986) and examined later - SCT accepts facilitation as a means of advancing language and considers assessment as intrinsic to its development. I present the argument that OL&C inclusive of dialogue becomes a tool for thinking and consider the teacher’s role in its facilitation.

Socio-Cultural Theory of Learning

Positioned within a Marxist philosophy, Vygotsky’s three stages of learning progress from *object* to *other* and finally to *self-regulation* (Lantolf et al., 2015). Learners begin by using objects to support the regulation of their environment. They manage their interactions and learning using concrete experiences and materials; the infant examines the toy car. A second stage requires others to support the learner’s engagement or regulation; an adult pushes the car, demonstrating how it moves. Finally, self-regulation occurs when the learner has internalized earlier supports and can carry out tasks independently; the infant repeatedly pushes the car around the floor, building narratives which might include pieces of furniture as obstacles, for example. This staged interpretation of the learning process requires active engagement, which is mediated by language, organisation and structure within a social context (Lantolf & Thorne, 2006).

Interpretation of the environment appears to be reliant on engagement with a more mature learner or MKO (Bruner, 1983; Sfard, 2015) who, rather than simply talking, reacts in a timely and supportive manner (Schvarts & Bakker, 2019). This process may be displayed externally, as is the case during verbal interactions with others, or it may be internal, where the learner is speaking to him/herself using private speech (Lantolf & Thorne, 2006; Wells, 2007; Winsler, 2003). Awareness of the presence of private speech (signalled, for example, in the use of averted gaze, repetition and altered prosody) is

important as it can positively impact children's success in learning (Lantolf & Thorne, 2006; Winsler, 2003). It also supports children's transitions from collaborative to independent learning as they internalise and organise ideas, and move away from adult support (Winsler, 2003). As a means of assessing levels of independent learning (Winsler, 2003), it can highlight areas in need of scaffolding. Participants in my study, who noted how, for example giving children more time to answer meant they paused before responding, believed this provided evidence of thinking and private speech. One participant recalled a child pause, use the phrase 'wait a minute!' as if conversing with herself, and then alter her answer. While I recorded these observations, it was beyond the scope of the study to explore the process in depth.

Oral Language as a Tool of Socio-Cultural Theory

Referred to as symbols (Wood, 1998), oral language, texts (print and digital), Mathematics, and the arts function as 'mediators' for the learner (Ratner, 2015) in an act of 'creative appropriation' (Lantolf et al., 2015). Considered a 'tool for thinking' (Mercer, 2004; 2008; 2010), language permits us to organize and reorganize our thoughts, thus, making it intrinsic to cognitive development (Lantolf et al., 2015; Winsler, 2003).

Language allows us to transcend current situations and examine what has already happened, as well as what might happen in the future. It frees us from events happening in our immediate environment, while enabling us to talk about events that have and have not already occurred (Lantolf & Thorne, 2006). We plan tasks in collaboration with others and subsequently internalize them creating a cognitive resource for the future.

Extant research suggests that outcomes may vary where the language available to people differs in particular social groups at particular times (Cregan, 2019; Kennedy & Shiel, 2022; Ratner, 2015). Research has long considered the disparities that can emerge between the language of children's homes and that used at school (Cummins, 2014; Hart & Risley, 1995; Mac Ruairc, 2011; Ratner, 2015). Cregan (2019) describes how its academic decontextualised nature means that, for example, figurative language is used, rather than images, to support interpretation. Termed 'cultural capital', proficiency in language can become "a foundation for learning and achievement" (Dobinson & Dockrell, 2021, p. 528) and can influence occupational success (Mercer & Dawes, 2018).

Those engaged in reforming classroom talk often position language in a rights-based democratic space that seeks equity (Alexander, 2018; All-Party Parliamentary Group (APPG), 2020; Michaels et al., 2008; Paatsch et al., 2019), and where children behave as

participants (Theobald & Kultti, 2012) rather than recipients. Not a simple either/or, Clarke et al. (2016) describe how it is what different teachers value that influences which children experience agency. Recognising OL&C as tools for addressing the ‘achievement gap’ (Cummins, 2014; Kennedy & Shiel, 2022) as well as responding to the democratisation of learning, presupposes the presence of teachers who have sufficient CK and PCK to develop its usage.

The Role of the Teacher as More Knowledgeable Other

Vygotsky’s second stage of development, *other-regulation* describes how, in terms of OL&C, children advance by observing and then adopting the behaviours of more experienced communicators (Bruner, 1983; Lantolf & Thorne, 2006; Lantolf et al., 2015; Wood, 1998). This role, historically attributed to mothers (Bruner, 1983) and explored in Section One in terms of its impact on the communication of infants, has more recently been ascribed to adults in educational settings (Alexander, 2018; Clarke et al., 2016; Lantolf et al., 2015) and peers (Shvarts & Bakker, 2019). Teachers who adopt the role of MKO in terms of communication are viewed as facilitators (Sybing, 2021), leaders (Goldenberg, 1992), and extenders of children’s language (Alexander, 2018). Alternatively the child as agent brings their interests and experiences to a ‘space’ which has been provided by the MKO (Einarsdottir, 2010).

Regardless of these differing positions, and whether the support is overt in terms of modelling and leading, or subtle as they create suitable ‘spaces’ for engagement, teachers as MKOs play a very particular role (Boyd et al., 2019; Schraw & Olafson, 2002; Sybing, 2021). Rather than providing “a shower of spoken language” (Bruner, 1983, p. 39), they sensitively interact with the child in what Vygotsky (1986) describes as ‘*obuchenie*’. This interconnectedness of teaching and learning, where learner and teacher mutually understand each other (Winsler, 2003), also highlights the centrality of relationships to the development of OL&C (French, 2014; Winsler, 2003). It results in teachers knowing when to “bear down to draw out a student’s idea and when to ease up, allowing thought and reflection to take over” (Goldenberg, 1992, p. 318).

It would appear that the capacity to listen is central to the successful engagement between the MKO and the child. French (2014) describes ‘ideal’ and ‘purposive’ child-adult conversations as those that “treat children as equal conversational partners” (p.23) and where adults actively listen in order to extend children’s understanding. Careful

listening without judgement as to what might be ‘correct’ or ‘good’ indicates to the child the information and types of response valued by the adult (Clarke et al., 2016).

Paradise and her colleagues (2014) compared ‘European American’ teachers using instructions, guidance, correction and motivation in what appeared to be adult-directed engagement, with Mexican teachers who worked closely and quietly alongside children, who they believed willingly engaged in learning opportunities. The latter offered what was described as authentic child-teacher engagement with the teacher in her listening, displaying real interest in what the child said (Paradise et al., 2014).

It appeared that a fundamental difference between the two traditions lay in positioning the child as one who was able. Overt praise was unnecessary, as was control, evident in an excessive use of instructions. An experienced European American teacher described being responsible for the children’s learning, suggesting she believed she, rather than the child, was in control. Her difficulty with ‘staying away’, as she termed it, was born out of her desire for children to be successful. Her efficient management of the learning environment suggested their success depended on her.

The Zone of Proximal Development. Teachers’ responsibility for facilitating learning (van der Veer & Valsiner, 1991) is evident in the construction of ZPDs or places where new learning occurs. Identified as one of Vygotsky’s main contributions to educational theory (Wood, 1998), the ZPD describes the space between actual and potential development (Lantolf & Thorne, 2006) and where teachers purposefully engage in a manner which will enable their children to advance (Winsler, 2003; Wood, 1998). Referred to earlier in the context of recognising private speech, the ZPD is often presented in physical terms; the three-year-old infant, who when supported by a familiar adult in a familiar context, constructs Piaget’s wooden pyramid (Wood, 1998). It might also be interpreted in a dialogic context with the teacher and child collaborating to extend reasoning.

Using *contingent instruction* that increases or reduces assistance as necessary (Wood, 1998), the teacher poses appropriately challenging questions (Snow, 2017; Zuker et al., 2020) that help the child to make connections that they might not have discovered independently. Shared book reading (SBR), as examined by Walsh and Hodge (2016), exemplifies this activity. Their review of twenty SBR interventions in pre-schools indicated that teachers’ questions, while having the potential to extend young children’s thinking, rarely do. They recommend teachers’ skills be developed through this type of

dialogic engagement in terms of advancing thinking, being reliant on teachers knowing when and how to engage.

Teacher Expectation. The potential for child-teacher engagements that move beyond children imitating adults' utterances, and that reflect the facilitating moves proposed by Snow (2017) and Zuker et al. (2020), presupposes an expectation on the part of teachers that children can engage in dialogue. Argued in Chapter Three within the context of epistemologies, teachers' attempts to engage dialogically may fail where they perceive themselves as transmitters of information and children as recipients (Maine & Hofmann, 2016). Alternatively Bond and Wasik (2009) describe teachers 'meaningfully' conversing with young children in response to their 'ideas', suggesting that teachers who expect children to have ideas may be more likely to engage dialogically with them. Research identifies the complexity of children's thoughts once activated by adults (Fleer, 2023). Open-ended questions with sufficient time to respond indicate to children that teachers are interested in these thoughts and expect them to respond (Gjems, 2010; Greeno, 2015). It would therefore seem probable that teachers who do not expect children to be curious about a topic or believe children may be too young to engage with complex ideas, are unlikely to seek their views, thereby limiting the possibility of dialogue.

Contexts for Developing Oral Language and Communication. Vygotsky's ZPD model can be applied to instances of 'everyday talk' (Alexander, 2018), or incidental teaching (Shiel et al., 2012), where "new personal experience [that] leads to the formation of new reactions" (Van der Veer & Valsiner, 1991, p. 53). These contexts can be motivating and child-initiated (Bruner, 1983; Wood, 1998), and can provide evidence of more complex engagements than those displayed in typical teacher-led classroom talk (Gray, 2017). Their contribution to the development of children's dialogue, however, is dependent on how teachers utilise them (Shiel et al., 2012).

Described as a 'leading activity', play is widely accepted as a context for and mediator of learning, and therefore, language development, before children begin primary school (Bond & Wasik, 2009; Duncan & Tarulli, 2010; Fleer, 2023; French, 2014; Nind, 2003). Early years educators utilise play for assessment purposes by questioning children (Pyle & DeLuca, 2017). Duncan and Tarulli's description of educators facilitating children's reflections and "playing with roles" (2010, p. 287) seems at odds with the recommendations of Howard (Aistear-Síolta, 2024). Howard comments that while teachers may be invited to join the play, once they begin to pose questions, children stop leading,

thus impacting the potential for longer cycles of play and language use, which occur when children lead.

The negative impact of teachers manipulating play experiences to bring about opportunities for OL&C development is presented in a year-long ethnographic study featuring a dual-language programme in a Spanish-English kindergarten classroom (Hayes & Matusov, 2005). With the programme's aim being to increase bilingualism, Hayes and Matusov sought to explore how teachers utilised play to develop 'real-life' conversations with and amongst their children. They outlined one experienced teacher's vain attempts to 'inspire' her children to converse during socio-dramatic play, despite what they described as her "passionate advocacy of the importance of fostering authentic conversation" in the classroom (p. 342). Using a typical triadic model of engagement where she questioned the children, they responded and she evaluated, the teacher attempted to have the children initiate 'conversations'. Along with an observed reluctance in the majority of the children to engage in Spanish, the authors noted how the teacher appeared to disturb the children's play as she introduced narratives that they have not considered, prioritised vocabulary enrichment through labelling and posed test questions. They suggested that had she engaged more dialogically with the children and used their play, which was their goal, in a way that permitted them to continue leading, the results may have been more positive. The question remains, therefore, how best to utilise play as part of OL&C development while not jeopardising children's personal, social and cognitive development.

More significantly, perhaps, in terms of teachers' CK and PCK, is the fact that the teacher in Hayes and Matusov's (2005) study, in identifying her children's limitations in initiating conversations, had not considered whether her practices may have been the cause. She referenced children's 'depressed homes' and an absence of language development believing children needed to be taught how to converse, and 'imitate' her in their play. Her interpretation of language appears to lack what Bruner (1983), Tomasello (2008) and Wells (2007) refer to as something purposeful. Three issues arise here: how teachers determine the suitability of contexts in which to support the development of communication and dialogue, whether play is a suitable context, and whether teachers are sufficiently skilled to engage in a way that does not jeopardise the play. A fourth concern – second language acquisition – is beyond the remit of my study. Teachers as MKOs require an in-depth understanding of how and why children use language, and their capabilities in terms of its use. Knowing when to 'step in' and when to 'step back' also appear to be part of this role, as teachers create sufficiently challenging contexts to bring about learning.

Scaffolding. *Scaffolding*, a metaphor often applied to the type or amount of mediation provided by the MKO (Lantolf et al., 2015; Van Der Veer & Valsiner, 1991; Winsler, 2003), is described as ‘temporary adaptive support’ (Shvarts & Bakker, 2019). When positioned within the ZPD, it reflects the ‘stepping in’ and ‘stepping back’ noted above (Shvarts & Bakker, 2019).

Some tension arises however, in terms of how the MKO operates in this scaffolding role. For Lantolf and Thorne (2006), the MKO maintains control as they increase the learner’s responsibility within the task as appropriate. Alternatively, Shvarts and Bakker (2019) consider the engagement as learning that is constructed between the teacher and learner. It appears teachers straddle both as part of dialogic engagement, with skills in knowing how to achieve deeper thinking while at the same time appreciating this happens through authentic engagement. This requires a deep understanding by teachers of the potential impact of children-teacher engagements on learning and an appreciation of “the nature and quality of teacher interactional style as the critical factor in predicting children’s outcomes” (Shiel et al., 2012, p.127).

Goldenberg (1992) applies a ‘weaving’ image to the way teachers scaffold and build on children’s existing views through ‘instructional dialogue’, helping them to extend their ideas and marry them to those of their peers (French, 2014). This reflects Alexander’s (2018) claim that, in facilitating children’s thinking through language, “it is the student’s talk that matters most, and it is to the teacher’s agency in securing the enhancement of student talk that dialogic teaching is directed” (p. 584).

Alternative to the support of teachers as MKOs is that provided by peers (Vrieki et al., 2019). Relying solely on teacher-child engagements may result in less frequent interaction (Wood, 1998). Strategies widely used in Irish primary schools to supplement it include practices such as ‘*Think Pair Share*’ developed by Frank Lyman in the 1980’s. While they may provide children with time to converse with peers before presenting information to a larger group, the effectiveness of these practices in terms of developing language is questioned. Chi and Menekse (2015) describe such engagements as *passive*, *active* or *constructive*, thereby suggesting that conversing partners may not be competent to extend each other’s thinking (Shvarts & Bakker, 2019) or challenge views considered necessary for cognitive development (Patterson, 2018; Sfard, 2015).

Oral Language and Communication Development and Cognitive Development

Social constructivists who examine the interconnectedness of language and understanding argue that cognitive development is directly and positively impacted by dialogic engagement at pre-school and school (Nystrand et al., 2003; Patterson 2018, Siraj-Blatchford & Manni, 2008). Knowledge, typically framed as “what is known” is reconfigured as what can be understood together (Wells, 2007, p. 269).

Oral language and communication when inclusive of dialogue becomes a tool for thinking (Phillips Galloway & McClain, 2020; PDST, 2020; Vygotsky, 1986; Wells, 2007). This ‘high-level’ thinking (Soter et al., 2008) or reasoning occurs as evidenced in Theobald and Kultti’s (2012) study, when children, through engagement, build on their own knowledge and that of peers and teachers (Wells, 2007). Therefore, cognitive development does not directly result from engagement in an activity (Zubaidi, 2015) but rather ‘tools’ including language, transfer the experience into new learning.

Teachers who pose authentic questions and encourage the exploration of ideas that require reflection facilitate this process (Gillies, 2015; Reznitskaya, 2012). Kirkland and Patterson (2005), who also advocate for authenticity, propose the use of predictable non-threatening contexts. However, in classrooms where children are required to justify their positions while being open to challenge (Wells, 2007; Michaels & O’Connor, 2015), the pedagogical focus becomes the children’s dialogic engagement (Phillips Galloway & McClain, 2020; Vrikki et al., 2019). Books, rather than providing knowledge, become the means to support the deepening of our understanding and the possibility of “knowing together” (Wells, 2007, p. 264). We read that the Vikings first came to Ireland in 795 AD and, by exploring together why people emigrate, we deepen our understanding of whether emigration is always beneficial. There are social gains in terms of agency (Clarke et al., 2016). Also, the link between dialogue and cognitive development becomes evident in, for example, children’s sharing of analogies which “requires the ability to consider the issue from a different perspective” (Sun et al., 2015, p. 72) as they explore themes such as identity and permanence (D. Kennedy, 2022). This view that language has a direct impact on thought development (Bruner, 1983; Shiel et al., 2012; Snow, 2017) and is “the process by which experience becomes knowledge” (Halliday, 1993, p. 94) has implications for teachers’ knowledge.

Teacher Knowledge. Little (2002) defines CK as the development of a deep understanding of subject matter. PCK is the “practical teaching knowledge” (Little, 2006, p. 6) that relates to how subject matter is taught in the discipline, which in this case is

children's thinking, and how that can be developed. Both are significant in that "neither content knowledge nor generic teaching skills alone are sufficient to be an effective teacher" (Borowski et al., 2012, p. 9).

If, as Wood suggests, "systems for representing the world are not just things that we think about; they determine how we think" (1998, p. 41), then we need to consider the quality of the dialogic opportunities available to children, brought about by teachers' CK and their PCK (Little, 2002; Piasta et al., 2022; Shulman, 1986). These opportunities and teachers' engagements might be viewed in terms of Little's (2002) *instructional triangle* featuring CK, PCK and the teacher's knowledge of the diversity of their group of children. This is mirrored in a recent document from the Department of Education (DE, 2021) entitled *Preparation for Teaching and Learning - Guidance for All Primary and Special Schools* which references teacher knowledge in terms of curriculum, pedagogy and knowledge of children and their prior learning. Cregan (2012) adds to this list teachers' knowledge of their own beliefs or epistemologies. The benefits for teachers of this increased knowledge include feelings of empowerment (Cregan, 2012), increased competence (Guskey, 2002), confidence (French, 2014) and the capacity to recognise and respond to 'critical moments' in classroom dialogue as they occur – a deciding factor according to Grieshaber (2010), in whether children's understanding is advanced.

Child-Teacher Dialogue

It has already been proposed that language as "the most pervasive and powerful cultural artifact that humans possess" (Lantolf & Thorne, 2006, p. 201) is central to cognitive development (Bruner, 1983; Vygotsky, 1986). In its dialogic form, it enables the testing of world views which results in new learning (Dawes et al., 2000; Vrikki et al., 2019). The slow shift of control from teacher to child described earlier as part of the ZPD is facilitated in this dialogic setting.

Teachers are responsible for providing opportunities for children to engage in dialogic contexts (Sybing, 2021; Walsh & Hodge, 2016) that are 'challenging' and encourage a range of perspectives (Maine & Hofmann, 2016). However, such engagements may be impacted by issues relating to authority, for example, and the possibility of being 'right' or 'wrong'. Teachers, by posing open-ended questions, can positively increase dialogic interaction (Topping & Trickey, 2014), influence OL&C development (Kucan, 2007; Nystrand et al., 2003) and support children's engagement in decision-making

processes (Blything et al., 2019; Topping & Ferguson, 2005). The results may be feelings of empowerment (Alexander, 2018).

These benefits highlight the potential imbalances that can occur in classrooms where child-teacher dialogue is not considered (Clarke et al., 2016). Extant research suggests *teacher talk* continues to dominate oral engagement in classrooms nationally (Shiel et al., 2012) and internationally (Alexander, 2018; Soter et al., 2008; Wilkinson et al., 2017), with the focus reportedly being on assessment as teachers attempt to establish what children know. If this is to change then perhaps genuine engagement needs to be prioritised, with teachers becoming aware of their talk patterns and how they impact child-teacher dialogue, while also providing and managing contexts (Stivers, 2021).

Dynamic Assessment and Oral Language and Communication

It is argued that traditional criterion-based and norm-referenced OL testing does not assess learners' OL development (Lantolf & Thorne, 2006). Rather than identifying how learning might be improved, it facilitates the assessment of systems (Fleer, 2002). The 'institutional capital' of schools is prioritised over the 'cultural capital' of children's immediate environment (Fleer, 2002; Nolan & Mac Ruairc, 2022).

A SCT of learning, however, considers cultural and institutional capital as well as the diversity evident in classrooms of young children (Winsler, 2003). Proposed earlier in terms of creating ZPDs, a true assessment of what the learner can do occurs while they are being assisted rather than when they are working alone (Vygotsky, 1986). This suggests the teacher's actions might also be analysed (Dawes et al., 2000). Labelled *dynamic assessment*, their relationship with the child is recognised, as well as the extent of their participation in the process. When all of these variables are considered, a more complete image of children's capabilities in OL&C emerges (Rogoff, 1998; Sybing, 2021).

Therefore, as well as considering particular elements such as the extent of children's vocabulary, as part of the *dynamic assessment* approach outlined above, the 'interpersonal' plane is analysed (Sybing, 2021). This includes teachers' dialogic practices, along with interactions with other children (Rogoff, 1998). This framework for integrating teaching and assessment moves beyond diagnosis of difficulties (Lantolf et al., 2015) and becomes part of future planning (Lantolf et al., 2015; Rogoff, 1998; Wood, 1988). All of this, however, appears dependent on teachers equipping themselves with skills in analysing classroom dialogue and teacher talk patterns (Kucan, 2007).

As “meaning occurs in the context of participation in the real world” (Fleer, 2002, p.112), the learning context and resources used to support dialogic opportunities also require analysis (Reznitzkaya, 2012; Sybing, 2021; Wood, 1998). In displaying “sensitivity toward the knowledge, identities, and other socio-cultural resources that students bring to the classroom” (Sybing, 2010, p.10), teachers need to be cognisant of the complex set of influences represented by culture (Rogoff, 1998). These can impact positively or negatively on dialogue (Clarke et al., 2016; Topping & Trickey, 2014). The communication patterns of children and teachers are also impacted by the differing registers of school and home (Cregan, 2007; Gee, 2015; Nolan & Mac Ruairc, 2022), and where children have English as an additional language.

The 2009 version of *Aistear: the Early Childhood Curriculum Framework* (NCCA), operational in lower primary classrooms during this study, proposed a dynamic approach to assessment, describing teachers in the “ongoing process of collecting, documenting, reflecting on, and using information” (2009, p. 72). While the framework outlined conversations and question types that would elicit information from children and referenced careful listening and enabling as some of the skills required by teachers, the complexity of these tasks may have been underestimated. Mercer considers it unreasonable to expect teachers to analyse language with a myriad of factors influencing dialogic engagement “in the heat of conversational exchange” (2004, p.161). While accepting that there may be difficulties with assessment, increasing teachers’ awareness of what is occurring ‘in the moment’ (Wells, 2007) in a manner that reflects *dynamic assessment* (Vygotsky, 1986) may, however, assist in improving children-teacher dialogue and ultimately the learning outcomes for children.

Section Two: Summary

Socio-cultural theory, a theoretical framework of learning (Vygotsky, 1986), facilitates an in-depth examination of the place of OL&C and dialogue in education. Its suitability is proven by its positioning of language as a tool for learning and the significance it attributes to the role of an MKO in its development. The dynamic approach to assessment promoted by SCT (Vygotsky, 1986) considers the dialogic event which includes the child, the teacher and the context (Alexander, 2018; Soter et al, 2008) as the unit of analysis.

Section Three: Oral Language, Communication and Dialogue - The Implications for Teaching and Learning

A primary function of classroom talk is the development of OL&C, which ultimately shapes children's learning (Boyd et al., 2019; Theobald & Kultti, 2012). In this section, I critique the suitability of models of talk in terms of cultivating classroom dialogue and explore teachers' practices in supporting its development with and amongst young children.

Classroom Talk

While 'pockets of excellence' undoubtedly exist in terms of teacher-child engagement (Vrikki et al., 2019), it is widely accepted that classroom talk is largely monologic (Alexander, 2018; Mascadri et al., 2021), with teacher talk evident to a much greater degree than is considered useful (Dockrell et al., 2010; Paatsch et al., 2019; Theobald & Kultti, 2012). In response to the claim that children's voices are not central to classroom talk (Sybing, 2021), identifying the types of classroom talk that prevail including listening, and assisting teachers in understanding these, may reveal reasons for this imbalance and bring about more dialogic classrooms.

Creating opportunities for classroom talk that facilitate OL&C development, reflects a complex set of decisions (Barnes et al., 2020; Conway et al., 2009; Grieshaber, 2010). Curricular requirements and school cultures (Theobald & Kultti, 2012), along with CK and PCK, impact separately and all at once. These issues are illustrated in a small study comparing formal and informal engagement between an Australian preparatory schoolteacher and a group of four- to six-year-olds (Theobald & Klutti, 2012). In a task to dramatize the story of *The Three Little Pigs*, the teacher engaged children in deciding who would take what role and in which of the three 'houses' they would 'live'. In their analysis of video-recorded interactions, Theobald and Klutti (2012) revealed some difficulties with managing oral exchanges amongst younger children. Hand-raising was used to manage the talk space and teacher control was also evident in the need to invite children into the discussion. This resulted in a dilemma for the teacher as she attempted to balance her pedagogical intentions with increased child autonomy and opportunities for dialogue. A second recorded excerpt, however, highlighted possibilities associated with informal child-teacher engagement where open-ended questions such as '*what do you think?*' were used to follow the children's interest in a digger repairing a drain outside the classroom. Content knowledge and the role of motivational factors in OL development along with the teacher's PCK in scaffolding the engagement, resulted in the exploitation of an opportunity that

promoted agency and dialogue. The “joint production of talk” (p. 217) planned as part of the *Three Little Pigs* task was instead achieved in this less formal dialogic setting where the significance of creativity and curiosity in children’s use of language became evident (Theobald & Klutti, 2012). Therefore, it is clear that talk can occur in a range of planned and unplanned situations. The extent to which it can become dialogic deserves attention.

Types of Talk

There are multiple terms for describing classroom talk including immediate and monologic, or non-immediate and dialogic. All have relevance, with a more monologic approach being preferable in the recall of facts and as part of rote learning (Alexander, 2018; Reznitzkaya, 2012). Considered a contextual factor (Paatsch et al., 2019), different talk types influence the communication that develops. For example, in terms of the secretarial aspect of writing and editing tasks including spelling checks, teachers may ask children to identify their errors. Once done, teachers commend the revised responses. The writing process can feature multiple phases of editing where, alongside the more creative authorial elements, teachers look for increased accuracy. In such instances, teachers control the discourse (Alexander, 2018), making it important that elsewhere in the school day more dialogic engagements feature.

Immediate or Monologic Talk. Immediate talk describes the responses required by teachers when they pose closed questions (Paatsch et al., 2019). A large-scale British study entitled *Researching Effective Pedagogy in the Early Years (REPEY)* analysed a random sample of 1967 questions by adults in twelve pre-school settings (Siraj-Blatchford & Manni, 2008). The study reported that 94.5% of these questions were closed. They featured factual recall with limited choices available on occasion. This type of questioning removes the opportunity for elaborations and justifications that can reflect personal experience and limit children-teacher engagement (French, 2014).

Similar practices were evident in the findings from an Australian study of child-teacher engagement in infant classrooms (Paatsch et al., 2019). The authors considered the impact of teacher questioning on opportunities for extended and justified responses by children. As part of a larger study, three pre-school teachers and six foundation year or infant class teachers recorded their engagements with groups of children over the course of one year. Contexts varied from shared reading to guided reading sessions and included some grammar and mathematics lessons. Teachers self-selected five-minute recordings of their engagements of which thirty three-minute sections from across the year were

transcribed and analysed. The questions teachers posed in the children-teacher dialogue were coded (i.e. open and closed questions), along with the children's response (i.e. verbal and non-verbal engagements). Other coded behaviours included the provision of 'wait time' for children to respond.

With findings largely consistent across settings, instruction-type language accounted for over 20% of foundation year teachers' engagements while labelling constituted 38% of their children's responses. The authors reported "limited opportunities for children to explain, initiate or give an opinion" (p. 79). Despite the fact that SBR provides contexts for joint attention (Ford et al., 2020; French, 2014; Walsh & Hodge, 2016), dialogue-limiting actions by teachers included oral cloze: that is the practice of children completing familiar phrases from books read to them. A teacher reading the opening sentence from *The Hungry Caterpillar* by Eric Carle stopped before the final word in order for a child to complete the sentence (Paatsch et al., 2019). The predictive element of such tasks may be useful in the context of a shared reading lesson, with benefits also in terms of second language acquisition. However, such activities appear to offer little in terms of developing children's cognitive potential available through dialogue (Bruner, 1983). Closed or test questions also featured in teachers' use of pictures as stimuli. Teachers regularly repeated exactly what children said to no apparent end. This raises the question as to whether teachers are aware of what constitutes facilitation of OL development.

Initiation-Reply-Evaluation Practices. Monologic talk, evident in child-teacher engagement, is often referred to as initiation-reply-evaluation (IRE) (Siraj-Blatchford & Manni, 2008). Identified in the 1970's by Mehan and Cazden, IRE differs from other oral engagements in its third move, evaluation, described as "crucial for controlling the flow" (Mehan & Cazden, 2015, p.15). This 'triadic discourse' pattern is at odds with authentic engagement where the questioner does not know the answer (Hayes & Matusov, 2005). Referred to as 'recitation' (Michaels & O'Connor, 2015) and described as a waste of "cognitive and educational potential" (Alexander, 2018, p. 562), teachers pose questions and children respond. Teachers evaluate the response with terms like 'good' or 'right'. Regardless of the feedback, the interaction is terminated (Theobald & Kultti, 2012) and the teacher remains in control (Zook-Howell et al., 2020). While not a focus of this study, it may be important to note that the IRE model of engagement supports a public expression of correctness which is not common to all cultures (Mehan & Cazden, 2015).

Extensions of this ‘asymmetric’ discourse model (Grieshaber, 2010) are those described by Topping and Trickey (2014) and Greeno (2015); the initiation-response-feedback (IRF) model; the initiate-respond-question-answer (IRQA) model; and the initiate-respond-restate-evaluate/feedback (IRRE/F) model. In each, the third move determines whether the engagement becomes dialogic, or in a controlling step by the teacher, is terminated. Equally predictable is the fact that children who believe they know the ‘right’ answer will respond because they understand that to be the purpose of the engagement. They will also expect the engagement to end at that point (Greeno, 2015). That children become habituated in these practices (Greeno, 2015), and engagements that occur in other cultural settings display divergent rather than convergent thinking (Mehan & Cazden, 2015) is hopeful. It suggests children can adopt different more varied dialogic moves if facilitated by teachers.

Altering the third move in a way that includes non-evaluative feedback for example, or a question that seeks further information, is supported by the adoption of ‘discourse moves’ (Mehan & Cazden, 2015) including *uptake* (Nystrand et al., 2003; Soter et al., 2008) (explored below). Such invitations to children to propose, make judgements and explain their views suggests possible epistemological changes for teachers (Vrikki et al., 2019; Wells, 2007; Wilkinson et al., 2017). Control of the content and knowledge appears to shift from teacher to child, as opposing views are welcomed. Teacher-child collaboration is evidenced in probes for reasons why the child has responded in a particular way. This type of engagement, possible using a speculative lens (Mehan & Cazden, 2015; Topping & Trickey, 2014) is examined later in this section.

Transmission of Knowledge. Monologic talk appears to fit the transmission (Ferguson & Lunn Brownlee, 2018) or realist (Schraw & Olafson, 2002) model of teacher instruction. Children position teachers as the holders of knowledge, with this knowledge becoming what is valued and relevant. Language is developed for the purpose of displaying knowledge through recall around prescribed themes (Siraj-Blatchford & Manni, 2008).

The impact of a transmission model on children’s contributions can be negative, reducing their willingness to engage in classroom dialogue (Mascadri et al., 2021) and pose ‘real’ questions (Wells, 2007). It can place stress on young children whose oral contributions at home may not have depended on the interpretation and retention of information (Paatsch et al., 2019). In such contexts, success depends on high levels of listening and accuracy in terms of recalling exactly what the teacher has transmitted.

Research by Paatsch et al. (2019) referred to earlier, in which they compared the practices of pre-school and foundation level teachers, revealed that the latter spent twice as much time instructing their children. While their findings appear at odds with comments by Walsh and Hodge (2016), who report greater levels of open-ended questioning as children progress through school, the suggestion is that teachers of younger children may be unsure of their role in this regard. Contexts such as reading and mathematics that could otherwise support the development of children's ideas through dialogue were used to develop a certain level of recall (Paatsch et al., 2019).

While admittedly transmission models are required in some instances (Reznitskaya, 2012), the question remains as to whether teachers are aware of the restrictive nature of their talk. With almost a quarter of teacher talk instruction-based (Paatsch et al., 2019), it appears unlikely that children will regard themselves as having knowledge that is worth sharing.

Advancing Monologic Talk. Monologic engagement that includes *disputational talk* (Mercer, 2004) describes the speaker expressing their own view and is evident in the opening stages of an engagement in statements such as '*I like pizza*'. While it may not be dialogic (Nystrand et al., 2003) it provides teachers with the possibility of extending the statement, thus facilitating the development of Mercer's (2004) other two talk types - *cumulative talk and exploratory talk*.

In modelling extensions with questions such as '*And is pizza good for us?*', the teacher supports others to join the discussion and provide alternative views. Participants collaborate through dialogue to create a common response to a task (Mercer, 2004). Positions are repeated as part of the clarification process, confirmed and where necessary elaborated upon to ensure shared understanding. The final stage, labelled *exploratory talk* features participants questioning each other, offering contradictory views, and formulating new ideas. However, the resulting talk, that is somewhere between self-expression and group consensus, is reliant from the outset on teachers' knowledge of what is occurring and how they can advance it. 'Talk moves' supportive of dialogue are explored later in this section.

Questioning and Dialogic Talk. Referred to as 'sites of interaction' (Nystrand, et al., 2003), the terminology used to describe questions can vary (Walsh & Hodge, 2016). Teachers' questions can be open-ended and authentic, facilitating children's expression of their ideas and developing reasoning (Soter et al., 2008). They may be closed, inauthentic

and ‘testing’ where the teacher knows the answer and the focus is on transmitting information. Others can be rhetorical and used to manage the dialogic space in which children and teachers engage.

In 2009, the Teaching Council commissioned a nine-country report that sought to explore the role of teachers. In their review of literature and policy in the field of initial teacher education and PL in countries including Ireland, Conway et al. identified the perceived roles of teachers in terms of four ‘realms’; teachers as managers, carers, cultural and civic beings, and the one that is most relevant to this study - ‘generous expert learner[s]’ (2009, p.11). According to Conway et al. (2009), ‘good and successful teaching’ promotes thinking alongside knowing. Teachers, as the experts who are also learning, make themselves redundant as they model higher order thinking and problem solving. What is also significant in terms of this study is the fact that the four realms feature quite different levels of control, thereby suggesting a range within classroom talk which features management, while at the same time promoting flexible thought. Children are at once required to follow rules of engagement such as listening, while at the same time being prepared to offer justified opinions.

It may therefore be useful for teachers to consider what they expect of their questioning (Walsh & Hodge, 2016). If vocabulary development is a focus, as was the case for the majority of studies of SBR reviewed by Walsh and Hodge (2016) and referred to earlier, then through test questioning, children will recall and label using newly acquired terms. Deep knowledge of the word would require reflection and suggests more open-ended questioning. Teachers who seek to develop reasoning may choose to have their children speculate. Greeno (2015), in his synthesis of patterns of classroom interaction between teachers and students, surmises that having teachers examine the purpose of their questioning may cause them to alter their follow-up question to a student’s response to feature reflection, for example, thereby shifting control and “positioning students as authors” (p. 261).

Referred to as non-immediate talk (Soter et al., 2008) and preferable in terms of increasing understanding, open-ended questioning is used to facilitate dialogic talk (Alexander, 2018; Bond & Wasik, 2009; Paatsch et al., 2019; Soter et al., 2008; Topping & Trickey, 2014). As facilitator, the teacher “create[s] contexts for students to generate extended responses which, in turn, reflect reasoning processes that are typically regarded as indicative of high-level thinking” (Soter et al., 2008, p. 380). As with Mercer’s (2004) *cumulative* and *exploratory talk*, children extend their responses, offer opinions, and

provide explanations (Paatsch et al., 2019; Topping & Trickey, 2014). They reflect, providing evidence of deeper conceptual understanding (Soter et al., 2008).

This dialogic model fits the rights-based democratic and participatory view of education referred to in Section One, where contributions are challenged and require justification (Alexander, 2018; Clarke et al., 2016; Einarsdottir, 2010; French, 2022; Reznitzkaya, 2012; Theobald & Kultti, 2012). It acknowledges the equally important, if dependent role of the child as they are supported to extend the dialogue by introducing justified opinions. This non-judgemental approach to classroom discussion (Boyd et al., 2019) adheres to the principles of SCT. A sense of ‘otherness’ describes inter-relational elements where language is acquired through shared experiences (Sybing, 2021) and thought is developed in dialogue with others (Halliday, 1993).

As with the *cumulative and exploratory talk* (Mercer, 2004) referred to earlier, multiple viewpoints are accepted, resulting in a shared response to a task. Participants speculate and reason in environments that are respectful of others’ views (Boyd et al., 2019). Child thought is promoted above linguistic accuracy and attention to language-based norms. There is a move away from “the acquisition of established facts to the internalization of intellectual competencies that underlie the development of disciplinary knowledge” (Reznitzkaya, 2012, p. 448).

Developing a Dialogic Stance

The term ‘stance’ denotes a way of thinking. Exploring a dialogic stance reveals the impact of particular talk types on thought development. Following a three-year American study of classroom discourse and nine approaches to developing small group discussion, Soter et al., (2008) identified what they considered features of good quality or dialogic classroom talk. They categorised these according to three stances - a critical-analytic stance, an expressive stance, and an efferent stance.

With literature as the basis for developing children’s exploratory talk, Soter et al., (2008) examined teachers’ open-ended questioning and their modelled behaviours associated with critical and analytical thinking. They referenced *Collaborative Reasoning*, which sought to identify underlying positions and assumptions in text, thus developing a critical-analytical stance. Other approaches such as book clubs, that focused on developing an emotional response to text resulted in an expressive stance. The third type, including Goldenberg’s (1997) *Instructional Conversations* programme, supported an efferent stance

whereby children considered texts in terms of the authors' intentions and their own experiences.

Soter et al.'s study (2008) revealed that children contribute more to conversations that reflect an emotional stance, suggesting a positive correlation between children's oral engagement and their capacity to connect with lesson content. However, the quality of the talk appears greater from within a critical-analytical stance. While possibly due to the presence of an MKO, this has implications for questioning that adopts a Socratic approach to dialogue. While not mirroring children's own immediate experiences, a critical-analytical stance that encourages speculation can result in reflection and reasoning (D. Kennedy, 2022).

A sixteen month intervention, involving six Scottish primary school classes of children aged 10 years, sought to encourage a collaborative approach to inquiry using philosophical questions (Topping & Trickey, 2014). Included in the ten to twelve hours of in-service professional development received by teachers, and as part of a staged approach to developing exploratory classroom talk, lessons plans were provided with open-ended prompt questions such as *What is truth?* Ensuing dialogue with and amongst students was recorded. This intervention, measured in terms of changes to the quantity and quality of interactions, was successful, with teachers posing more open-ended questions, students talking more, and students' responses including justifications.

The concern that this type of speculative engagement may only be possible with older children was addressed by Mehan and Cazden (2015), who were similarly successful with children in First and Second Grade in the USA. Their recordings of teachers engaging dialogically around what they referred to as 'big ideas' in Science revealed "a shift in the classroom language game from recitation to reasoning" (2015, p.20). In prioritising reasoning, both studies required children to justify their positions, and thereby take control of the dialogue.

Siraj-Blatchford and Manni (2008) argue that younger children may in fact be better placed to engage in collaborative dialogue based on open-ended questions. Adding the phrase '*why do you think*' to a discussion regarding Humpty Dumpty's fall from the wall can add a collaborative dimension to child-teacher engagement. Children are encouraged to justify their responses and propose alternative viewpoints. However, extending child-teacher dialogue to include these types of discussions may require teachers to transfer control to children.

Approaches to Developing Dialogue

Approaches to supporting the development of children's dialogue appear to operate along a continuum from creating environments conducive to dialogue (Soter et al., 2008), to adopting prompts or talk moves that support reasoning (Ferris, 2014), to providing children and teachers with repertoires of phrases that result in exploratory talk (Alexander, 2018; Boyd et al., 2019). In terms of Mathematical thinking, it is possible to anticipate students' contributions and thereby provisionally plan for the direction of the dialogue (Stein et al., 2015). Key words are a feature of Dawes et al.'s (2000) *Thinking Together Programme* (i.e. 'because', 'if', 'agree' and 'why').

A small-scale American study by Boyd et al. (2019) also used specific speculation and reasoning terms to support dialogic engagement. The authors examined the discourse of six 4th and 5th grade English language learners who scored between 19% and 88% on English language tests (Boyd et al., 2019). In exploring child talk alongside teacher talk, Boyd et al. (2019) observed their teacher who, rather than evaluating the children's responses, gave time to and assisted them in making connections with their peers. Terms including *might/ maybe, could, if, and because* acted as prompts for joint attention across the classroom and encouraged exploration that was inclusive of all perspectives. *Connect episodes* described the verbal contributions made by the teacher and children as they developed ideas, and the children reasoned out loud. Analysis of the episodes showed evidence of "listening, correcting, speculating, elaborating, and questioning" (Boyd et al., 2019, p. 34).

Some argue for a less structured approach, suggesting that rather than explicitly teaching children how to engage dialogically using specific terms, teachers should be made more aware of children's talk moves so that they might support them (Alexander, 2018), reflecting what Phillips Galloway and McClain (2020) refer to as "a culture of language consciousness" amongst teachers (p. 306). Alexander's (2018) *Dialogic Teaching Project*, delivered to 38 UK schools from 2014 to 2017 featured a *repertoire* of talk-based pedagogical skills and strategies (Jay et al., 2017). These were provided to teachers for the purpose of extending the language and communication of Year Five students (9-10 years) in English, Mathematics and Science. Participating teachers focused on extending their own talk repertoires as well as their children's. The twenty-week intervention that addressed classroom talk and featured eleven cycles of mentoring and teachers' self-evaluation of recordings and target-setting, was reportedly successful in terms of improving the quality of children's talk and learning (Jay et al., 2017).

While elements of Alexander's study (Jay et al., 2017) have limited value in terms of this study (i.e. the focus group were Year 5 teachers and standardised test scores were used to prove the intervention's success), aspects of the intervention that are relevant include the focus on teacher talk. Its findings, similar to those of Gillies (2015), suggest that increased children-teacher dialogue may result from changes in teachers' practices (Jay et al., 2017), with positive results where teachers' questions encourage speculation along with the justification of ideas. The move away from closed questions suggests teachers may have experienced an epistemological shift in terms of knowledge and control.

Uptake is defined as an act of building on another's comment by revoicing, elaborating or questioning (Zook-Howell et al., 2015; Soter et al., 2008). Nystrand et al. (2003) describe how it invites others into the conversation. Appearing similar to a *connect episode* (Boyd et al., 2019), the approach lies somewhere between a prescribed move and a purposeful facilitation of dialogue. A teacher responds to a child in a way that indicates that what they have said is worthy of exploration. Gjems (2010) describes this attentiveness by teachers of young children, evident in their questioning, as 'crucial' (p. 147) in developing conversations. The act of seeking clarification, justification and the extension of children's ideas (Zook-Howell et al., 2015) like open-ended questioning, suggests a shift in control from teacher to child. It is reliant on teachers' careful listening, noted earlier in terms of language development and now in terms of bringing about authentic engagement.

Environmental Support. Environmental factors can contribute to the development of children-teacher dialogue. The introduction of 'ground rules' as recommended by Mercer (2008) can assist in cultivating the listening and responding that occurs in the dialogic space. In their discussion on the 'forms and norms' of developing classroom dialogue, Michaels et al. (2008) consider the responsibilities of participants in the dialogue who are required to listen in order to build on each other's responses. While initially the teacher's role is authoritative, once a respectful dialogic space is established, this authority is released (Phillips Galloway & McClain, 2020).

Alternatively, a tension can exist between orchestrating the dialogue through the introduction of rules such as listening and turn talking, and allowing it to develop organically (Cregan, 2019). Timetables and 'hand-raising' have a similar effect (Theobald & Kultti, 2012). The former indicate teachers' intentions to achieve outcomes within a specific timeframe at the expense of classroom dialogue, while 'hand-raising' can be misinterpreted by children, insofar as it suggests that those whose hands are not raised have nothing relevant to contribute. However, prioritising engagement and the expression

of justified opinions over task completion and facilitating the engagement of several children within a conversation, requires perspectives and skills that all teachers may not hold.

Linked with balancing children-teacher talk and encouraging children's contributions (Alexander, 2018; French, 2014), *wait-time* or the time teachers provide to children to formulate answers, might also be considered an environmental factor in supporting classroom dialogue. While difficult to implement (Michaels & O'Connor, 2015), it contributes to a supportive environment necessary for children to develop and articulate thoughts (Ferris, 2014) and engage orally (Jay et al., 2017; Paatsch et al., 2019).

Children's Talk that is Accountable. Programmes that develop children's abilities to use information to reason by making logical connections, and to act as members of a learning community by building on each other's information, are reflected in the *Accountable Talk* model (Clarke et al., 2016; Ferris, 2014; Michaels et al., 2008; Vrikki et al., 2019). Credited with the capacity to increase children's collaborative reasoning, *Accountable Talk* provides "specific talk moves ... to facilitate academically productive discussions" (Clarke et al., 2016, p. 30).

In an American study that provided teachers with 'talk moves' or terms which were believed to cultivate academic discussion, Clarke et al. (2016) examined the extent to which children were facilitated to engage in dialogue. Children who contributed regularly described their responses positively and in terms of what they wanted to find out, whereas less regular contributors referred to their information being right or wrong (Clarke et al., 2016). While Clarke et al.'s (2016) findings might not be fully relevant to the age cohort in this study, they highlight the importance of informed teacher engagement that can result in increased teacher sensitivity towards children's contributions.

Talk Moves. Teachers scaffold engagement using prompts (Maine & Hofmann, 2016), tools (Michaels & O'Connor, 2015) or 'talk moves' (Ferris, 2014). Referenced above in terms of supporting children in extending their ideas (Dawes et al., 2000), talk moves also support children in revoicing, restating, reasoning, extending and giving examples. Sufficient wait time, referenced earlier, is provided to develop thoughts (Ferris, 2014). Teachers model phrases such as '*can you explain...*', resulting in advanced thinking and learning (Michaels et al., 2008; Vrikki et al., 2019).

Conversation stations (Bond & Wasik, 2009) feature talk moves including 'revoicing'. Revoicing allows teachers to summarise children's contributions and in so

doing encourages others to develop the idea while validating what the child has said. While promoting reasoning and advancing conceptual understanding (Topping & Trickey, 2014), revoicing also helps to clarify positions and provide teachers with opportunities to model different types of language (Ferris, 2014). Revoicing replaces evaluative terms such as ‘good’ and ‘right’ with phrases such as ‘*so you believe...*’ or ‘*are you agreeing with ...*’. The emphasis is on developing arguments and extending ideas with the result resembling *exploratory talk* (Dawes et al., 2000) described earlier.

Teachers as Listeners

The approaches outlined above indicate the significant role teachers play in extending children’s OL&C. The “careful orchestration of talk and tasks” (Michaels et al., 2008, p. 284) and the creation of “occasions for purposeful dialogue” (Wells, 2007, p. 266) situates the teacher as MKO listening purposively to the children’s contributions (French, 2014) so that they can build on them. Providing these “thoughtful listening” opportunities (Bond & Wasik, 2009, p. 469) may require teachers to, for example, differentiate between children’s responses that are as a result of instruction in using the prompt, and those displaying a genuine understanding of how a talk move works (Maine & Hofmann, 2016). Arguments for the democratisation of classroom dialogue present all participants as equals (French, 2014; Michaels et al., 2008). Equally, without all participants listening, a two-way conversation may result between teacher and child at the expense of group dialogue.

Section Three: Summary

The research cited in this review suggests that the impact on OL&C development appears positive where children-teacher engagement is analysed within and consigned to controlled settings including classroom groups. Using open-ended questioning with the expectation that children provide justified and reasoned responses results in increased dialogue (Alexander, 2018; Boyd et al., 2019; Soter et al. 2008; Topping & Trickey, 2014). There are positive results where teachers provide wait time (Boyd et al., 2019) and actively listen to children (Bond & Wasik, 2009). Benefits are also reported where teachers use ‘talk moves’ (Clarke et al., 2016) or specific prompts (Alexander, 2018; Bond & Wasik, 2009; Boyd et al., 2019; Soter et al., 2008) and introduce ground rules (Mercer, 2008).

Conclusion

In this chapter, I traced language acquisition in babies and young children and considered the role dialogic engagement plays in cognitive development. I examined the significant role played by teachers in supporting the development of OL&C and dialogue

in classrooms. This highlighted the breadth of knowledge, both CK and PCK, teachers require to fulfil this role and implied a need for PL in this area if practices are to be addressed.

In the next chapter I explore teacher PL and in particular professional learning communities as an effective means of supporting teachers in the development of their CK and PCK. I consider the potential impact of teachers' epistemologies on their PL and provide a conceptual framework based on the literature I have reviewed for the purpose of advancing this study.

Chapter 3

Literature Review

Part 2: Teachers' Professional Learning within a Socio-cultural Context

Introduction

Here in Part 2 of the literature review, I explore models of professional learning (PL) that assist teachers in examining their content knowledge (CK) and pedagogical content knowledge (PCK) to inform my study. While continuing to apply a socio-cultural theory (SCT) of learning (Vygotsky, 1986) as outlined in Chapter Two, I also consider the benefits of adopting the principles of adult learning theory (Darling-Hammond et al., 2017; Louws et al., 2017; Merriam, 2017) in the support of teachers as they examine their role in the development of children's oral language and communication (OL&C) and dialogue. I consider how *transformative* PL (A. Kennedy, 2005; 2014) might exist in instances where teachers' reflection is facilitated. Argued as a fitting context for developing teachers' knowledge (Doğan & Adams, 2018), I next explore professional learning communities (PLCs) in terms of their contribution to teacher PL, and I consider coaching as a means of supporting the work of PLCs. Finally, I reflect on the potential influence of teachers' epistemologies on their PL and their development of classroom dialogue. Lastly, I present a conceptual framework for this study. This chapter informs the second research question:

In what way is teachers' knowledge and practice regarding the development of dialogue in children aged 4-8 years impacted by participation in a Professional Learning Community?

Theoretical Framework for Professional Learning

Vygotsky's (1986) SCT theory of learning, pertinent to the development of children's dialogue, also has relevance for teachers' PL insofar as it upholds the view that learning may be the product of joint enterprise and community reflection (Collin & Karsenti, 2011; DeBruin-Parecki & Henning, 2002; Johnson & Golombek, 2020; Van Lare & Brazer, 2013). The significance of contextual influences such as culture are highlighted, along with the role of a more knowledgeable other (MKO) as facilitator (Beauchamp, 2015; Šarić & Šteh, 2017).

As a social exercise (Cochran-Smith & Lytle, 1999; Lefstein et al., 2020; Timperley, 2015), PL may require an appreciation of cultural issues including relationships which are central to learning (A. Kennedy, 2011). Working in tandem with SCT in the

facilitation of effective PL are the principles of adult learning theory and self-directed learning (Louws et al., 2017; Merriam, 2017). In this section, I examine ALT and consider whether the agency it promotes in terms of PL can be achieved.

Adult Learning Theory

Adult learning theory (ALT), which includes self-directed learning (Merriam, 2017), promotes opportunities for active engagement by teachers who see themselves as co-constructors of PL rather than passive recipients (A. Kennedy, 2022; Louws et al., 2017). Transformative models of PL are reflected in this theory, providing teachers with the necessary “autonomy and the ability and space to exert agency” (A. Kennedy, 2014, p. 691). The Teaching Council (2016), responsible for the regulation of the teaching profession in Ireland, concurs. Its *Code of Professional Conduct for Teachers* (The Teaching Council, 2016), similar to policy in other jurisdictions (Kennedy & Beck, 2018), identifies teachers as responsible for improving their professional practice (King & Stevenson, 2017). Their framework for teachers’ learning, *Cosán*, highlights the importance of teacher reflection at all stages of PL (The Teaching Council, 2016).

The *Looking at Our Schools* framework for School Self-Evaluation (Department of Education DE), 2022) also references “the agency of teachers in making informed and reflective professional decisions about teaching and learning” (p. 9). While perhaps a little tokenistic, considering Kennedy et al.’s (2015) argument regarding accountability and the imposition of top-down standards in teaching, teachers are expected to demonstrate agency in targeting areas in need of attention within their schools, based on their own professional judgement (Louws et al., 2017). In this way they would contribute to the structure and content of their PL.

Therefore, research and policy seem in agreement that teachers should be expected to identify their needs, plan their learning, engage and evaluate (Guskey, 2002; DE, 2022b; Lampert et al., 2015; Louws et al., 2017; Vangrieken et al., 2017). According to Louws et al. (2017), the learning that results from this type of self-determination or ‘autonomous motivation’ is in contrast with imposed learning or ‘controlled motivation’. In their examination of the views of Dutch post-primary teachers, Louws et al. (2017) found that the majority of the 309 respondents to their web-based questionnaire were motivated by the prospect of being able to select the focus of their own PL. Participants whose teaching experience averaged fourteen years generally identified their preferred content in terms of subject-specific content such as ICT skills. The belief is that teachers know what they need

to know and, therefore, are best placed to direct their PL, and engagement is likely to be greater where teachers are considered ‘responsible’ and ‘in control’ (Louws et al., 2017, p. 172).

Balancing Agency and Facilitation. Central to this *transformational* model of PL is the adult’s capacity to address an issue by drawing on past experience (Merriam, 2017). Fleming (2016) describes it as challenging one’s assumptions, with the resulting actions being emancipatory. The documents referenced above (The Teaching Council, 2016; DE, 2022b) represent a recent cultural change (Kennedy & Beck, 2018) in so far as teachers are now entrusted to advance their own PL as they see fit. However, expectations of agentic reflective behaviours appear at odds with earlier research by Guskey (2002), who suggests teachers may need a ‘nudge’ to embark on PL that will likely require additional effort and time. With discrepancies existing between teachers’ espoused theories and their practices (i.e. theories in use) (Van Lare & Brazer, 2013), teachers can believe their existing practices are effective, thereby experiencing difficulty identifying areas in need of attention (Michaels & O’Connor, 2015). Teachers, fearful of losing the autonomy they hold in terms of what happens in their classrooms, may be reluctant to consider others’ views (Vangrieken et al., 2017). Alternatively, the challenges that Merriam (2017) believes can stimulate the PL process may feel threatening to teachers (Wilkinson et al., 2017).

According to Servant-Miklos and Noordegraaf-Eelens (2021), this self-directed approach to learning is where the difficulty lies for *transformational learning*. They question whether teachers may have the knowledge to begin the process and instead promote a *social-transformative* model, with problem-solving that is facilitated and strengthened by collaboration. Therefore, it would appear that, while not self-directed, PL that affords teachers the opportunity to collectively address issues, can become transformative. Teachers are facilitated to prioritise their difficulties and challenge their perspectives, thereby reflecting the continuum evident in Kennedy’s ‘*Spectrum of CPD Models*’ (2014, p. 693).

A large-scale intervention to develop ‘dialogic teaching’ by Alexander (2018), referred to in Chapter Two, while judged successful at a number of levels, highlights the issue of agency for teachers’ PL and how balancing it with increasing teacher knowledge to bring about change is complex. Implemented in 38 British primary schools, the intervention required teachers to “deploy a variety of moves to probe, extend, and follow up pupil contributions on the principle that these would both improve engagement and yield cognitive gains” (Jay et al., 2017, p. 39). Mentors met with teachers fortnightly over

two terms (Jay et al., 2017). The teachers were provided with a handbook of specified talk repertoires, nine talk moves that they were required to implement, online materials including videos of child-teacher talk sequences and reference material. A number of teachers who participated in the intervention reported being intimidated by the programme's content and recommended the number of PL meetings (eleven across two terms) be reduced.

The literature, presented in Chapter Two, suggests that in order to address the difficulties associated with developing children's dialogic skills, teachers may require greater CK and PCK. Alexander's (2018) intervention resulted in changes in teachers' PCK with positive impacts on classroom talk (Jay et al., 2017). However, it appears the degree to which the intervention considered teacher agency as part of the PL was limited. It may, therefore, be necessary to ask whether it is possible to balance agency with the need for increased CK and PCK in order for changes in practice to occur.

More fundamentally, we may first need to establish whether teachers believe they need to change their practice (Michaels & O'Connor, 2015). Kennedy's (2022) call for an 'educational movement' that expects ongoing critical reflection on practice and the resulting change, while made in the context of initial teacher education, may present a significant challenge for teachers. Initiating this process of self-critiquing may also require a consideration of whether teachers display "skills of critical consumption" (A. Kennedy, 2022, p. 5).

The prospect of affective gains, however, could provide a possible solution. As well as agency as part of ALT, considering the learning context as perhaps a community of teaching colleagues may allow us to acknowledge how its members can be impacted affectively and how this might influence learning (Merriam, 2017). It also returns us to the argument that if learning is a social enterprise and as such can support social reform (A. Kennedy, 2022), there may also be benefits for the group (Servant-Miklos & Noordegraaf-Eelens, 2021). Kennedy (2022) describes this sensitivity to the individual's needs as well as those of the group as a 'tension'. She considers the role of a facilitator who can support an individual's development within the group, while at the same time enabling the group to advance in order to meet their shared goal. This suggests members' PL experiences could impact them personally as well as professionally.

Where there is some agreement, however, is the importance of teachers witnessing the benefits of changes in their practices, highlighting the need for PL to be embedded in

teachers' classroom experiences (Darling-Hammond et al., 2017; Desimone, 2011; Kazemi & Franke, 2004; Timperley, 2015). If, according to Guskey (2002), teachers' beliefs evolve from their practices, then experiencing success as part of PL would seem important. Where all of this fits in terms of effective PL is examined next.

Effective Professional Learning

The literature does not fully agree on what constitutes effective teacher PL (King, 2014). Desimone's (2011) core features include the need for coherence between national policy and school practice while appearing to pay less attention to the quality of teacher reflection. Kennedy (2014) highlights the significance of teacher agency. Little (2006) and Timperley (2015) argue the benefits of protocols or a series of questions that can guide and deepen teacher discussion. Campbell (Atlantic Rim Collaboratory, 2025) describes 'teacher-led learning circles' that develop leadership alongside PL. While opinions may vary, it may be useful to consider how PL models compare and what they can each provide. I examine them here in terms of structure and content and adopt Kennedy's (2014) '*Spectrum of CPD Models*' to reflect on their purpose. I consider the degree to which they feature *transformational* principles referenced above (Merriam, 2017).

The Structure

Research highlights the value of teachers engaging in PL as members of a collaborative group (Cochran-Smith & Lytle, 2009; Darling-Hammond et al., 2017; A. Kennedy, 2014; Little, 2006; Nelson et al., 2012; Wilkinson et al. 2017). Teachers serve as a support for each other (Timperley, 2015) as they examine their practice and take risks required as part of problem solving. The act of engaging in the collaborative process, described as *transformation of participation* (Kazemi & Franke, 2004, p. 205), becomes central to the learning.

The duration is also a factor in determining the effectiveness of PL programmes, with those that happen over longer periods considered more beneficial than isolated events (Darling-Hammond et al., 2017; Desimone, 2011; Little, 2006; Timperley, 2015). Teachers who may feel threatened by the possibility of change and the probability of additional work (Guskey, 2002) may require sustained support over weeks, months and in some instances years (Darling-Hammond et al., 2017). While Desimone (2011) recommends twenty hours (or more) contact time to increase the effectiveness of PL opportunities, Little (2006) proposes that even longer periods may not have the desired result in teacher learning and changes in practice. However, with a greater length of time providing opportunities for

sustained implementation of changed practices, along with opportunities to reflect and critique (Darling-Hammond et al., 2017; Little, 2006), the chance of advancement must be increased. A longer period may support the establishment of trust within a professional group necessary for reflection (Stoll et al., 2006), and the risk-taking referred to earlier (Guskey, 2007; Merriam, 2017; Vangrieken et al., 2017).

Vangrieken et al. (2017) and Darling-Hammond et al. (2017) both report that PL that includes critical reflection as part of transformational learning (Merriam, 2017) requires ‘expert’ facilitation. Kennedy (2005; 2014), in her ‘spectrum’ of PL models, proposes that the more transformative the model, the greater the opportunity for agency, and therefore, the less evidence there is of facilitation. The concern then may be the degree to which facilitation can impact agency and how both can exist within the same model.

The Content

It is recommended that the content of PL programmes involve active learning that is based on goals identified by teachers or governing bodies (Darling-Hammond et al., 2017; Desimone et al., 2002; Kazemi & Franke, 2004; Little, 2006). Termed ‘reform-type’ initiatives and described as “mediator[s] of teacher learning” (Kazemi & Franke, 2004, p. 204), teachers reflect on their children’s work in the area selected for PL. They also observe, analyse and reflect on the practices of peers (Darling-Hammond et al., 2017; Kazemi & Franke, 2004). Kazemi and Franke (2004) recommend it as a means of moving away from more general pedagogical information while also gaining new CK. Whether teachers are suitably equipped to engage with these materials at a level that requires skills in reflection and analysis (Brown et al., 2021) requires investigation. Where research-informed content fits in relation to classroom-generated data as a support to PL also warrants attention.

The Purpose

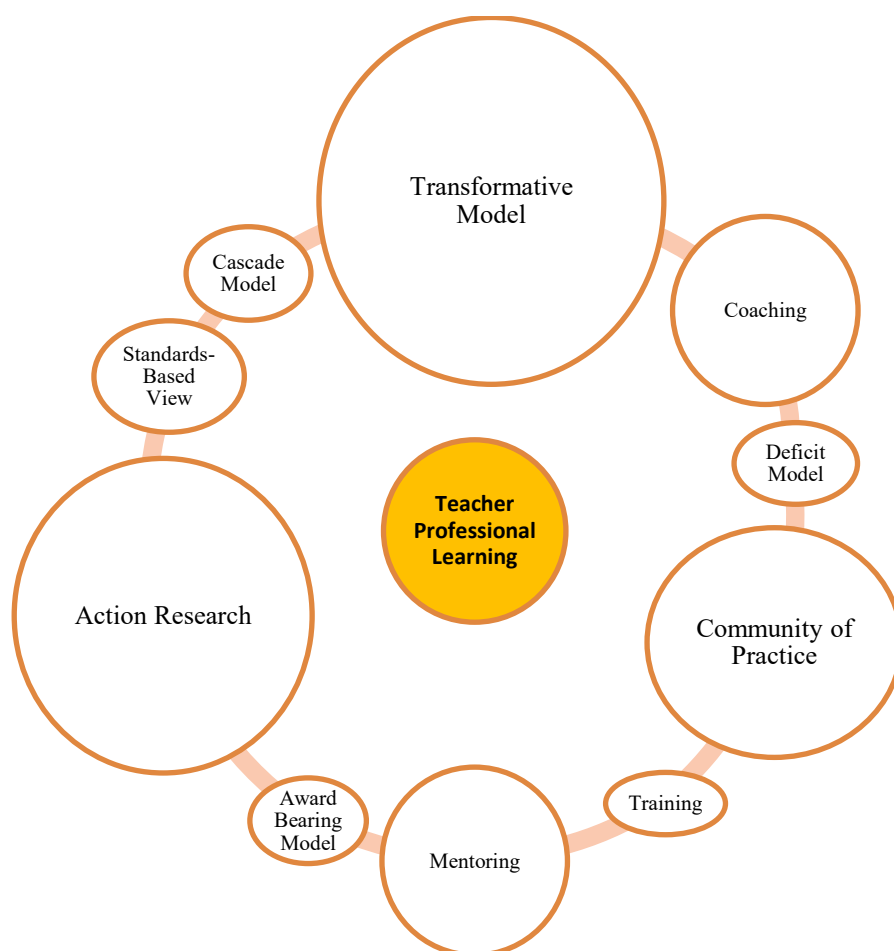
It is recommended that PL would reflect the goals of governing bodies (Desimone, 2011) and that it would support the implementation of new curricula (Darling Hammond et al., 2017; Little 2002; 2006). This study is occurring at a time when teachers are attempting to enact a curriculum: *The Primary Language Curriculum/Curaclam Teanga na Bunscoile* (PLC/CTB) (National Council for Curriculum and Assessment (NCCA), 2019). They await the implementation of a new curriculum: *The Primary Mathematics Curriculum* (PMC) (NCCA, 2023) as well as a framework that provides direction for future developments in primary and special education: *The Primary Curriculum Framework* (NCCA, 2023).

Therefore, it would appear timely to consider how these documents might be utilised to develop teachers professionally.

More generally the purpose of PL is to transform practice that results in improved learning outcomes for children (King, 2014). How this occurs is presented by Kennedy (2005) along a continuum. At one end, she identifies as the focus, standards that might be externally applied to classroom practices in the form of a training or deficit model, for example. This then extends to something more transformative that addresses teachers' beliefs as well as their CK and PCK (A. Kennedy, 2005).

Figure 1

Nine Models of Professional Learning



Source: Kennedy (2005)

All models presented in Figure 1 provide for teacher learning but feature the agency associated with ALT to a greater or lesser degree (as suggested by the use of different sized circles). Training programmes, PL that has been designed to address a perceived gap in teacher knowledge or which complies with award bearing standards,

provide limited opportunities for teachers to manage their own learning. The standards applied are externally drawn and the focus is generally skills-based. These courses appear as smaller circles in Figure 1 as they feature the least amount of teacher agency.

The cascade model, while delivered by teachers to teachers, is also subject to external controls and prioritises skills over beliefs. Kennedy (2005) links coaching and mentoring. Coaches facilitate learning conversations for coachees who, according to Oberholzer and Boyle (2024), direct their own learning journeys. Mentors, with more experience than their mentees, who also encourage reflection, provide guidance where appropriate. Both models feature collaborative conversations with the aim being to have teachers challenge their thinking (Oberholzer & Boyle, 2024). The degree to which they feature teacher agency is dependent on the relationship between the pairings (A. Kennedy, 2005), and possibly whether the coach or mentor believes they too are on a learning journey.

The community of practice (Wenger 1998) and the action-based research models feature as the larger circles in Figure 1 and display the highest levels of teacher agency. Teachers either collaboratively or individually examine their own contexts and, with relevant CK and PCK, make changes based on reflection.

Conditions for Successful Professional Learning

Therefore, in attempting to create the optimum PL conditions for teachers, a tension may arise, as suggested earlier, between adopting the most agentic model of PL advocated by ALT (Merriam, 2017; Louws et al., 2017) and selecting one that recognises the facilitating role of a MKO as part of a SCT of learning (Vygotsky, 1986). Combining elements of *transformative* PL (A. Kennedy, 2005) that include “the crafting of new identities” (Kazemi & Franke, 2004, p. 205) with facilitation may address some of this tension.

If we accept the TC’s *Code of Professional Conduct for Teachers* (2016) and the DE’s (2022b) requirement that schools adopt a “culture of continuous improvement” (p. 16) as part of School Self-Evaluation, we then can assume that the ‘good teacher’ is positioned as one who critically reflects and inquires (A. Kennedy, 2018). With this in mind, the measures of success in PL, often considered in terms of upward movement in assessed learning outcomes for children (King, 2014), might also include the extent to which the PL process has been transformative (A. Kennedy, 2005; Kennedy & Beck, 2018), whether teachers’ attitudes have changed (Guskey, 2002; King, 2014), or whether

they examine their practices differently (Van Lare & Brazer, 2013). Perhaps adopting a ‘sense-making’ approach to new information may be useful where teachers take responsibility for applying knowledge as they see fit (Lampert et al., 2015), thereby displaying agency (McGuinness, 2018). Central to this is the capacity to reflect and analyse which is examined here.

The Fundamental Practices of Reflection and Analysis

Teachers’ skills in reflection and analysis are central to the success of PL (Doğan & Adams, 2018; Šarić & Šteh, 2017; Schön, 1983). Numerous terms describe these acts including *reflective dialogue* and *reflective practice inquiry* (Brown et al., 2021). Šarić and Šteh (2017) argue that *critical reflection* is the most complex of these, crediting the ‘critical’ element with developing deeper understanding through questioning. Cochran-Smith describes inquiry as more significant again than reflection, believing that while reflection underpins inquiry, inquiry may not be the result (Fiorentini & Crecci, 2015). She interprets inquiry as a deeper exercise that considers classroom data, and the “active questioning of assumptions of common practices... [and] a thoughtful consideration of multiple perspectives” (2015, p. 12).

In a review of thirteen studies of PLCs inside and outside the USA, Doğan and Adams (2018) found that teachers’ practices were impacted most frequently where they engaged collaboratively in reflective dialogue. Collaborative dialogue is at the heart of Brown et al.’s definition of reflection:

... a collaborative, dialogic process in which educators both consider and aim to address pressing educational issues or problems. Such a process involves the collective generation and testing of ideas linked to enhancing their own practice; with these ideas based on evidence in the form of literature and/or data... (Brown et al., 2021, p. 9).

The supportive elements of a group or community are widely reported (Cochran-Smith & Lytle, 2009; Johnson & Golombek, 2020; Kazemi & Franke, 2004; Van Lare & Brazer, 2013; Wilkinson et al., 2017). PL, therefore, may accommodate reflection at an individual and/or group level with or without a MKO present (Beauchamp, 2015; Collin & Karsenti, 2011).

Teachers’ own teaching experiences clearly provide a suitable context for critical reflection, and SCT’s dynamic assessment that occurs within a ‘work’ context (Fleer, 2002). However, Hoogland et al. (2016) describe the ‘open culture’, and a positivity required amongst teachers when using classroom data as the basis for decision making.

Questioning assumptions and providing alternatives (Brown et al., 2021) requires cognisance of how difficult this process might be in collaborative settings (Šarić & Šteh, 2017). It may be that an initial step in this challenging process (Guskey, 2002) is “being open to changing attitudes and practices in the light of new knowledge” (A. Kennedy, 2022, p.10). These difficulties are examined next.

Difficulties with Reflection and Analysis

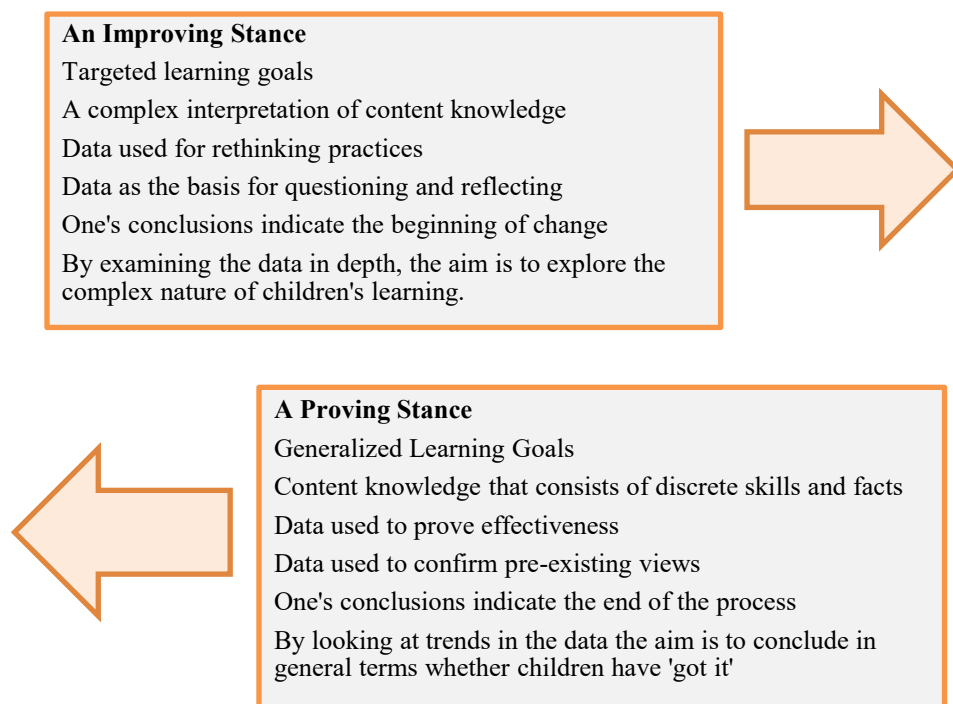
While accepting that reflection is central to teachers’ PL and should be taught (Schön, 1983), the literature suggests that it may be difficult. Brown et al. (2021) describe how schools act quickly and may be reluctant to explore issues in depth, solutions are arrived at that do not address the source of the problem, and appropriateness rather than effectiveness may be prioritised. According to Šarić & Šteh (2017), reflection is time-consuming, with the act of reflecting critically requiring ‘intellectual perseverance’ or deep thinking, as well as a willingness to consider the breadth of an issue. In addition, its subjective nature makes measuring it problematic (Brown et al., 2021). Also, teachers may struggle with interpreting and analysing data (Brown et al., 2021; Hoogland et al., 2016; Hultén & Björkholm, 2016; Nelson et al., 2012).

The fact that teachers’ reflections do not appear to impact their practice (Beauchamp, 2015) is significant in terms of PL. One reason for this may be the general confusion around how reflection is defined (Beauchamp, 2015; Brown et al., 2021; Šarić & Šteh, 2017). Beauchamp’s (2015) linking it with identity suggests teachers may need to be open to being impacted affectively so that “the subject of reflection actually matters” (Brown et al., 2021, p. 9).

As part of a five-year North American study that at one point involved thirty-five PLCs and over 150 secondary school Mathematics and Science teachers, Nelson et al. (2012) examined the nature of teachers’ reflections around students’ learning as shown in Figure 2. In seven groups, each with a membership of between three and twelve teachers the authors sought to cultivate an inquiry stance (Cochran-Smith & Lytle, 2009). They focused on the dialogue between group members and what was possible if there was “a willingness to wonder, to ask questions, and to seek to understand by collaborating with others in the attempt to make answers to them” (Wells 1999, p. 121). The groups were facilitated for the first three years with teachers collectively engaged in supported cycles of information collecting, analysis and planning as they sought to identify and solve problems.

Figure 2

The Impact of Variations in Teacher Reflection



Source: Nelson et al. (2012)

The outcomes for Nelson et al. (2012) were referenced in terms of their insights into teachers' reflective conversations. At the upper end of reflection, teachers' analysis was specific and clearly linked to learning targets, reflecting the complexity of CK and the inter-connectedness of concepts. At the opposite end, teachers' observations were over-generalized, their CK appeared as a description of specific skills, and they commented on facts present or otherwise. Teachers at the upper end used the data to examine their actions, question themselves and plan for changes in their practice. Teachers at the lower end of engagement used the data to prove their effectiveness. Their evaluations did not lead to further questioning and there was no impact on their practice (Nelson et al., 2012).

Little (2002), in her description of the learning that is possible based on recordings of classroom engagements, also warns of the tendency to overgeneralise. She comments on the impossibility of understanding the many complex decisions made by teachers over the course of a single interactive episode. It appears, therefore, that teachers may engage in either discussions that seek new knowledge with higher levels of inquiry or descriptive, information-giving conversations (Brown et al., 2021; Šarić & Šteh, 2017). With an *improving stance*, teachers openly examine how their practices limit their students, while

reflecting on the principles that underpin their subject and teaching in general. The alternative, a *proving stance*, means teachers are less likely to examine their own practices, they make general statements and look back at events rather than looking at what might be possible with change. Therefore, solutions to issues that do not display reflective analysis may not result in developments in teachers' CK and PCK (Nelson et al., 2012), identified previously as the purpose of PL (Doğan & Adams, 2018).

The positive impact of classroom data on teachers' epistemologies was also considered by Nelson et al. (2012), who reported that some teachers used the data to explore students' understanding in depth, highlighting the acceptability of a multiplicity of interpretations (Figure 2). However, the fact that others applied general statements such as *got it* may reveal an over-reliance on teachers' intuition, as opposed to a more time-consuming examination of the problem (Šarić & Šteh, 2017).

Sometimes reflection and self-critiquing do not result in positive change (Šarić & Šteh 2017). There may be ethical concerns where teachers are required to personalise their experiences and make comments in terms of their identity, their beliefs, and their effectiveness (Beauchamp, 2015). There may be a lack of attention to contextual factors such as school cultures (Little, 2002). Representing a situation verbally can present difficulties in terms of capturing the essence of the event. This suggests the need for a greater level of sensitivity around how reflection is supported, with an aim being to encourage teacher agency (Beauchamp, 2015; Timperley, 2015). The potential benefits of supporting this process are considered next.

Supporting Reflection and Analysis

If reflection and analysis, fundamental to PL, are difficult, then perhaps teachers could benefit from being supported in this area. Brown et al. (2021) describe the 'high quality learning conversations' of teachers that combine an examination of existing school practices around a particular issue with an exploration of theory in the field. They suggest, however, that this requires a supportive framework that structures dialogue and investigation. They deploy a facilitator whose "skilful facilitation can often lead to a productive balance of comfort and challenge" (p. 6). Šarić and Šteh (2017) also recommend supporting reflection and analysis with guiding questions, but argue for a more intuitive response that considers unpredicted situations where a staged approach may not be possible. Therefore, it appears that where facilitation is considered as part of PL,

teachers may be engaging in a process that is ‘transitional’ rather than ‘transformative’ (A. Kennedy, 2005; 2014).

Wilkinson et al. (2017) and Nelson et al. (2012) both provided structures in their models that had the potential to support reflective practice. The PLCs featured in Nelson et al.’s (2012) study adopted a four-stage framework with teachers first exploring the tools they would use to assess their students’ work. Then they collected the data which included reflection on content knowledge. Over the course of a number of meetings, they presented their classroom data including class work, homework, examples of classroom discussions and assessment results, both formal and informal. They discussed their practices, examining their content knowledge in relation to the subjects being taught and reflecting on future targets. Nelson et al. (2012) identified as evidence of teachers’ analysis, instances when they spoke about what their students were doing and why, thereby “mak[ing] meaning of student responses” (p. 7). They observed that the teachers’ dialogic engagements reflected a ‘continuum’ referenced earlier, from inquiry where they asked questions and negotiated responses, to ‘disconnected talk’ that was judged irrelevant (Figure 2). There was evidence of reflection on how teachers identified implications for their teaching and described practices and learning targets they would or would not change. In proposing that the groups displayed particular epistemological stances, Nelson et al. (2012) considered how their discussions influenced the meetings’ outcomes, concluding that what was preferable was inquiry that focused on improving practices (Figure 2). The framework provided by Nelson et al. (2012), while cultivating ‘reflective conversations’, did not always produce solutions for the teachers. However, according to the authors, the group model cultivated an inquiry stance they positioned as central to transformative PL.

Wilkinson et al.’s model (2017) of PL also promotes the advancement of teacher inquiry within a collaborative setting. As part of a three-year process, they engaged with thirteen fifth-grade teachers and students in two states in the USA. Following a questionnaire to establish levels of experience and professional beliefs, Wilkinson et al. (2017) began a nine-month process of workshopping, meeting and interviewing participants to track their progress in fostering dialogue amongst their students. Video and audio-taped engagements were used to develop analysis skills, and all teacher-researcher meetings were recorded as part of data collection. While there is limited information available regarding the class-based work which occurred once weekly for an hour within language arts lessons, the well-documented teacher meetings revealed insights into the support teachers require in order to reflect.

Wilkinson et al. (2017) presented two workshops at which they provided participants with ‘instructional content’ and activities in the area of dialogic teaching and what they termed ‘argument literacy’, where students are enabled to use all their literacy skills to understand and build arguments. They followed this with a total of seven two-hour long group meetings with teachers and up to six coaching sessions with each teacher, all after school. There they shared their recordings of classroom practice. Reflection followed with discussions leading to areas in need of exploration being decided collectively by the group. The researchers had sought to examine if combining facilitated opportunities for teachers to reflect together with practices that they termed ‘a repertoire of discursive moves’ would increase inquiry and ultimately impact practice. With a significant level of group and individual support, Wilkinson et al. (2017) recognised that teachers’ practices had become more dialogic, attributing this to the space provided by the study groups for reflection and collaborative inquiry.

Kucan (2007), in her study of experienced teachers (including those in First and Second Grade), individually analysed fifteen-minute recordings of their text-based classroom discussions at the beginning and at the end of an American Master’s programme. She reported how teachers began to notice the impact of their questioning and their management of students’ responses. Kucan advocates for the use of tools (i.e. a coding manual and comparison and reflection guide) to facilitate inquiry, thereby enabling teachers to identify patterns in their behaviours. She included in her manual question and response types and provided examples along with templates where teachers recorded their analysis of transcripts of their classroom discussions.

The approaches of Nelson et al. (2012), Wilkinson et al. (2017) and Kucan (2007) are similar in the use of classroom-generated PL content to support teachers’ reflections on their practice. All studies considered the children’s work, but their focus remained the teacher’s role in the learning process and how their reflections evolved. There was also evidence of facilitation that included the provision of additional information around developing dialogic behaviours in classrooms.

While Nelson et al. (2012) and Wilkinson et al. (2017) promoted a deepening of teachers’ understanding of what can occur through discussion with colleagues, Brown et al. (2021) highlighted individual support in their review of over 60 studies in areas including psychology, nursing, education, and the Arts. They identified as a key component of the collaborative reflective process, the opportunity for ‘learning conversations’, a feature of Timperley’s (2015) reflective coaching, where the coach engages in “practice analysis

conversations” with a coachee (p. 32). Their potential impact on the PL process would suggest the role of a facilitator requires consideration. Wilkinson et al.’s (2017) model of PL that combines group engagement with individual support provides a level of facilitation that may suit teachers like those in my study who may be unaccustomed to reflecting on practice.

Professional Learning Communities

While Nelson et al. (2012) might claim dialogue and group membership reflect a transformative model of teacher PL, it may be that they indicate movement towards it (A. Kennedy, 2005). Groups, labelled by Doğan and Adams as PLCs, can support PL that features teachers actively engaging, challenging and questioning what is being explored in an agentic way (A. Kennedy, 2014; Little, 2006; Louws et al, 2017; Timperley, 2015). They define this as “a group of professionals working collaboratively towards a shared purpose of improvement in instruction and student learning through dialogue” (Doğan & Adams, 2018, p. 636). French (2014) credits such opportunities for collaborative professional engagement with allowing the sharing of knowledge and resources within institutions, thereby improving the possibility of sustaining changes in practice and contributing to a positive professional culture with a common appreciation of educational goals.

The term PLC, however, is widely used in the literature to describe a broad range of structures, content and purposes (Doğan & Adams, 2018; Lefstein et al., 2020; Van Lare & Brazer, 2013). The frequency with which they meet, how participants are selected, how they are facilitated, and the extent of their agency are some of the areas in which they differ. Therefore, it may be fair to suggest that the reasons for their success or otherwise may be varied.

Typically, PLCs recognise the principles of Wenger’s (1998) communities of practice (Stoll et al., 2006; Van Lare & Brazer, 2013). The process begins with the establishment of the concept of mutual agreement and joint enterprise. These tenets (Wenger, 1998) operate only insofar as they provide for the establishment of a collaborative environment that functions through dialogue. They do not compromise the significant role debate (Brown et al., 2021) may play in the process, and recognise the potential for Van Lare and Brazer’s (2013) ‘undiscussables’ to emerge – issues with, for example, school organisation that are not generally explored publicly.

The PL content is generally shaped by the goals and needs of participants identified through their analysis of and reflection on their own classroom data and that of their peers (Darling-Hammond et al., 2017; Desimone et al., 2002; Kazemi & Franke, 2004; A. Kennedy, 2005). The PLC members, along with a MKO, provide additional information with the intention being to increase CK and PCK, thereby improving classroom practice. Participating teachers explore the relevance of the information to their contexts and collaboratively identify pedagogies to support its implementation. They identify the suitability of their goals in terms of the outcomes, and they observe and alter them accordingly. Resulting challenges for teachers may include the questioning of their practice, as well as increased expectations in terms of teacher criticality. The result is a PL model that provides for sustained and cyclical development of teachers' practices while at the same time cultivating inquiry (King, 2014).

As argued earlier, group settings can support reflection (Collin & Karsenti, 2011; DeBruin-Parecki & Henning, 2002; Johnson & Golombek, 2020; Van Lare & Brazer, 2013; Wilkinson et al., 2017). However, the collaborative engagement described as being central to the workings of a PLC is not without its limitations. The reflective aspect of a PLC may be perceived as inhibiting problem-solving, with school leaders requiring "fast paced decision making" (Brown et al., 2017, p. 2). According to Mercer, joint activity and talk partners may pose "a threat to the pursuit of our individual interests" (2000, p. 170). Alternatively 'good' ideas may be over-looked with teachers "striving, in a committed but unselfish manner, to establish the best solution" (Dawes et al., 2000, p. 173). Teachers who do not recognise their classroom-generated data as a reflection of their practice may not feel that examining it will bring about improved practice (Hoogland et al., 2016). Personal and professional differences can also impact group deliberations and the outcomes achieved. The suggestion is, however, that by adopting an inquiry stance referred to earlier, these issues may be addressed (Eshchar-Netz et al., 2022) – a valuable perspective as I attempt to create a dialogic context for PL. In this next section I consider how this stance might be facilitated.

Facilitation as Central to the Professional Learning Community

Research by Kazemi and Franke (2004), while aiming to examine the potential benefits of a collaborative PL model, reveals the degree to which reflection and analysis may require facilitation. Their study described the Mathematics teaching of ten elementary teachers in a small urban school in the USA over one academic year. Participants met together monthly to reflect on their children's responses to questions posed by a facilitator.

The data these questions generated brought about conversations during the general meetings that became more specific as the programme advanced.

Initial meetings revealed the participating teachers were unaware of how children arrived at solutions to problems. The facilitator's input in terms of CK included the introduction of mathematical terms. She contributed theoretical insights around children's thinking where appropriate and facilitated discussion by, for example, noticing common practices across classrooms and seeking elaborations from teachers. For example, she encouraged members of the group to identify strategies for addressing issues with questioning. Teachers selected their own samples of classroom data for review at the meetings. The facilitator and the teachers spoke as members of a group, and in facilitator/teacher coaching sessions referenced in Wilkinson et al.'s (2017) study. Group discussions reflected the teachers' needs and drew on information gathered during the coached sessions. The authors of this research concluded that the participants experienced transformation as a result of participation in a PLC. They supported each other's thinking, helped each other and questioned. However, what is clearly evident is the significant role played by the facilitator in assisting teachers to become more directed in their examination of children's work and more open about their difficulties.

With skilful facilitation by a MKO (Beauchamp, 2015; Šarić & Šteh, 2019), the participants in Wilkinson et al.'s (2017) study began to reconsider their role in terms of transmitting information and grew in confidence in terms of recognising their children's competencies. Teacher analysis, group discussions and interventions were all facilitated by someone who proposed a shift in teachers' epistemologies. Teachers were encouraged to engage differently with children rather than reporting what they didn't know. Their reflection became evident in their annotations on children's work and their capacity to see similarities across classes. The authors refer to teachers' surprise when they examined children's work, suggesting they may previously have underestimated their children's capabilities. Some described changes in their practice such as giving more time to listening to children strategising. Their research confirms that teachers can experience difficulties analysing data even when the data come from their own classrooms and therefore, may benefit from facilitation within groups and in a coaching context.

Coaching

Referenced earlier in terms of its capacity to supplement the support provided by PLCs (Wilkinson et al., 2017), coaching as defined by Kennedy (2005) and Darling-

Hammond et al. (2017) provides the individual support that may be missing in a PL group setting where some issues can go unaddressed (Timperley, 2015). It also reflects a SCT of learning (Vygotsky, 1986), with dialogic engagement being generated between the coach and the coachee. There appears to be some confusion around the labels: Oberholzer and Boyle (2024) position mentors as MKOs with the capacity to guide, while Darling-Hammond et al. (2017) and Timperley (2015) suggest MKOs are similar to coaches. Regardless, the coach/mentor role currently operating in Irish schools formally in terms of the induction of newly qualified teachers, and informally (Conway et al., 2009), offers “enhanced professional agency and well-being” (Oberholzer & Boyle (2024, p. 9)).

Timperley (2015) identifies three types of coaching: *peer coaching*, *reflective coaching* and *cognitive coaching*. Peer coaching describes conversations amongst peers that may or may not be supported by training and the use of protocols or questions to enhance reflection. While supportive, it may not be sufficiently challenging to bring about deeper reflection on practice. Reflective coaching appears more like the facilitation of reflection with the potential for the coach and coachee to have similar levels of experience. The coach, however, requires coaching skills if their engagement is to bring about changes in practice.

Cognitive coaching, while similar to the other two forms in its focus on reflection rather than transmitting information, generally features experienced teachers with additional training as coaches (Timperley, 2015). Timperley (2015) describes how this third model can feature ‘practice analysis conversations’, where the coach and the coachee co-construct evidence-based theories of learning. Darling-Hammond et al.’s review of thirty-five studies that explored the effectiveness of different PL models also position coaching as a suitable context for “generating feedback and supporting reflection” (2017, p. 15), while extending and reinforcing teacher learning. Therefore, rather than debating whether the act is coaching or mentoring, what may be more important is the depth of inquiry possible in conversations that avoid focusing on “practical advice” and “helpful hints” (Timperley, 2015, p. 32).

A further consideration is that of the coach-coachee relationship (Nugent et al., 2023; Timperley, 2015), where both parties can question each other. Kennedy (2005) opts for relationships that both support and challenge and are potentially mutually beneficial. However, if as Darling-Hammond et al. (2017), Nugent et al. (2023) and Timperley (2015) argue, effectiveness is reliant on the expert nature of the support provided, and coaches require a deep knowledge of how children learn (Timperley, 2015), then a tension may

arise between offering encouragement and being reflective in a way that advances practice. Engagement that is both ‘directive’ and ‘reflective’ becomes important (Nugent et al., 2023).

Nugent et al. (2023), in their research into coaching practices, analysed 400 hours of remotely-facilitated coaching sessions in middle and high schools in the USA. They found these sessions typically began with coaches seeking general feedback about what was working for the teacher. The coach and teacher viewed recorded classroom footage (five-six minutes) and talked about how practices might be advanced. Finally, both parties established how the coachee might advance their practice. Initial meetings featured respect- and rapport-building behaviours that included humour, believed to be critical. Directive engagements were more prominent than reflective ones. However, the researchers were satisfied that this was to bring about improved PCK.

While averaging 47 minutes, conversations were often longer with Nugent et al.’s (2023) findings indicating that they addressed the lack of opportunities participants had to engage professionally with others. This suggests coaching sessions may satisfy professional needs that go beyond developing CK and PCK. Praise served to reassure as well as sustain positive relations, which helped teachers “to open up (become vulnerable) with their skills and shortcomings and dive deeper into the reflective process” (Nugent et al., 2023, p. 418).

Theorists may be uncertain what it is exactly that makes coaching an effective PL model. Deciding whether it is because it happens within schools where teachers work (A. Kennedy, 2005), or that it involves expertise brought into schools (Nugent et al., 2023), or that it features as part of interventions (Darling-Hammond et al., 2017) may not be important. However, that it appears to provide support at both a personal and professional level may be significant. Its reliance on authentic dialogic engagement allows it to sit within the two theoretical frameworks that guided the PL aspect of this study: a SCT of learning (Vygotsky, 1986) and ALT (Merriam, 2017).

In this next section I consider teachers’ epistemologies and how being mindful of their potential to influence classroom practice can impact the design and effectiveness of PL experiences.

Teachers' Epistemologies

Much of the academic writing around 'epistemology' concerns itself with the 'terminological chaos' of defining it (Zybel, 2020). Considered "a way of thinking and being in relation to a particular phenomenon" (Nelson et al., 2012, p.13), its evolution is neither linear nor one-way (Schraw & Olafson, 2002). It can, however, evolve from something quite simplistic to a more complex interpretation of knowledge (Ferguson & Lunn Brownlee, 2018; Zdybel, 2020).

Teachers' beliefs can be impacted by school cultures that uphold the 'subordinate status' of newly qualified teachers, discouraging them from adopting innovative approaches to teaching (Schraw & Olafson, 2002). Home-school cultural differences (Cregan; 2007; Nolan & Mac Ruairc, 2022) may influence teachers' perceptions of OL&C development in a way that limits their expectations with regards to dialogue. Teachers who commandeer 'intellectual authority' in terms of subject knowledge, for example (Zook-Howell et al., 2020), can interpret their role as transmitters of information (Ferguson & Lunn Brownlee, 2018), believing changes in children's knowledge result from their actions. In the study by Wilkinson et al. (2017) referenced earlier, primary teachers' self-reported epistemologies, outlined during focus group interviews and professional development meetings, did not change significantly despite their child-teacher discourse becoming more dialogic. The authors suggest this may have been due to teachers' difficulties with articulating how their changed practices demonstrated shifts in their beliefs.

A small-scale UK study by Maine and Hofmann (2016) illustrates the influence of beliefs on attempts to develop dialogic patterns of interaction (Nystrand et al., 2003). Their ten week project, aimed at developing reading (narrative) comprehension strategies, required small groups of children aged 7-11 to provide a narrative for a short film they had viewed. Despite the introduction of talk moves and the provision of prompts to support teachers, referred to earlier, teachers continued to take alternative turns or over-facilitate (Zook-Howell et al., 2020), and there was little evidence of children responding directly to each other's comments. The teachers' reported commitment to developing dialogue was at odds with their practices as they continued to control engagement by, for example, redirecting children's ideas away from what was deemed incorrect and towards a more acceptable interpretation. One teacher who modelled language that promoted a shared response such as '*but I don't understand...*', sought to direct understanding by having the children return to the film to clarify inconsistencies. Another teacher, who scaffolded the

use of talk moves, was less interested in extracting the ‘correct’ information but was not inclined to extend the dialogue in order to develop understanding. A third teacher also made use of the prompts but did not seek justifications for responses. The teachers’ expectations that the children’s responses would display accountability in terms of the narrative provided, was, according to the authors, at odds with a thought process that supported multiple interpretations, legitimised the children’s contributions, and provided ‘genuine’ dialogic engagement (Maine & Hofmann, 2016). While responding to a question about a text with evidence from the text may be valid in terms of developing reading comprehension, facilitating deeper reflection may also be possible by encouraging contributions substantiated by, for example, personal experience.

While 52% of children’s turns in the study by Maine and Hofmann (2016) featured the talk prompts taught, there was evidence to suggest that the teachers’ epistemologies had not changed. They were not inclined to develop the children’s ideas beyond the text or probe for justifications that might indicate a commitment to the dialogic process. On one occasion, when a child reported uncertainty as to why a particular event occurred, her peers followed with suggestions. While the teacher facilitated this dialogue, she did not provide the child with the means to evaluate these propositions, thus limiting their capacity to transfer the learning to other contexts.

The findings from Maine and Hofmann’s (2016) study have relevance for the aims of PL. They suggest that, despite newly acquired PCK, teachers’ epistemologies which inform their practice, and in this instance prioritised content over skill development (Maine & Hofmann, 2016; Schoenfeld, 2002; Schraw & Olafson, 2002), are difficult to change. It may also be the case that the supports, including time, were insufficient to facilitate the participants in altering their beliefs, or they were in the process of changing. How one’s beliefs impact practice is termed an epistemological worldview (Schoenfeld, 2002; Schraw & Olafson, 2002).

An Epistemological Worldview

Knowledge, when defined in terms of a continuum, can be considered fixed and indisputable or subjective and changeable (Zdybel, 2020). At one end of this continuum, teachers who are *realists* (Schraw & Olafson, 2002) or *absolutists* (Wilkinson et al., 2017) transmit a fixed body of knowledge or skills, follow a prescribed curriculum, ask closed questions, and while they may be active in their delivery, the children become passive receivers of knowledge. This leads to the misconception that teaching is “the

uncomplicated, systematic act of transmitting ‘expert’ knowledge to the ‘novice’ learner” (Richardson (2003), cited in Rogers, 2011, p. 253). While child-teacher dialogue may happen, it is unlikely to be authentic or reflective.

Relativists or *multiplists* appear at the opposite end, believing themselves to be facilitators who prioritise independence and self-regulation above all other learning. However, with little recognition of the benefits of collecting alternative viewpoints so as to generate new ideas, this seems at odds with the co-construction of knowledge that occurs during child-teacher dialogue (Bruner, 1983).

Contextualists or *evaluativists* operate at the centre of the continuum closest to a SCT of learning. Like *realists*, they uphold the concept of ‘core knowledge and skills’ (Schraw & Olafson, 2002) including constrained skills such as recalling one’s name or reciting letter names (Anderson et al., 2018). However, in order for cognitive development to occur, the person needs to engage dialogically in learning experiences (Vygotsky, 1986) so that their knowledge can be challenged and altered. A *contextualist* stance prioritises classroom dialogue above curricular expectations (Sybing, 2021) and better describes the role of the teacher as MKO.

The Complexities of an Epistemological Worldview. Establishing one’s epistemological worldview can be complex with teachers often unaware of its influence on curriculum implementation, pedagogy and assessment and their role as a teacher (Schraw & Olafson, 2002; Zdybel, 2020). Propositional knowledge gained through effort (Pritchard, 2017), or continuous use of a particular strategy, may confirm for teachers that their beliefs and therefore their approaches are correct. Alternatively it may reflect an experiential or affective side of teaching (Zdybel, 2020).

At the same time, discrepancies may appear between teachers’ beliefs and their knowledge *in practice* (Schoenfeld, 2002; Schraw & Olafson, 2002; Zdybel, 2020). An American study of the views of twenty-four elementary and middle school teachers revealed discrepancies between participants’ preferences for a contextualist’s view described earlier and their practices (Schraw & Olafson, 2002). While teachers reported favouring scaffolded learning within a structured curriculum and agreed with the central role played by learners in the construction of knowledge, their practices differed. Suggested explanations included inexperience, time pressures, administrative issues, and school culture. While it was felt the pressure of meeting learning and teaching targets including standardised testing may have reduced teachers’ creativity and encouraged more

transmission-type pedagogies, Schraw and Olafson (2002) suggest those who believed themselves to be free to make curriculum and pedagogical decisions were most likely to do so.

Zdybel (2020) used phenomenographic interviews – an approach that maps perceptions about knowledge onto classroom practice – to identify how 40 Polish teachers believed their minds operated. Included in participants’ drawings and metaphors of what happens with new information was the description of the mind as a ‘container’ and the view that knowledge was a set of non-negotiable facts. Where teachers dispute the changing nature of knowledge as part of an epistemological worldview (Zdybel, 2020), there may be implications for how they perceive dialogue.

The Child’s Perspective. Having teachers consider their epistemological worldview in terms of their relationships with children may help them to examine whether their practices support classroom dialogue. An Icelandic study of twenty boys and girls aged 6-7 years found that children defined their schooling in terms of subject matter, as teachers transmitted information around reading, writing and mathematics (Einarsdottir, 2010). They did not include questioning and critical thinking, central to dialogue. Interestingly, their descriptions of playschool or infant classroom experiences reflected a closer alignment to democratic engagement and critical thinking.

Transmission also featured in a three-year Australian study of 168 children aged 6-9 years by Mascadri et al. (2021). When asked why teachers listened to them, children reported it was for the purpose of assessing knowledge. Children viewed teachers as ‘bosses’, listened to them to reward them for compliance and listened to them more as they got older (Mascadri et al., 2021). While Mascadri et al. (2021) attributed some of these comments to an increased awareness of the purpose of sharing knowledge, they queried whether such perceptions could reduce the chances of some children engaging in dialogue.

It would appear that teachers’ epistemological worldview can impact how they listen to children, thus influencing the authenticity of their dialogue. How young children perceive themselves and what they have to say appears similarly linked to teachers’ epistemological worldview, with teachers’ control over children’s interactions contributing to children’s identities of themselves, where they position themselves, and their expectations of communication with teachers (Devine, 2002). The expectation of compliance, as suggested in Mascadri et al.’s (2021) findings, may also influence whether children would be prepared to offer alternative viewpoints as part of dialogue.

‘Silent’ Children. Children may also influence child-teacher dialogue by choosing how they wish to engage. Research reported by Clarke et al. (2016), though limited in its relevance to this study due to the age of its participants, focused on ‘silent’ children. Their exploration of whether a dialogic model marginalised those who do not appear to engage found that ‘silent’ children can apply information gleaned during class discussions. Their study revealed that 9th Grade Biology students who were initially reluctant to contribute to discussions often provided unsolicited offerings later. Therefore, it would seem important to include children regardless of whether they appear willing to engage.

While participants in Clarke et al.’s (2016) research reported their students’ lack of knowledge as a reason for inconsistencies in classroom dialogue, it may also be that presenting knowledge in the form of absolutes, where children view engagement in terms of being right and wrong, limits dialogue. One student of the 16 who consented to being interviewed, reported agency once the lesson’s content was linked to their own experience, suggesting that helping children to make connections with content may support ‘talk turns’ and increase dialogic engagement (Goldenberg, 1992; Paatsch et al., 2019).

Advancing an Epistemological Worldview

That teachers’ epistemologies influence child-teacher engagement (Barnes et al., 2020; Boyd et al., 2019; Schraw & Olafson, 2002; Zdybel, 2020) validates their examination. The three EWVs presented here broadly describe teachers’ practices in terms of CK and PCK (Schraw & Olafson, 2002). If dialogic teaching is “an epistemology and a habit of mind, not just a way of upgrading talk” (Alexander, 2018, p. 587), then reflecting on children-teacher dialogue through the lens of an epistemological worldview and in a PL context may assist teachers in developing a deeper understanding of their own beliefs and practices.

Exploring one’s epistemological worldview in depth utilises one’s ‘intellectual conscience’ or scepticism (Pritchard, 2017). In terms of PL it can filter the information gleaned from experiences (Zdybel, 2020), potentially inhibiting advances in knowledge. It may also be vulnerable to change when subjected to pressures such as curriculum (Wells, 2007), school culture (Schraw & Olafson, 2002), and conflict (Zdybel, 2020). Recognising its potential influence was, therefore, important as I created the concept of a PLC that would answer this study’s research questions.

A Conceptual Framework for the Research

Sometimes referred to as a ‘concept map’ (Maykut & Morehouse, 1994), a conceptual framework allows researchers to focus their inquiry by formulating questions around a set of related ideas. A review of the literature pertaining to teachers’ PL and their epistemological worldview raised questions for me as to how teachers’ CK and PCK and practice might be impacted by participation in a PLC. The review contributed to the creation of a PLC that featured the following eight elements of PL:

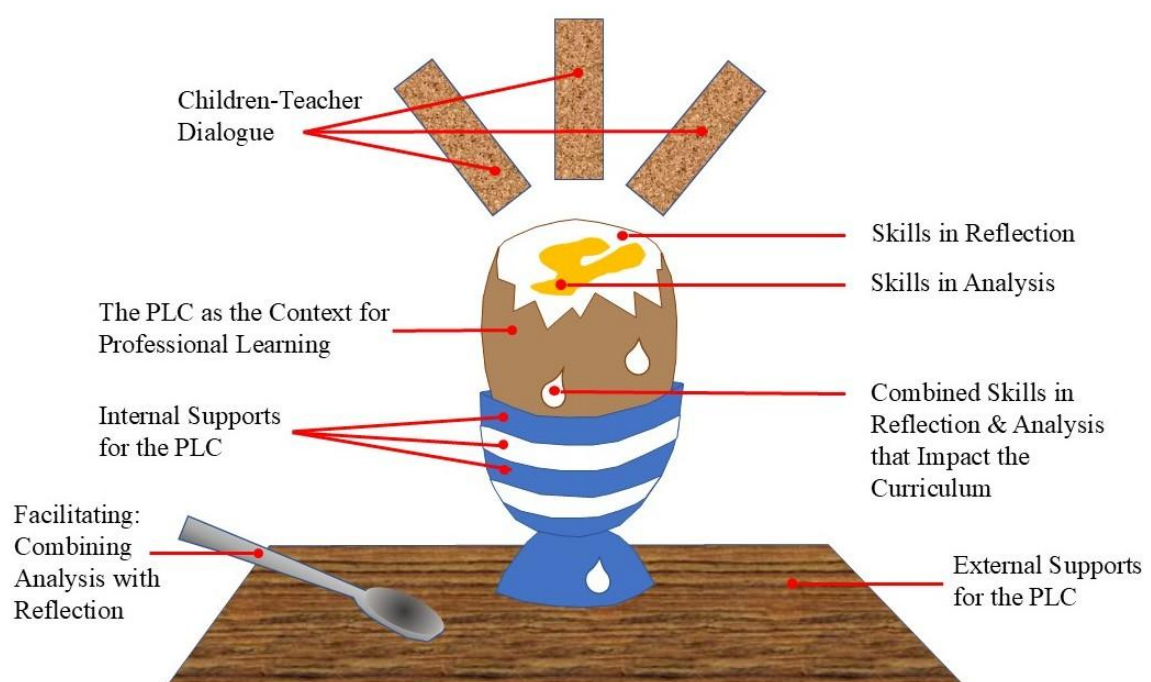
- **Content:** Content that is embedded in teachers’ classroom experiences and curriculum increases relevance (Darling-Hammond et al., 2017; Desimone, 2011; Timperley, 2015).
- **Collaboration:** Collaborative settings may be supportive (Timperley, 2015) and advance understanding through dialogic engagement and shared problem-solving (Darling-Hammond et al., 2017; Desimone, 2011; A. Kennedy, 2014; Little, 2006; Vygotsky, 1986).
- **Active Learning:** As active learners teachers observe, analyse, and reflect on their own practices and those of their peers (Darling-Hammond et al., 2017; Kazemi & Franke, 2004), thereby moving away from general pedagogical information.
- **Reflection:** Central to the success of PL, teachers, individually or in groups, reflect by considering the depth and breadth of an issue (Šarić & Šteh, 2017) from within their own ‘work’ context (Fleer, 2002).
- **Agency:** Teachers, responsible for improving their professional practice (King & Stevenson, 2017), display agency in creating their PL (A. Kennedy, 2022).
- **Facilitation:** Facilitation by a MKO (Darling-Hammond et al., 2017; Little, 2006; Timperley, 2015) supports teachers’ reflection, thereby impacting the effectiveness of the PL experience. As an extension of facilitation, **coaching** can work to meet professional and personal needs (Nugent et al., 2023; Wilkinson et al., 2017).
- **Duration:** A sustained model of PL provides time for teachers to examine their practice (Darling-Hammond et al., 2017; Desimone, 2011; Little, 2006; Timperley, 2015; Wilkinson et al., 2017), and can lead to changes based on reflection and inquiry (Brown et al., 2021; Cochran-Smith & Lytle, 1999; Darling-Hammond et al., 2017; Kucan, 2007; Little, 2006; Šarić & Šteh, 2017; Timperley, 2015), thereby supporting teachers to take control of their learning (A. Kennedy, 2005).

- **Tools:** Classroom data (i.e. recordings and transcripts) provide a catalyst for discussion and decision-making (Hoogland et al., 2016). A protocol keeps the conversation focused (Bowe & Gore, 2017; Timperley, 2015)

I constructed a conceptual framework around the illustrative metaphor of an egg. Holliday (2017) argues how, in education, metaphors help us to relate everyday experiences. I envisioned the PLC as a fragile egg shown in Figure 3. It's eggcup reflected the numerous supports including relationships and trust which would be necessary for a professional community to function. It sat on a table representing system supports such as school leadership, and logistical supports such as time made available to meet, all of which would facilitate the process. Reflection, or the yolk, and analysis represented as the white, would become central to the PL process once it began. Initially observed as separate exercises, they would become interdependent, as the PLC became established. As facilitator and represented as a spoon, I would initiate the process of reflection and analysis, dipping in when required and assisting participants as they explored relevant CK and PCK. The 'soldiers of bread' signified classroom generated data which would be subjected to reflection and analysis within the PLC. The dripping egg reflected what I anticipated in terms of teachers applying a similarly reflective stance to other aspects of their teaching.

Figure 3

A Conceptual Framework for the Study



While metaphors do not fully explain phenomena (Holliday, 2017), the egg as a conceptual framework fulfilled its function (Holliday, 2017). It represented how I envisaged the PLC at the beginning of this process, as a place where change could happen with the right support.

Conclusion

In this chapter, I presented a review of literature pertinent to issues related to teacher PL. Situating PL within both a SCT of learning (Vygotsky, 1986) and ALT (Merriam, 2017) created tensions in terms of the degree to which teachers could experience agency, thereby participating in a transformative process (A. Kennedy, 2005; 2014). I identified teachers' analysis and reflection on practice as actions central to bringing about change in CK and PCK and argued for their support within a PLC model of PL (Kennedy et al., 2023). The possibility of including coaching in what Darling-Hammond et al. (2017) refer to as a 'multimodal' approach to PL was considered, and I reflected on whether PL needed to be cognisant of teachers' epistemological worldview. This review informed the second research question:

In what way is teachers' knowledge and practice regarding the development of dialogue in children aged 4-8 years impacted by participation in a Professional Learning Community?

In the following chapter I outline the methodology I used to examine both teachers' knowledge of the development of dialogue, and the impact of their involvement in a PLC on their knowledge in this area.

Chapter 4

Methodology

Introduction

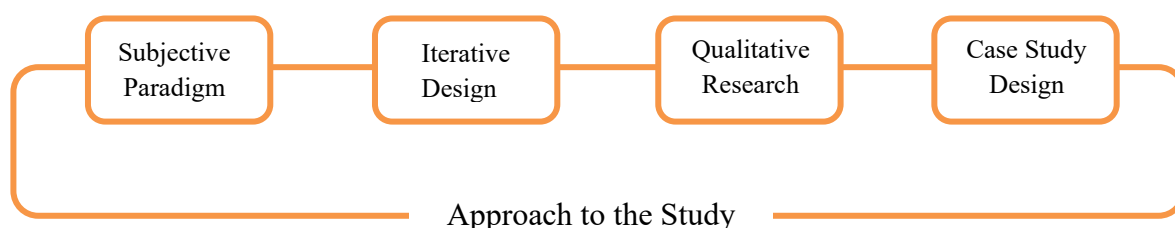
In this chapter, I outline the rationale for adopting a subjective paradigm and follow this with a description of the qualitative approach I took to data collection and my creation of a single case study. I outline the purposive and convenience sampling used in the study and provide information about its research participants. I provide a study plan and explain the three phases of the data collection process, detailing the qualitative data collection instruments used at each phase (i.e. semi-structured interviews, classroom observations, post-recording meetings, recordings of professional learning community meetings, audio/audio-visual recordings of teacher-children dialogue and field notes). I explain how the study adhered to ethical considerations. Finally, I outline the processes of inductive, deductive and template data analysis I employed for each of the data collection instruments in order to answer my research questions.

The Approach to the Study

In designing this study, I adopted a subjective paradigm, as indicated in Figure 4. If paradigms are defined as the way we view the world (Cohen et al., 2018) or how we create and interpret reality (Maykut & Morehouse, 1994), then adopting a subjective paradigm enabled me to investigate how children and teachers functioned in different dialogic groups. It allowed me to consider participants' experiences while developing an understanding of their actions at a specific place in time (Cohen et al., 2018). My suggested explanations of events accompanied the data gathered from within 'real-life' settings (Cohen et al., 2018).

Figure 4

The Approach to the Study



Learning was positioned as a social enterprise. Participating teachers examined their children's oral language and communication (OL&C) development through dialogic

engagement with them. Participants' own learning was facilitated by the establishment of a professional learning community (PLC) with me as a more knowledgeable other (MKO). My role as part of this learning process was also subjected to examination. The framework provided by this subjective paradigm, *interactive* and *mutual* in nature (Cohen et al., 2018), supported my in-depth examination of the authentic classroom engagements of a small number of teachers and their participation within professional learning communities (PLCs). I explored how "humans actively construct their own meanings of situations" (Cohen et al., 2018, p. 137). However, gaining a more in-depth understanding of the experiences of a few meant the study was limited in terms of its findings and how these findings might be generalized to other groups or transferred to other contexts – factors which are addressed in Chapter Seven.

This paradigm also made my study vulnerable to bias (Cohen et al., 2018) - something I could have avoided if, for example, I had adopted a positivist approach to interviewing, and engaged objectively, thereby creating "a report on a reality that is independent of the interviewee" (Edwards & Holland, 2013, p. 15). But since the value of an *inter-view* is its co-creation of a reality between the interviewer and the interviewee (Kvale, 1996, as cited in Edwards & Holland, 2013), and because an aim of research is to gain insight into people's interpretations of a shared experience, I addressed the inevitable biases by adopting a reflexive approach to data collection, analysis and reporting (Braun & Clarke, 2021) which I outline later.

Operating within a subjective paradigm left me free to accept the multiple interpretations of phenomena presented by participants. The changing nature of these interpretations was acknowledged and at times celebrated, reflecting the dynamic nature of a study which featured participants' changing perspectives.

Adopting an Iterative Design

An iterative design permits the exploration of the varied and sometimes contradictory ways in which people interpret their world and how they construct their views (Cohen et al., 2018). This fits with a subjective paradigm that accommodates multiple interpretations of what might be termed 'reality'. Applying an iterative approach to data collection allowed for the changing nature of participation as the study evolved. Cycles of engagement highlighted later in Figure 6 provided participants with the opportunity to review and alter their positions. This reflected the dynamic nature of

learning that occurred for participants as they reported changes in perspectives and practices. The qualitative approach I adopted for this study is now considered.

Qualitative Research

Qualitative research is accepted as a suitable means of examining “what ordinarily and routinely happens in schools and classrooms” (Hitchcock & Hughes, 1995, p.12). Its methods, and specifically a single case study, were deemed an appropriate means of exploring how Irish teachers support the development of dialogue in children aged 4-8 years – an area in need of examination as argued in Chapter Two. These methods are also suited to deepening our understanding of how PLC membership, widely accepted as an effective model of professional learning (PL), can impact teacher knowledge and practice.

In order to explore these topics, I formulated two questions:

Research Question One:

What do teachers know about supporting the development of dialogue in children aged 4-8 years?

Research Question Two:

In what way is teachers’ knowledge and practice regarding the development of dialogue in children aged 4-8 years impacted by membership of a Professional Learning Community?

Selecting a subjective paradigm reflected a constructivist’s perspective that experience is central to knowledge with organizational change occurring through people (Cohen et al., 2018). This was in line with the theoretical framework I adopted which proposed two views: that as part of socio-cultural theory (SCT) people’s knowledge including language, develops through their engagement with others (Vygotsky, 1986); and that people are agents of change – a position upheld by adult learning theory (ALT) (Darling-Hammond et al., 2017; Louws et al., 2017; Merriam, 2017).

According to SCT “meaning occurs in the context of participation in the real world” (Fleer, 2002, p. 112). In this study, the importance of context was recognised in how it influenced all stages from data collection to analysis and finally to the conclusions drawn (Cohen et al., 2018). The relative nature of knowledge was prized over absolutes, and I welcomed contradictory views of shared experiences (Cohen et al., 2018). Mercer (2010) claims “cultural and local norms shape the processes of teaching and learning; and ... in the classroom, meanings are continually renegotiated through talk and interaction”

(p. 3). Participating teachers functioned as individuals with identities, whose personal commitments and existing professional communities impacted their work (Nelson et al., 2012). This study sought to explore the multiple realities or unique experiences that can exist within a shared one, resulting in a deeper understanding of how engagement works for children and teachers, and how we are impacted by it (Cohen et al., 2018).

While understanding how teachers reflect on their practice is important, Coburn and Turner (2011) (cited in Timperley, 2015) contest that “few studies of data use that attend to outcomes also attend to the process by which these outcomes are produced” (p. 197). This study considered the experiences of (a) teachers with their classroom groups and (b) groups of teachers as they supported each other’s PL.

Extant research highlights the importance of understanding teachers’ practices in terms of learning outcomes for children (King, 2014). This occurred informally for participants during this study. The study’s limitations, and my focus on teachers’ individual learning within a community model of PL, confined my examination to teachers’ content knowledge (CK) and pedagogical content knowledge (PCK), thereby developing a deeper understanding of how these could evolve through membership of a PLC. My rationale for using a case study is now outlined.

Case Study Design

Our ontological world views influence our beliefs about knowledge which consequently influence the research methodologies we choose and ultimately our data collection processes (Hitchcock & Hughes, 1995). It is therefore suggested that researchers select research methods that reflect their values (Cohen et al., 2018; Nind et al., 2016; Yin, 2003). With a participatory view of education (Michaels et al., 2008), I was committed to examining teacher-children and teacher-teacher interactions and ultimately the conditions that encourage dialogue. Case study fits this brief as it considers phenomena within a context (Cohen et al., 2018; Robson, 2015).

Case study, as a methodology for carrying out qualitative research, implies a ‘deliberate’ desire to examine real-life contexts (Cohen et al., 2018). It considers multiple sources of evidence (Gillham, 2000; Yin, 2003) which can result in a holistic view of phenomena (Yin, 2003). Nind et al. (2016) describes as “in-depth’ and “intensive”, the examination of the single case “within its naturalistic context, valuing its particularity, complexity and relationships with the context” (p. xii). Using a ‘rich narrative’ (Maykut & Morehouse, 1994) it attempts to explain human behaviour in depth and what influences it

(Cohen et al., 2018). In this study I sought to examine what influenced participants' actions within the dialogic space they inhabited with their children and with each other.

The study took place across two schools. The distinguishing feature of the case was that its participants were all teachers of children aged 4-8 years. Adopting an *embedded case study design* meant each participant was part of the larger group of class teachers for this age group (Cohen et al., 2018; Yin, 2003) and as a single case study, each became a unit of analysis within the case. I did not compare the experiences of the two PLCs, as by teaching in one of the schools my relationship with that cohort of participants positioned me differently in terms of my facilitation of their PLC. This meant a comparison of the two PLCs could have become about the impact of my role as facilitator who was known to some and not to others. My decision to maintain the focus on teachers' insights and to broaden the sample to include a second school is explained below.

An Exploratory Approach

Adopting Yin's (2003) *exploratory* approach to gathering and analysing data allowed me to identify what participants knew while at the same time appreciating the breadth of experiences present in the case. Rather than being concerned with the frequency of an event, the approach facilitated an in-depth analysis of the dynamics and nuances associated with the process. Interpreting the case study as a 'chronological narrative' (Hitchcock & Hughes, 1995) was also useful as it supported an examination of change over time as participants engaged in the six cycles of reflection and analysis presented later in Figure 6.

There are multiple limitations associated with case study design as there are strengths (Cohen et al., 2018). Generalizability (i.e. statistical) in terms of findings was never my aim. Instead my approach provided analytic generalizability (Cohen et al., 2018), and while not quite 'revelatory' (Yin, 2003), I examined in depth the perceptions and experiences of teachers whose insights I believe, contributed to existing bodies of knowledge in terms of children-teacher dialogic engagement and teacher PL.

The Challenge of being the More Knowledgeable Other

Referenced in Chapter One in terms of the insider/outsider debate (Bettez, 2015; Corbin Dwyer & Buckle, 2009), and discussed in Chapter Three, my facilitation of a PL experience for the participants positioned me as a MKO. In line with Vygotsky's (1986) SCT of learning, this arrangement permitted me to support participants, providing the knowledge they required to advance their classroom practice. However, my intention to

also include ALT (Darling-Hammond et al., 2017; Louws et al., 2017; Merriam, 2017) which considers the agency of adults in their own learning, may not have been as successful. Participants required information in order to alter their practice. By acting as MKO and providing this information, I may have inhibited their capacity to direct their own learning. However, without my input, it was unlikely that they would have examined their practices. This presented a challenge that I had not anticipated, requiring me to revise my interpretation of agency. I continued to struggle with balancing the development of this agency with providing an experience that would result in teacher PL. My presence and the expectation it created regarding the provision of information are examined in Chapter Six. I continue with an outline of the approach I took to identify my sample.

The Research Sample

Both *purposive* and *convenience sampling* were adopted to identify the participants. The former permits the selection of a particular sample, in this case teachers of children aged 4-8 years, which assisted in answering the study's questions (Cohen et al., 2018; Maykut & Morehouse, 1994). The criteria for *convenience sampling* were met by me working in School A and I knew the principal of School B. The schools were located within driving distance of each other, thereby facilitating data collection. Information about the two schools is provided in Table 1.

Table 1

A Description of the Study Sample

Description	School A	School B
School Type	Single Sex Vertical School	Vertical School mixed to First Class
Location	Suburban	Suburban
Enrolment	491	319
Average Class Size	25	23
Percentage of Children for whom English is an Additional Language	10%	40%
Number of Class Teachers	21	15
Number of Support Teachers	7	7
Special Needs Assistants	2	5
Number of Teachers engaged in the Study	5	4

The limitations associated with *purposive sampling* relate principally to the lack of representativeness that a *probability sample*, for example, might provide (Cohen et al., 2018). I attempted to increase representativeness by introducing diversity within the

sample. Schools' A and B were both vertical schools with all-female teaching staffs and administrative principals. However, School B was co-educational, and their enrolment included a greater number of children for whom English was an additional language. While not the focus of this study, I believed including girls and boys some of whom had English as an additional language, was important as it mirrored somewhat the cultural diversity in Irish mainstream primary schools. The limitations caused by the size of the sample on the transferability and generalizability of the findings are examined in Chapter Seven.

While two sites provide “undeniable benefits for comparing people doing similar activities in different settings” (Lareau, 2021, p. 20), as noted earlier I did not carry out a comparative analysis as part of the study. Rather the findings from both reflected a broader range of experiences which contributed to the depth of the study.

Bowe and Gore (2017) identify PLC membership in terms of between four and eight teachers. Five teachers in each school agreed to participate, totalling ten teachers which was reduced to nine when one teacher went on leave. To protect their identity, participants were given the pseudonyms listed below in Table 2. This sample provided me with sufficient data to examine the complex nature of teachers' engagement in PL (Edwards & Holland, 2013; King, 2014).

Table 2

Participants' Professional Background Information

Participant	Teacher Type	Class/Group Level	Teaching Experience	Relevant Additional Qualifications
Helen	Class	Junior Infants	6 – 10 years	-
Niamh	Class	Junior Infants	11 – 15 years	Master's Degree: Linguistics
Brid	Class	Junior Infants	0 – 5 years	-
Yvonne	Class	Junior Infants	0 – 5 years	-
Rachel	Class	First Class	35 + years	Master's Degree: French
Ann	Class	Senior Infants	6 – 10 years	-
Ellen	SET	First Class	35 + years	-
Eimear	Class	First Class	6 – 10 years	-
Laura	SET	Second Class	11 – 15 years	-

Note: SET describes special education teachers who support children with additional needs within and outside the classroom.

Next, I present the plan for this study and provide information regarding the piloting phase.

Study Plan

This study took place over the course of one academic year from September 2022 to June 2023. I constructed the study plan presented in Table 3 to assist me in planning my investigation from which conclusions could be drawn, and a case study could be created (Robson, 2015; Yin, 2000).

Table 3

Study Plan

Phase	Data Collection Process
Pilot Phase August 2022 – September 2022	Pilot Semi-structured Interviews with Teachers Pilot Classroom Observation of Teacher Testing of Recording Equipment Requests to Respective Boards of Management and Principals
Phase One October 2022 – November 2022	Introductions and Information Meetings Gaining Informed Consent/Assent Semi-structured Interviews with Teachers Classroom Observations of Teachers
Phase Two December 2022 – May 2023	Introductory PLC Meetings Audio/Audio-Visual Recordings Individual Post-recording Meetings PLC Meetings
Phase Three June 2023	Semi-structured Interviews with Teachers Classroom Observations of Teachers

Pilot Phase

I piloted a semi-structured interview schedule (Appendix A) on three occasions between late August and early September 2022 which provided me with an opportunity to practice necessary interview skills (Cohen et al., 2018). Participants were experienced teachers who had undergone PL in a range of formats; one was a national tutor; another had completed a year-long diploma while the third was a regular attendee at in-service. Their experiences provided insights into several areas being explored in the interview schedule, including the varied approaches to reflection and analysis. Their engagement and feedback following the interview effected several changes in the schedule, including its length with additional prompts for some questions being made available (Appendix A). For example difficulties describing OL&C as something more than ‘what occurred between people’ led to the question ‘how do you facilitate dialogue?’

My piloting process was weakened by the lack of representation in terms of less experienced teachers. To address this, I identified a teacher with less than ten years teaching experience who agreed to be participate in my piloting of the observation

schedule (Appendix B). While the schedule did not change significantly following the observation, the process highlighted for me the enormity of the task and caused me to reconsider the purpose of the observation. Rather than simply observing whether OL&C was being developed, I sought to establish how the participant interpreted OL&C development and if the learning outcomes they identified prior to the lesson, were being addressed. To this end I requested, as part of the study's observations, the participants' targets or learning outcomes.

During the pilot phase I also trialled recording equipment and the process of uploading and transcribing. I recorded all interviews and meetings on the voice recorder application on an iPad. The data was transcribed and stored on the *Dublin City University (DCU) Shared Drive* as per the information provided in my application to the Ethics Board (Appendix C).

Piloting a possible format for the PLC meeting (PLCM) was not possible at this stage as the meeting format relied on the engagement of participants. Instead I drew on guidance within the literature to establish a meeting format which is provided later. As this was a case study with an iterative design, there were several amendments to data collection processes (Robson, 2015). For example, an early PLCM featured analysis of two audio/audio-visual (A/AV) recordings as per participants' wishes. This was reduced to one when it became apparent that there was insufficient time to examine them both in detail. I now detail how data was collected across the three phases.

Data Collection

Cohen et al.'s (2018) description of a case study requires that the researcher gather information from a range of sources. Subsequently, a more focused set of hypotheses are developed, and predictions may be made. Finally, participants have the opportunity to review findings and interpretations (Cohen et al., 2018).

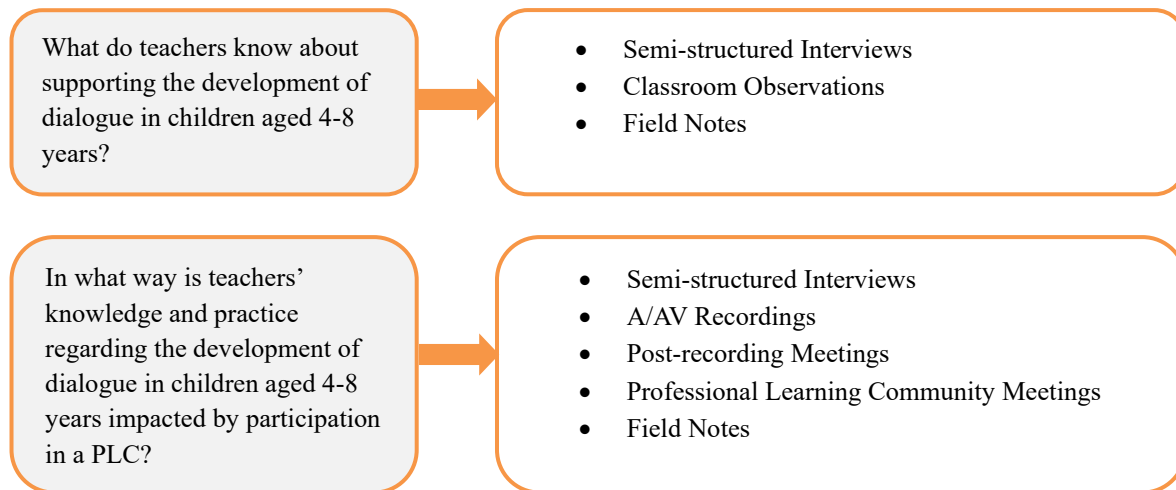
Data collection began following the pilot phase (Appendix D). A multi-method approach was adopted (Gillham, 2000). *Phase One* describes this period before participants engaged in the PLCs. *Phase Two* featured their engagement in the PLCs and *Phase Three* followed after their engagement.

The data collection instruments I selected and present in Figure 6 reflected the study's theoretical framework which viewed knowledge as something generated between

people (Vygotsky, 1986; Cohen et al., 2018). They were used in the following way to provide the necessary data to assist me in answering my two research questions:

Figure 5

Research Questions and Data Collection Instruments



I began a research journal when submitting my research proposal for the Doctoral Programme. It contributed to all stages of analysis (Maykut & Morehouse, 1994) and while not included in Figure 5, it became central to my research journey, allowing me to reflect on how I felt at different stages of the process. In it I posed questions to myself and others and recorded conversations with colleagues who were not directly involved in the study. Once I began transcribing A/AV recordings, my journaling moved to electronic files that were dated and labelled (a) *procedures*, (b) *tools*, and (c) *the sample*. A *notes* file accompanied each cycle of data collection.

Phase One (Prior to beginning the Professional Learning Process)

I intended beginning *Phase One* in late September 2022. However, due to difficulties with identifying a second school, delays in completing the consent/assent process, and the typical time constraints of teachers beginning a new school year, interviews and observations began early in October. Broad time frames provided the flexibility required to accommodate these issues which were outside my control.

Before beginning *Phase One* I requested and received permission from the respective Boards of Management of the two schools and their principals, to engage in the study (Appendix E, Appendix F). I invited prospective participants, that is, all teachers working with children aged 4-8 years in Junior Infants to Second Class, to attend a short

meeting in their respective schools where I outlined the study to School A's ten attendees and School B's five attendees. They received a plain language statement that described the purpose and shape of the study along with the type of commitment required by those who might wish to participate (Appendix F). Following the meetings, five teachers from School A and five teachers from School B agreed to participate. The early withdrawal of a participant from School B from the study meant that her data was not included in the final analysis.

Semi-structured Interviews

While not an intervention, this study resembled one insofar as participants were presented with practices around for example, analysing classroom data, which were potentially new to some (Robson, 2015). Therefore, establishing existing levels of teacher knowledge prior to commencing the process was important in terms of measuring the extent to which changes in knowledge and practice may have occurred, and in identifying possible areas of focus (Cregan, 2012; Mroz & Hall, 2003; Wilkinson et al., 2017). I gathered this information using semi-structured interviews prior to and following PLC attendance and the PL process.

Semi-structured interviews can be relaxed and engaging while at the same time being time-consuming and requiring extensive researcher knowledge (Adams, 2015). They become in-depth when they reveal “different levels of information about people’s motivation, beliefs, meanings, feelings and practices” as they attempt to assimilate cultural messages (Pugh, 2013, p. 50). This interpretation of the semi-structured interview process matched my aims, as I hoped participants would consider their role as teachers working alone to support the development of dialogue in their children while at the same time viewing themselves as members of a professional community.

In contrast with Topping and Ferguson’s (2005) recommendation that they occur after an observation, I interviewed participants early in the research process, thereby affording me the opportunity to begin developing a rapport with them before being invited into their classrooms. I explored issues that were common to the participants while also allowing them to create ‘unique’ and ‘personal’ narratives (Gillham, 2000) that reflected a range of professional experiences, decisions, and expectations.

While a means of collecting information, the semi-structured interviews also facilitated the development of my relationship with participants (Lareau, 2021). While I was known to participants in School A both as a colleague and a friend, I was keen to

establish myself as someone who was genuinely interested in their views on educational matters. As far as possible, I wanted to ensure they were not threatened by the process or that they would feel obliged to continue should they wish to withdraw. My relationship with participants in School B was different. I did not know them, having met them for the first time at the information meeting. However, as with School A I used the interview process to help establish a professional relationship with them.

Somewhat unexpectedly, the information participants provided contributed to my facilitation of the PLCs in *Phase Two*. For example, Yvonne and Rachel's descriptions of preferred learning styles prepared me for the possibility of differing levels of engagement during the PLCMs. Others commented on the influence of school cultures on previous PL experiences, and how as "powerful sources of surveillance" they impacted their participation (Broderick et al., 2012, p. 833).

Constructing the Interview Schedule. Research reveals some similarities within interview schedules and evidence of Patton's (1990) typology of questions. In Table 4 I compare a number of sources that provided me with a basis for constructing my schedule.

Table 4

A Comparison of Question Typologies

Source	Behaviour/ Experience	Opinion	Feelings	Knowledge	Sensory	Background Information
Patton (1990, as cited in Maykut & Morehouse, 1994)	✓	✓	✓	✓	✓	✓
Mears (2012, as cited in Cohen et al., 2018)	✓	✓	✓	✓		
Kvale (1996, as cited in Cohen et al., 2018)			✓	✓	✓	✓
Edwards & Holland (2013)	✓	✓	✓			
Morgan-Brett (2021) cited in an Academic Video (Sage)	✓	✓	✓	✓	✓	✓
Semi-structured Interview schedule for this study	Experience of OL&C development with examples	Perceptions of OL&C development with value statements	Feelings to include emotional responses	Description of knowledge/ Evidence of OL&C development	Description of how OL&C development is organised/ looks/sounds	Background information

Conducting Semi-structured Interviews. Lasting approximately one hour, the semi-structured interviews were held in the participants' schools within the school day (i.e., between 1:30 pm and 2:30 pm). Class supervision was provided by the principals where necessary. I audio recorded the semi-structured interviews using an iPad, used an interview schedule (Appendix A) (Adam, 2015; Lareau, 2021) and took field notes. Amending the schedule for use in *Phase Three* meant it reflected the six cycles of data collection and my ongoing analysis (Appendix A), while providing me with opportunities to revisit participants' perceptions and examine the degree to which these perceptions had or had not changed.

The interviews began with me reminding participants that confidentiality rather than anonymity was assured throughout the process and particularly at the stage of reporting when the setting might be familiar to a reader. Participants would be referred to by a pseudonym throughout the report making their contributions unidentifiable (Table 2). Participants were encouraged to ask for questions to be repeated and to seek clarification. I informed them of their right to withdraw from the interview or any part of the study at any stage, and reminded them of the purpose of the interview which was to explore participants' perspectives across three areas:

1. Knowledge of OL&C development
2. Views on teacher PL
3. Experiences of the Primary Language Curriculum/Curaclam Teanga na Bunscoile (PLC/CTB) (NCCA, 2019)

My initial questions including years of teaching experience were easily answered. Participants were invited to address the three areas in the order they wished, responding to questions as they related to them alone, and were not required to present their school's position or that of colleagues (Lareau, 2021). Each of the three topics was introduced with a broad statement (Edwards & Holland, 2013). More specific questions followed, and elaboration and clarification probes were used where necessary (Maykut & Morehouse, 1994). I closed the interview with a description of what would happen next in the study. Out of respect for the participants' engagement in the process I invited questions (Cohen et al., 2018).

Oral Language and Communication Development. A review of the literature provided me with a context for the section on OL&C development (Alexander, 2018; Mercer, 2010; Schoenfeld, 2002; Soter et al., 2008). In order to identify participants'

perceptions regarding their CK and PCK, I focused on curriculum, pedagogy, and assessment (Schraw & Olafson, 2002).

Professional Learning. To establish participants' preferred learning opportunities, I gathered views on previous PL experiences, the success of their experiences to date and whether engaging in PLCs represented a viable PL alternative for them. They considered PL within communities of learning (Alexander, 2018; Cochran-Smith & Lytle, 2009; Dögan & Adams, 2018; Teo, 2018; Wenger, 1998).

The Primary Language Curriculum/Curaclam Teanga na Bunscoile (NCCA, 2019): Participants were asked to comment on their use of the *Curriculum/Curaclam Teanga na Bunscoile* (PLC/ CTB) (NCCA, 2019) and describe its impact on their classroom practice in terms of OL&C development only. Some questions referred to recent experiences around its introduction into schools, thereby providing data in terms of OL&C and PL.

The Researcher as Interviewer. An interviewer does more than simply ask questions which will then relate the participant's story (Pugh, 2013). She analyses as she goes considering how something is reported as well as what is reported. Reflecting in real time with the interviewees, I moved beyond what might be considered a set of 'correct' responses, inviting interviewees to provide examples of when they felt a particular way (Luttrell, 2000). I recognised how emotion impacted on participants' reasoning and actions (Pugh, 2013). One participant described during a *Phase Three* interview how our conversation was causing her to reconsider her position regarding her children's abilities to critically engage. As already noted, the *Phase One* semi-structured interviews provided me with an opportunity to begin my research relationship with the participants.

Classroom Observations

Pedagogy, described as what teachers do with what they know, can be examined in classroom observations as teachers provide evidence of the link between their CK and their PCK (Nind et al., 2016). However, the fact that inconsistencies can exist between what teachers report, and their practice (Schraw & Olafson, 2002), meant that as part of establishing CK and PCK, I needed to observe participants teaching what they deemed an OL&C lesson. The combined data from the observations and interviews allowed me to triangulate my data which increased the credibility of my findings (Maykut & Morehouse, 1994). Also, the data gathered from interviews when mapped on to observed classroom

practices, contextualised what participants reported as their CK and PCK (Cohen et al., 2018; Nind, 2003).

The pilot phase revealed that identifying what teachers considered as OL&C development was as important as what they did to develop it, and whether they achieved their intended learning outcomes (Patterson, 2018; Reznitzkaya, 2012). The observations also provided me with insights into how participants perceived their role and to a lesser degree, the extent to which their pedagogy had been successful. This information was then compared with participants' reports during interviews.

Constructing the Observation Schedule and Recording the Data. My observation schedule reflected research-based strategies for effective dialogic engagement (Alexander, 2018; Mercer, 2005; Soter et al., 2008; Topping & Ferguson, 2005). I adapted *The Communication Supporting Classroom Observation Tool* (Dockrell, et al., 2012) to construct the schedule adding statements that reflected my review of the literature with regard to OL&C development (for example 'Extending: teacher repeats what child says and adds a small amount of syntactic or semantic information') (Appendix B). While omitting its scoring features I attended to the three aspects of Dockrell, et al.'s (2012) tool: *the environment*, *the opportunities*, and *the interactions*. I sought to identify if what participants had planned was occurring and noted types of teacher and child talk (Mercer, 2005, Nystrand et al., 2003). I recorded the contexts for these engagements along with any other information relevant to teacher knowledge about OL&C development (Appendix H). To this end and where possible, I recorded child-teacher and child-child interactions verbatim.

Conducting the Classroom Observation. Observed lessons took place in whole-class settings where participants were class teachers and in group withdrawal settings where participants worked as special education teachers. I acted as a *complete observer* (Cohen et al., 2018) in both contexts.

Participants identified a time convenient to them. Scheduling their interview for before their observation allowed participants to informally introduce their lesson at the end of their interview. They were requested to teach a twenty-minute lesson with OL&C development as its focus. During a *Phase One* information meeting I recorded in my field notes how some participants had reacted negatively to the suggestion that they would provide lesson plans for their observed lessons. Based on this feedback, rather than requesting lesson plans I asked for intended learning targets or outcomes. Some

participants adopted this practice for the remainder of the study, while others provided them when we met at post-recording meetings (PRMs). These meetings are described later.

The limited guidance around planning and lesson content was intentional. I was not inspecting their teaching. The observation was for my benefit in terms of testing the validity of the information gathered during interviews. It was also important that the engagement remained informal as part of developing a collegial relationship with participants in preparation for the PLCs that would follow. Other benefits included the contextual information it provided, particularly in terms of PLCB where the numbers of children with English as an additional language were significantly greater than in PLCA. It also offered some contextual information regarding the classroom cultures from which the A/AV recordings would come.

Classroom supervision issues did not allow for lengthy researcher-participant conversations following observed lessons. While this might have aided my analysis of what occurred, it was important to minimize the impact of what could otherwise have been interpreted as an ‘inspection’. Instead, a short conversation followed where I advised participants that what had been recorded would be available as a description on the *Shared Drive* and if they wished it could be altered. I then thanked them for their cooperation and outlined the next stage in the process. Participants’ use of the *Shared Drive* is referenced again later in this Chapter.

A written summary of each observation (Appendix H) featured information from the observation schedule, my field notes, and the plans or learning outcomes provided by participants. I included extracts from verbal and non-verbal interactions between participants and their class. A section labelled ‘alternatively’ allowed me to practice reflexivity as I considered reasons as to why particular engagements may have occurred. For example, in *Observation One* I reflected that Helen’s maintaining control, while not conducive to children building on the contributions of others, may have been because she wished to establish turn-taking with her children who were beginning Junior Infants.

Field Notes. Field notes, described as ‘intellectual stocktaking’ (Gillham, 2000, p. 24) and “the lifeblood of a project” (Lareau, 2021, p. 140), contributed to this study from the outset. They ensured as faithful a representation of events as possible (Cohen et al., 2018) as they featured my observations (Maykut & Morehouse, 1994). They insured I practiced reflexivity during data collection, analysis and presentation (Braun & Clarke, 2021). Those taken during observations contributed significantly to instances where for

example, participants may have met the criteria included in the observation schedule but opportunities for extended periods of child talk appeared limited (Nind, 2003). Following school visits I transferred my field notes to the computer. From there they were subjected to an initial analysis which contributed to my preparation for subsequent PLCMs and ultimately the data analysis process.

Field notes made as I transcribed the meetings' recordings, assisted me in behaving reflexively as I identified how my presence impacted the participants' experiences of the PL process. For example, I became aware during the process how as MKO, I was questioning a fundamental aspect of the participants' teaching, namely how they engaged with their children. Believing my comments could cause embarrassment and risk participants withdrawing from the study, I sought to minimise their discomfort by tempering the degree to which I challenged their behaviours. My role as researcher became compromised by my role as a colleague in the case of PLCA, and as a teacher in both PLCs. This potentially limited the depth of participants' analysis and ultimately their PL. Intent on representing participants' views as faithfully as possible, I remained reflective from *Phase One* to the write-up.

Documentation

Pedagogical documentation describes a range of materials including observations and record-keeping that can be used to support reflection on pedagogy (Nind et al., 2016). While there are benefits to gathering supporting documentation in terms of triangulation, there are challenges associated with using data that has not been prepared specifically for the purposes of answering the research questions (Cohen et al., 2018). As outlined above, participants were asked to present intended learning outcomes or targets to accompany their observed lessons, as well as any planning related to their A/AV recordings of children-teacher dialogue. Some did so with the remainder providing them on request.

Phase Two (During the Professional Learning Process)

Phase Two began with an introductory PLC meeting followed by six cycles of engagement over eight months, with each cycle featuring the following three distinct elements that were recorded:

1. Participant A/AV Recordings of Children-Teacher Engagement
2. Post-recording Meetings (PRMs) between the participants and me
3. Professional Learning Community Meetings (PLCMs)

Transcribed by me, I subjected these recordings to preliminary analysis which influenced future cycles of data collection. An in-depth analysis of this data is provided in Chapters' Five and Six.

To ensure all participants received similar support I devised a monthly time frame (Appendix I). While this was common to both schools, accommodations were necessary where professional and personal engagements meant participants were unavailable to attend meetings, came late or left early, demonstrating the study's response to the uncontrollable elements of 'real world research' (Robson, 2015). The resulting variations that occurred in meeting content are outlined in Table 5 later in this chapter.

The Introductory Professional Learning Community Meeting

The introductory PLCM differed from the six subsequent PLCMs. Its purpose was to create a context in which professional engagement could begin. Based on information gathered during *Phase One* interviews, the model of PL being explored was new to participants and therefore, had the potential to cause unease. The practice of analysing one's own practice in a public space could have been unsettling while concerns pertaining to the recording element could have overshadowed the real purpose of the exercise which was to establish a shared commitment to the development of OL&C through reflection on practice (Bowe & Gore, 2017). Therefore, this first meeting needed to provide reassurance.

Reference was made to information I gleaned during interviews where participants' descriptions of what they interpreted as PL and PLCs ranged from chats on the corridor to school planning meetings. In this study, I do not dispute either of these as contributors to PL (The Teaching Council, 2016). However, research recommends developing a clear understanding of the features of a PLC (Doğan & Adams, 2018). To this end, I adopted Timperley's (2015) three features of 'effective professional conversations' to frame PLCM conversations:

- Active learning based on classroom-generated material
- Maintaining a focus on improving children's OL&C and dialogue
- Collaboration around addressing problems and developing practices

I modelled these principles using a sample AV recording and a 'Viewing a Video' protocol (Appendix J).

The 'Viewing a Video' Protocol. The benefits associated with using a protocol to scaffold inquiry and support professional conversations, include the focus they bring to particular behaviours (Timperley, 2015). They ensure viewers remain non-judgemental as

they attend to practices rather than teachers (Bowe & Gore, 2017). Aware of their reservations around presenting themselves as practitioners in front of colleagues, I hoped my five-part protocol (Appendix J) would support participants who had not engaged in this type of practice previously. Intended to ensure transparency and consistency around the process, and clarity around how recordings would be viewed and reviewed, the protocol became limiting with repeated use. Its usage is examined in Chapter Six.

The Sample Audio-Visual Recording. Presenting a sample AV recording at the introductory meeting provided me with opportunities to model the reflection and analysis process. It also framed me as a participant at least on this occasion as my practices were analysed. It supported conversation at several levels including the logistics of recording. The AV recording featured six First Class children engaging in children-teacher dialogue on the subject of frogspawn in a tank. Having made it the previous year, I sought and received permission from the children concerned and their parents, to include it, on the understanding that the children would be unidentifiable.

Participants watched three extracts totalling approximately eight minutes. I provided them with a transcript of the dialogue. This assisted me in introducing the analytical practices which would become a feature of future PLCMs (Appendix K), while modelling Timperley's (2015) three features listed above.

At the end of the introductory meeting, I explained how participants would be required to make 5-8-minute-long A/AV recordings of their dialogue with their children on six separate occasions (i.e. approximately one recording per month). These recordings would be similar in length to those deemed suitable by Paatsch et al. (2019) in their study of children-teacher engagement. I would transcribe and share them with their respective contributors on the *Shared Drive* prior to the PLCM. While the limited numbers of children who assented to participate in the study meant all participants were required to use the 'group' as their context for dialogue, both PLCs agreed groups were preferable when supporting the social, communicative and affective needs of young children (Alexander, 2018) (Appendix L). All seven PLCMs in both schools were audio recorded, transcribed and uploaded to the *Shared Drive*.

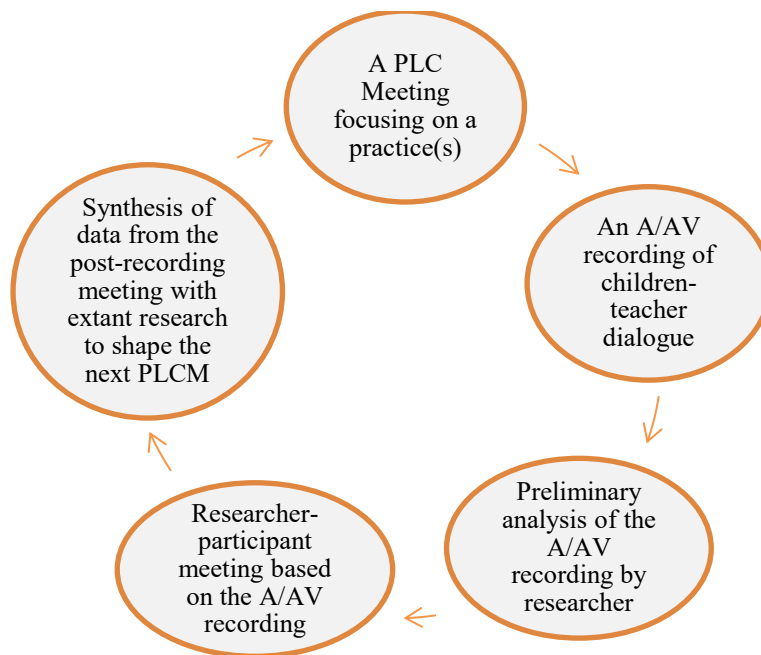
A Single Cycle of Data Collection

My iterative approach to the study's design facilitated my repeated collection and analysis of the data over six cycles (Grbich, 2007; Hall, 2007). In the case of PLCMs preliminary analysis of their content allowed me to plan the focus of subsequent PLCMs,

in terms of participants' perceived needs. This meant the discussions at each PLCM contributed to the content of following meetings. This process reflected the practices of a number of studies referred to in Chapter Two (Doğan & Adams, 2018; Kazemi & Franke, 2004; Nelson et al., 2012; Wilkinson et al., 2017). Each cycle featured five stages. The five stages illustrated in Figure 6 occurred across approximately a four-week period.

Figure 6

A Single Cycle of Data Collection



- The cycle began with PLC discussions related to the development of OL&C and research-based classroom practices to support the development of children's dialogue. To minimise issues with supervision while at the same time being mindful of participants' commitments after school, PLCMs took place within the school day (i.e. between 1:30 p.m. and 2:30 p.m.) when the infant classes ended.
- Each participant recorded dialogic engagement with their group of children and uploaded their recording to the *Shared Drive*.
- I transcribed and analysed these recordings in terms of the practices being examined at the PLCM.
- A face-to-face conversation between the participant and me labelled a post-recording meeting (PRM) followed (French, 2014) where we discussed the recording, its transcript and issues that arose at the previous PLCM. PRMs typically

took place one week after the recording was uploaded and lasted approximately thirty minutes.

- Information gathered during PRM discussions and related material from extant research contributed to the content of the following PLCM.

Each cycle provided me with opportunities to increase my levels of reflection and those of the participants, to alter data collection instruments, to hone my facilitation skills and deepen my insights. In the following section, I examine the contribution of A/AV recordings to the study.

Recordings of Children-Teacher Dialogue

Research focusing on teachers' classroom practice utilises A/AV recordings at all stages from initial inquiry to data collection to occasions that require reflection by teachers and possible changes in practice (Alexander, 2018; French, 2014; Goldenberg, 1992; Mercer, 2005; Reznitzkaya, 2012; Wilkinson et al., 2017). The ready availability of recording technologies has increased their use (Derry et al., 2010), 'revolutionizing' educational research in terms of data collection, examination and sharing (Derry, 2007, p. 1). Their inclusion provided the participants and me with opportunities to revisit the educational context (i.e. the children-teacher engagement) and focus on a range of issues during our discussions (Cohen et al., 2018; Derry et al., 2010; Paatsch et al., 2019).

Sometimes described as *video clubs* or *lesson study*, the practice of watching and discussing videos of teachers in classrooms has been in use since the 1990s (Sherin & Sherin, 2007). What teachers observe in these contexts can become part of their analytical practices while at the same time positively impacting group dynamics (Sherin & Sherin, 2007). Considered "powerful tools for professional self-evaluation" (Alexander, 2018, p. 575) recordings are valued for their capacity to support discussions between teachers regarding their facilitation of children-teacher dialogue around text (Zook-Howell et al., 2020). They address some of the difficulties associated with providing teachers with exemplars as part of PL where rather than provoking self-reflection and change, discussion becomes about what is considered 'best practice' (Teo, 2018).

Audio/Audio-Visual Recording in this Study. Teacher-generated content in the form of self-selected A/AV recordings became the primary tool by which classroom behaviours were analysed. The participants had recorded their children before but not for the purpose of examining their own engagement. In this study they selected the contexts in which they recorded their engagement. They positioned the recording device thereby

determining what was captured in the frame and generally complied with my recommendation that recordings would last 5-8 minutes (Appendix N). Once they had completed each recording they uploaded it to the *Shared Drive*.

The A/AV recordings facilitated participants in exploring their knowledge of and practice in developing their children's dialogic engagement. Participants were encouraged to 'notice' their engagements (Estapa, 2016) with a group of children (Paatsch et al., 2019). In stimulating "recall, reflection and dialogue" the recordings scaffolded participants' analysis (Nind et al., 2016, p. 174). My transcriptions furthered discussions allowing participants to, for example, link their talk to children's behaviours and finally, to the identification of an alternative 'talk move' more conducive to developing dialogue (Maine & Hofmann, 2015; Phillips Galloway & McClain, 2020).

Bowe and Gore (2017) in their study of *Quality Teaching Rounds*, supply teachers with an 18-element framework with which to code and analyse their own classroom data. I began this study by providing participants with a framework that featured Mercer's (2005) three types of talk (Appendix K). However, I abandoned this approach when I noted how participants found categorizing talk difficult, possibly because the framework featured researcher rather than practitioner knowledge (Bowe & Gore, 2017). These and other amendments are presented in Chapter Seven.

Studies of classroom dialogue and in particular interventions such as those by Alexander (2018) and Maine and Hoffmann (2016) often feature contexts stipulated by the researchers. In this study I, like Patterson (2018), sought to increase agency by having participants select their own contexts. This also facilitated participants selecting practices they may have felt confident showing to colleagues. Selected contexts for children-teacher dialogue included (a) social, personal and health education, (b) social, environmental, and scientific education, (c) play, and (d) literacy (Appendix L). Six participants uploaded all six A/AV recordings with three uploading five (Appendix M). Their duration in length varied and some, due to technical errors, occasionally did not include sound.

Transcriptions. Transcribing all of the A/AV recordings of children-teacher engagement once they were uploaded to the *Shared Drive*, meant I could subject them to preliminary analysis, thereby identifying examples of what had been discussed at previous PLCMs. I included non-verbal as well as verbal contributions providing a more complete picture of interactions and how they evolved (Alexander, 2018; Derry et al., 2010). Examples of recorded non-verbal behaviours included humour, significant pauses, levels of

ease, utterances that were unclear and observations of children indicating uncertainty (Edwards (1993), cited in Derry, 2007).

The participants and I then shared our observations at the PRM where I provided them with a hard copy of the transcript that included shading to indicate teacher talk, for example (Mercer, 2005). Later in the process, words indicating speculation were typed in red. Participants were reminded that they could access all of their own recordings on the *Shared Drive* whenever they wished and were encouraged to do so in preparation for future recordings. The transcripts supported my on-going analysis of participants' CK and PCK (Derry et al., 2010). They provided data that contributed to the creation of a *trajectory* for each participant in terms of their PL (Appendix O). This process is outlined later as part of data analysis.

Audio/Audio-Visual Recordings as Data. The A/AV recordings became data once analysed (Goldman et al., 2007). They captured changes in children-teacher dialogue pre- and post-intervention (Topping & Trickey, 2014), provided material for the development of analytical skills as part of PL, and produced summative data from which I drew conclusions (Creswell, (2003) cited in Aguilera & Krasny, 2011; French, 2014). When examined with accompanying transcripts they helped me identify what and how events occurred to support the development of children's dialogue. Extracts included in Chapter Five helped to illustrate the dialogic efforts of participants and their children (Derry et al., 2010). Their impact on the PL process is considered in Chapter Six.

Difficulties associated with using Audio/Audio-Visual Recordings as Data. A/AV recordings can be susceptible to *reactivity* (Cohen et al., 2018) where the act of recording can impact behaviour. The participants, in relating how their engagements with and amongst their children were impacted by the recording process, described being anxious to remain off screen. They reported discomfort hearing themselves. Most recalled these difficulties reducing in time. Laura described it as 'get[ting] over yourself' (I2). The option remained, to audio record with Ellen and Rachel choosing this method occasionally.

What was captured in the recorded episodes was subject to participants selecting what they wanted to record and upload. Some chose to rerecord on occasion while some selected episodes from longer recordings (Derry et al., 2010; Goldman et al., 2007). Some participants' recordings may have been planned and possibly 'staged' and therefore may not have displayed typical practices. Others were happy to upload whatever was recorded even when, for example, engagement levels were reportedly below expectation. These

scenarios could have presented issues for the findings had it been the case that the recordings were for the purpose of providing a baseline for tracking progress (Alexander, 2018). While some children may have displayed changes in dialogic behaviours, it would be difficult to confirm whether such advances were attributable to changes in participants' practices. Child maturity, for example, could have had a positive impact. For these reasons, I chose not to focus on the recordings as a means of measuring the success of children-teacher engagements, but rather to support participants' reflection on their behaviours and to stimulate discussion (Nelson et al., 2012; Nind et al., 2016). This was evidenced in instances where despite recordings being without sound, post-recording discussions were both reflective and analytical. They also assisted in my examination of how participants' reflection developed during the PL process.

Difficulties with the recording process included the technology failing on occasion, the time taken to upload large files to *the Shared Drive*, and the logistical challenges in terms of managing the remainder of a class. One recording device was not sophisticated enough to capture the totality of the groups' engagements. However, it was more important to me that participants were not overwhelmed by technological expectations and therefore, using a fixed position single device where data was easily saved and retrieved was central to the exercise. My adopting reflexive behaviours throughout the analytical and reporting process also assisted.

Post-Recording Meetings between the Researcher and Participants

Typically between three and five days after recordings were uploaded (Barron & Engle, 2007), I met with each participant at a post-recording meeting (PRM) to collaboratively analyse their recording's content. The recording acted as a catalyst for our professional discussions (Darling-Hammond et al., 2017; Desimone et al., 2002; Doğan & Adams, 2018; A. Kennedy, 2005) across the six cycles of engagement. These discussions were audio recorded and transcribed, and the transcriptions were uploaded onto the *Shared Drive* to facilitate member checks (Maykut & Morehouse, 1994). They also contributed to the individual *learning trajectories* described later.

On one or more occasion participants were invited to present their recording at a PLC meeting for shared reflection and analysis. I applied three criteria when selecting recordings for the PLC meeting:

- The recording displayed examples of children-teacher dialogue.

- There was evidence of some of the practices that were the focus of previous PLC discussions.
- The participant had presented one or no recording previously.

It would not have been possible to make effective use of all A/AV recordings at PLCMs. However, participants' individual recordings remained central to their respective PRM discussions.

The Professional Learning Community Meetings

The majority of participants in this study attended all seven PLCMs (Appendix N). On occasion people left early or came late. The meetings' proceedings were uploaded onto the *Shared Drive* making the discussion available to those who were absent.

The development of relationships appears to contribute to the degree to which professional conversations used to support learner-centred education, become dialogic and collaborative (DeBruin-Parecki & Henning, 2002). Trust (Stoll et al., 2006) is required and a sensitivity regarding the examination of teachers' practices in classroom talk, without which their personal and professional views of themselves can be negatively affected (Alexander, 2018). The introductory PLCM aimed at establishing a trusting atmosphere. The following six PLCMs in an effort to reassure participants, followed an intentionally predictable format as outlined below.

The PLCM Format

Participants were welcomed with refreshments and reminded that the meeting was being audio recorded. I invited general comments regarding participants' most recent experiences from within the five-part cycle shown earlier in Figure 6.

-

The participant requested to share her A/AV recording began the process by following the 'Viewing a Video' protocol described earlier. Participants at the introductory PLCMs had suggested that they would like to view two A/AV recordings at each meeting. This was trialled during the next PLCM but because of time limitations which impacted the depth of analysis for each recording, subsequent meetings featured just one A/AV recording. Alexander (2018) recommends that A/AV recordings of classroom practices be presented in three stages – firstly as an audio recording, then as a transcript and finally as a video recording. Because of time limitations I adopted a two-stage

approach beginning with the A/AV recording thereby allowing participants to contextualise their discussion.

-

Once the recording had been viewed/listened to, participants responded. I noted issues raised by participants that might be explored later at the meeting or at subsequent meetings. These included the ten practices listed below and featured in Table 13.

-

The typed transcript I provided included verbal and non-verbal contributions described earlier (Alexander, 2018; Patterson, 2018). Participants attempted to analyse the children-teacher engagement. My on-going preliminary analysis of PLCMs resulted in opportunities for participants to practice analysis of their own transcripts in later meetings.

-

The PLC members completed tasks I created to develop the practices being discussed. On three occasions I informally presented supporting research articles in hard copy format or online.

-

Participants ended the meeting by deciding dates for the next cycle of recordings and they were invited to complete their engagement graphs described below.

Ongoing analysis of the data revealed that over the course of this study the participants and I together explored the ten practices shown listed here.

Ten practices to support dialogic engagement

- | | |
|--------------------|-----------------------------|
| 1. Time to talk | 6. Dialogic talk |
| 2. Wait time | 7. Authentic questioning |
| 3. Talk moves | 8. Uptake |
| 4. Joint attention | 9. Differentiated support |
| 5. Teacher role | 10. Assessment and analysis |

These ten practices, identified in the literature as fundamental to OL&C development and dialogue, became points of new learning for participants and areas of focus for their recordings. They were discussed and on three occasions participants were provided with ‘glance cards’ (Appendix P) that reflected these conversations (Doğan & Adams, 2018). The cards supported the implementation of new practices (Appendix P).

Participants were directed to the *Shared Drive* on three occasions where I had added articles relevant to what we were exploring.

Table 5 below provides an outline of when these topics were introduced to both PLCMs. Column One describes what was common to both PLCs while Columns Two and Three indicate how the treatment of the practices and the order in which they were explored differed in response to the needs of each group.

Table 5

A Summary of Topics Discussed at the Professional Learning Community Meetings

Topics Discussed	PLC School A	PLC School B
PLCM 1 Balancing teacher and child talk The teacher's role as facilitator and model Joint attention Active listening and justifying OL&C, cognition and constructing ideas together Types of talk that promote dialogue Test and authentic questions (Alexander, 2018) were identified in the sample transcript but not discussed.	Providing children with sufficient time to think about their responses (Wait Time) Cumulative Talk (Mercer, 2005) and Uptake (Soter et al., 2008).	The limitations for younger children who prefer to tell stories rather than ask questions. When dialogue is limited for children who have additional needs.
PLCM 2 The teacher's role and who is controlling the talk Joint attention and listening for both teachers and children Ground Rules (Mercer, 2008) Analysis: Test and authentic questions (Alexander, 2018). Wait Time Extending OL&C beyond labelling and using reasoning words (Soter et al., 2008) (e.g. pupil: I agree/ disagree, maybe) Extending OL&C to include justifying (Ferris, 2013) Talk moves (Michaels & O'Connor, 2015) Types of talk that support dialogue: cumulative/ exploratory talk (Mercer, 2005) and connect episodes (Boyd et al., 2019)	Supporting children not appearing to engage	Types of talk that support dialogue: cumulative talk (Mercer, 2005) and connect episodes (Boyd et al., 2019) introduced in PLCB
PLCM 3 The Teacher's Role Review of the OL&C strand of the PLC/CTB (NCCA, 2019) and its twelve learning outcomes OL&C assessment and analysis: Recognising when children supply, explain, justify, describe, predict, or reflect (LO11 and LO12, PLC/CTB, NCCA, 2019) Glance Card 1: Talk Moves (Michaels & O'Connor, 2015) & Reasoning words (Soter et al, 2008) Joint Attention and Listening Questioning & Speculating OL&C and cognition Children posing questions	Questioning & Speculating: A Socratic or philosophical stance to support open-ended questioning	Questioning that challenges children to dig deeper was discussed but named as Accountable Talk (Ferris, 2013). Pre-teaching vocabulary as preparation for dialogic engagement: (School B places

		significantly more emphasis on vocabulary development).
<p>PLCM 4</p> <p>The Teacher's Role: Transmitting content versus teaching skills; the teacher as 'not knowing'. Questions that challenge children to explain, justify, describe, predict, or reflect (LO11 and LO12, PLC/CTB, 2019) and Accountable Talk (Ferris, 2013). OL&C, assessment and analysis: Recognising when children supply, explain, justify, describe, predict, or reflect (LO11 and LO12, PLC/CTB, 2019) as part of Accountable Talk (Ferris, 2013; Michaels & O'Connor, 2015). Questioning & Speculating: The use of 'I wonder...'. Academic Article: Gregory & Cahill (2010) OL&C and cognition Uptake using a Pragmatic Language Activity (Shaul, J.) (https://autismteachingstrategies.com/wp-content/uploads/2012/01/Chain-Building-Girders-Conversation-Activities-Download.pdf)</p>		<p>Focus was on developing positivity around the PLC/CTB (NCCA, 2019) and the LOs as a useful starting point for planning for OL&C development.</p> <p>Accountable Talk (Ferris, 2013; Michaels & O'Connor, 2015) not included.</p>
<p>PLCM 5</p> <p>The Teacher's Role Questioning & Speculating: The use of 'I wonder...'. (Gregory & Cahill, 2010). Supporting pupils not appearing to engage Talk Moves (Michaels & O'Connor, 2015) & Reasoning words (Soter et al, 2008) Glance Card 2: Language Analysis Framework (Alexander, 2018; NCCA, 2015; Shiel et al., 2012; Tough, 1985) to frame questions that develop, assess and analyse OL&C (Topping & Ferguson, 2005). Teacher responses: Uptake and 'building on'</p>		<p>Limited reference to article by Gregory & Cahill (2010) – explored in greater detail in PLCM6.</p>
<p>PLCM 6</p> <p>The Teacher's Role Supporting children not appearing to engage Questioning & Speculating: The use of 'I wonder...'. (Gregory & Cahill, 2010). OL&C, assessment and analysis: Recognising when children supply, explain, justify, describe, predict, or reflect (LO11 and LO12, PLC/CTB, 2019). Glance Card 3: Recognising Dialogue (adapted from Alexander, 2018) – for participant's use when analysing their recording prior to the next PLCM7</p>	<p>Philosophy and Cognitive Development was discussed Academic Article: D. Kennedy (2022) The Deviant Response (D. Kennedy, 2022)</p>	<p>Supporting children with EAL The deviant response was not addressed as the D. Kennedy (2022) article was not explored. Philosophy & cognitive development were discussed briefly re: open-ended questioning</p>
<p>PLCM 7</p> <p>The Teacher's Role Questioning and speculation OL&C, assessment and analysis: Recognising when children supply, explain, justify, describe, predict, or reflect (LO11 and LO12, PLC/CTB, 2019).</p>		

Identifying three levels of teacher uptake (Maine & Hofmann, 2015; Nystrand et al., 2003; Siraj-Blatchford & Manni, 2010) Challenging children's talk OL&C Development, Dialogue and Life Skills		
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Engagement Graphs

Mapping is a “visual method in which participants individually or in groups map out (write or draw) their experiences, often including a space/time dimension” (Nind et al., 2016, p. xvi). By creating a graph (Appendix Q) I hoped participants would identify their levels of negotiation and the degree to which they believed they contributed to the process (Nelson et al., 2012). This would become an ‘elicitation tool’ (Thille et al, 2021) which they would bring to the interview in *Phase Three* to support their reflection (Edwards & Holland, 2013; Nind et al., 2016).

Participants were reminded prior to each meeting to bring their graphs and following each PLCM they were invited to map their perceived levels of engagement in the meeting on their graph. I advised them that they would not be required to share their graphs, and I would not be analysing them. I also hoped to triangulate my observations and analysis of transcripts with participants’ self-reported engagement levels.

About mid-way through the study however, it became apparent that some participants in both PLCs had either misplaced their graph or were not inclined to add to them. This hesitancy in recording of one’s feelings around a practice was the reason why I had not recommended the use of reflective journals at the beginning of the study (Hobbs, 2007).

I was satisfied that the PRMs provided opportunities for reflection. In addition to this, and as part of the fourth cycle of data collection, I invited participants to comment on their engagement in the process and in particular their satisfaction levels with the PLC (Nelson et al., 2012) (Appendix Q). These reflections were included in the data analysed to create participants’ trajectories. The findings are summarised in Chapter Six.

Phase Three (Following the Professional Learning Process)

The final phase of data collection drew on the insights I gathered in *Phase One* and preliminary data analysis carried out on *Phase Two’s* six cycles of data collection (Grbich, 2007). Participants were re-interviewed and observed, to establish their CK and PCK in terms of supporting OL&C and the development of dialogue. This second round of

interviews and observations provided participants with the opportunity to reflect and comment on the PL process.

The Second Interview Schedule

Participants attended for a second interview in *Phase Three* (Appendix A). The focus remained the three areas listed in *Phase One*. However, in an effort to gain greater insight into elements of the process, I extended my questioning to include participants' views of the following:

- The PLC experience in terms of teacher agency
- The impact of PRMs on PL
- The use of A/AV recording in PL
- The place of the PLC/CTB (NCCA, 2019) in OL&C development

The practice of ability-grouping children for OL&C development, was included in interviews with participants who had referenced it during the PL process. These *Phase Three* interviews also provided closure for participants, ending their engagement in the process.

The Second Classroom Observation

Classroom observations in *Phase Three* featured a revised OS and reflected the content of the PLCMs. Focus areas included types of questioning and evidence of talk moves by the participant and children (Appendix H). They provided me with the opportunity to thank the children for their engagement in the study. Next, I outline how I complied with the ethical standards of research required by Dublin City University (DCU).

Ethical Considerations

Ethical considerations are central to all aspects of research from the planning stage to the sharing of findings. Acknowledging that researcher incompetence is unethical (Cohen et al., 2018), I began this journey by completing the *Comprehensive Version* of the *Research Integrity Online Training* module presented by DCU. Following this, I applied to and received ethical approval from the Research Ethics Committee (REC), DCU for *Approval of a Project involving Human Participants* which due to the sensitive nature of the recordings, required a 'full review' (Derry et al., 2007).

Gaining Consent and Assent

I gained access to the schools at the centre of this study with letters to their respective Boards of Management (Appendix E) and Principals (Appendix F). Through

their principals, teachers were made aware of the study. As noted earlier, I knew both principals and while they were willing for their respective staffs to engage, they indicated that they would not compel them to do so. They provided rooms for the initial meetings that took place after school.

Conscious that because of my existing relationship with each principal, teachers could feel obliged to participate, I requested that the principals not attend the initial meeting. I hoped this would allow teachers the freedom to decide if they wished to engage. A similar meeting at a third school had resulted in two teachers expressing interest in the study; an insufficient number, I believed, to secure the viability of a PLC.

At both meetings I distributed a plain language statement (Appendix G), which outlined the study plan. It detailed the aim of the study, the possible benefits to participants, the shape of their involvement, data storage and privacy issues, and my contact details. Teachers were not required to state their interest at the meeting. Those willing to participate consented later in writing (Appendix R). As already noted, some who were in attendance chose not to participate in the study, suggesting that the tone of these meetings was respectful of teachers' right not to engage.

The parents/guardians of the children in each of the participants' classes were given a simplified plain language statement following advice from REC (DCU). It was presented in English with a Russian translation available for those who required it. Participating teachers in School B felt that the decision to engage by the parents/guardians of children in their school might be impacted by the fact that I came from outside their school community. To address this concern, I prepared a two-minute AV recording introducing myself and the study to the parents/guardians and children in both schools. This was sent to all relevant classes on *Seesaw*, an electronic platform used in both schools to disseminate information. I received two e-mails from parents seeking clarification. Despite receiving a plain language statement and being invited to ask questions by e-mail or telephone, several other parents/guardians ticked the box saying they had not had the opportunity to ask questions. Information regarding the parents/guardians who consented and the children who assented is presented in Appendix M.

In all Junior and Senior Infant classes, the class teachers chose to present the assent form to their children (Appendix S). In two other classes Support teachers involved in the research facilitated the process while I presented the form for completion to a First Class and a group from Second Class. Several children asked questions during the process. Some

did not indicate assent despite their parents/guardians consenting. One child reported that she did not wish to participate, and the remainder of the group where she was sitting decided similarly. After a few moments she changed her mind and the other group members followed her. These incidents highlight the fragility of the process where it can be difficult to ascertain if children understand the nature of assent and consent.

This study engaged a ‘vulnerable’ sector of the population (i.e., children aged 4-8 years) (Derry et al., 2007; Robson, 2015) with those agreeing to participate being recorded in dialogue with their teachers. A/AV recording of this group presented its own ethical issues in terms of confidentiality. While I accepted that these concerns may not have been fully understood by the children, I did my utmost to protect and store their data securely using password-protected technology (i.e., an encrypted DCU Google Drive) with all recordings being permanently deleted from password protected recording devices. The intended benefits for the children were improved learning experiences resulting from their teachers’ engagement in PL.

Technical Support

I provided technical support (i.e. making, sharing and deleting A/AV recordings) to participants at the introductory PLCM. Participants in both PLCs used school devices (i.e. iPads and a Chrome Book). School e-mail addresses were used for uploading recordings. Mobile telephone numbers were shared to facilitate the setting up of two separate WhatsApp groups in which I provided reminders of dates for PLC and PRM meetings. In this next section I outline the steps I took to analyse the data.

Data Analysis

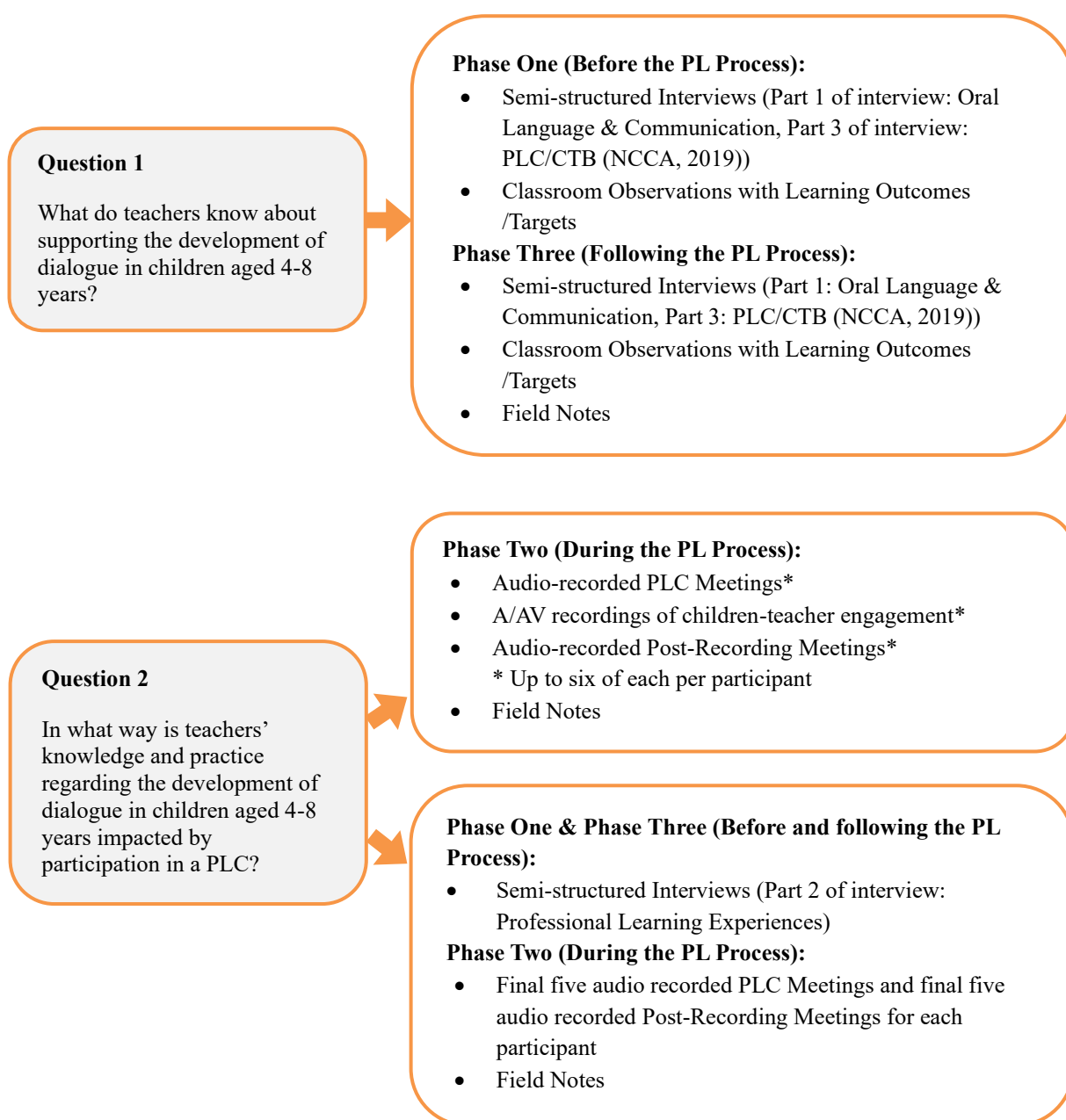
Data analysis allows for the organisation and interpretation of information (Cohen et al, 2018). As “interpretative-descriptive research” (Maykut & Morehouse, 1994, p. 123), it requires “rigorous thinking, along with the sufficient presentation of evidence and careful consideration of alternative interpretations” (Yin, 2003, p. 110). Adopting Waring and Wainright’s (2008) position that technology can become a barrier to interpretation during analysis of data, I chose to manually analyse the data.

A preliminary analysis of my first meetings with participants proved significant in that it influenced study proceedings, and in particular planning for PLCMs. Like Aguiler and Krasny (2011) in their examination of communities of practice, I reviewed and reflected on existing data before the next data collection event, demonstrating how analysis begins once data collection begins. This reflection facilitated a divergence in the focus of

the two PLCs (Table 5). As issues arose in each PLC they became the focus of the discussion for that PLC. To answer my two research questions, to develop rich description (Cohen et al., 2018), and to expose ‘deep truths’ (Pugh, 2013), I sourced the data from all three phases of the study. Studies focusing on human experiences, observable through social interactions, reflect the use of both inductive and deductive analysis (Grbich, 2007). In Figure 7 below I outline the data analysis process organising the data sources according to the research questions they addressed.

Figure 7

Data Sources for Each Question



Once data collection was completed all data sources were tagged using a common labelling system (Maykut & Morehouse, 1994). For example, *SA T1 V1* indicated *School A, Teacher One, Video One*. I replaced these tags with pseudonyms at the reporting stage. Table 6 presents the labels used to identify sources within Chapters Five, Six and Seven. Where a quotation was taken directly from a transcript I identified its source using the participant's pseudonym, the data source and the number of the event.

Table 6

Identification Labels for Data Sources used at the Reporting Stage

Label Example	Data Source
I1/ I2	Interview One (before the PL process)/ Interview Two (following the PL process)
O1/ O2	Observation One (before the PL process)/ Observation Two (following the PL process)
PLCA1	Professional Learning Community A: First Meeting
PRM2	Post-recording Meeting: Second Meeting
A/AV3	Audio/Audio-visual Recording: Third Recording

To answer my first research question, I adopted an inductive thematic analysis (ITA) approach (Braun & Clarke, 2006). I analysed all nine participants' semi-structured interviews (i.e. Part 1 and Part 3) from before and following the PL process. My analysis of all nine participants' classroom observations from before and following the PL process allowed me to triangulate my findings (Robson, 2015) as I compared participants' reports of their practices (i.e. espoused theories) with their theories in use (Brown et al., 2021). The process is described below.

To answer my second research question I adopted two approaches. Firstly, to identify the CK and PCK participants gained, I carried out deductive thematic analysis (DTA) (Kalpokas & Hecker, 2023) on all of my data gathered in *Phase Two*. I applied as my themes, ten practices identified in the literature as supportive of classroom dialogue. I created a trajectory (Edwards, 2017; Jocius et al., 2023) for each participant, once again triangulating what participants reported with what I observed in their A/AV recordings (Appendix O).

Secondly, to examine the PL process and its impact on participants in general, I utilised template analysis (TA) (King & Brooks, 2017). An offshoot of deductive analysis, TA allowed me to apply *a priori* codes to the data set which had been drawn from the literature as elements of effective PL, and deeper analysis followed. The data gathered from Part 2 of the semi-structured interview (before and following the PL process) when combined with data from the final five PLCMs and PRMs provided evidence of development as the PL process moved through its six cycles.

In order to identify evidence of reflection I applied Nelson et al.'s (2012) terms *improving* and *proving* to the explanations provided by participants, for why children engaged the way they did. For example, where a participant identified a child's difficulty with engaging in terms of the choice of book I labelled it *proving*; the participant had not considered her own practices to be a cause for limited engagement. Where a participant reflected on and critiqued their own practice I labelled the explanation *improving* (Nelson et al., 2012).

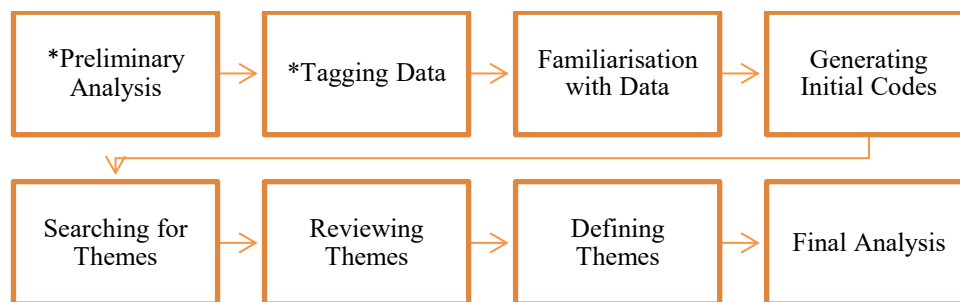
My findings with regard to participants' knowledge of supporting the development of dialogue are presented in Chapter Five. In Chapter Six I present my findings in terms of participants' PL experiences.

Inductive Thematic Analysis

Inductive thematic analysis (ITA) (Braun & Clarke, 2006) provides a flexible tool that supports the identification of "patterns within and *across* data in relation to participants' lived experiences, views and perspectives, and behaviour and practices" (Clarke & Braun, 2017, p. 297). My ITA of interviews, observations including participants' identified learning outcomes/targets and my field notes (Maykut & Morehouse, 1994), provided me with insights into participants' knowledge of what constituted dialogue and their role in developing it. The steps taken are provided in Figure 8.

Figure 8

Inductive Thematic Analysis Process (adapted from Braun & Clarke, 2006)



*Initial stages added by me and described earlier.

Familiarisation with Data. As outlined earlier, preliminary analysis began at my first meeting with prospective participants. At the same time I began data tagging. ITA began with reading and rereading transcripts. I highlighted in turquoise all references in the transcripts to OL&C. Comments relating to PL were highlighted in green (Appendix T). Quotations by participants, that I believed might contribute to the findings were highlighted in yellow. This provided me with a starting point in a process that initially felt daunting.

Mindful of how reducing data to single phrases can risk losing rich understandings (Aguilar & Krasny, 2011), I unitized the data by ‘chunking’ participants’ engagements (Maykut & Morehouse, 1994) in an examination of ‘topical episodes’ (Boyd et al., 2019, p. 28) or a series of related turns. This was in accordance with the questions I asked in the interviews. In the case of *Phase Three* interviews the ‘chunks’ often related back to conversations had in *Phase One* and meetings in *Phase Two*. In response to Question Two the ‘chunks’ sometimes involved more than one participant and occurred over several turns (Appendix T).

I further familiarised myself with the data by constructing three-column tables as shown in the extract in Table 7 below. *Column One* featured ‘chunks’ of data and *Column Two* entitled *Preliminary Notes* included ‘memos’ (Cohen et al., 2018) or my questions and thoughts on the process. *Column Three* was reserved for coding as described below.

Generating Initial Codes. Coding provides opportunities for quantifying behaviours and identifying possible correlations between types of classroom talk and positive learning outcomes (Mercer, 2010). In a manner that reflects discourse analysis, dialogic episodes can be examined along with the frequency with which particular

utterances occur (Nystrand et al., 2003). However, there are potential limitations with this type of coding (Nystrand et al., 2003) as ‘hard boundaries’ are created which can minimize the complexities involved in communication (Stivers, 2015). Examining individual utterances can limit interpretations where turn-taking does not follow a simple question-response pattern. Contradictions emerged between what participants in this study said and what they did (Schraw & Olafson, 2002), and there were inconsistencies with what they said on different occasions. Also, context was important for the class groups and the PLCs (Nystrand et al., 2003; Stivers, 2015). It appeared important therefore, to broaden my analysis beyond individual utterances and to consider how ideas were developed (Anderson & Holloway, 2018) through what Gee describes as a “dance with words, deeds, and things” (2015, p. 303). In Table 7 Laura, in her second interview, reflects on her role.

Table 7

An Extract featuring Recorded Codes and Themes

Participant	Preliminary Notes	Codes; *Themes in Bold
[Describe your role now.] “... the word <i>facilitator</i> probably is still there for me but how that looks is very different now in terms of like kind of being more intuitive now, I think about knowing how to bring it on and develop it or like little ways we learned to bring children out if they're quiet or they're not contributing, or even just to recognise when dialogue is happening or not. I think previously I probably would have thought that maybe dialogue was happening when everyone says something.” (SAT5, I2, p1)	Teacher as facilitator is different. New knowledge in terms of how to develop OL&C. New knowledge about what is dialogue versus talk. Teacher needs to know what to do with non-contributing pupils. Possible epistemological change. Teacher is reflecting. Dialogue requires more than what was previously happening.	BTF/ PC/ COL&C Facilitation is a broad term to describe what teachers do in terms of OL&C. Facilitating OL&C Devel. LTK Teachers need to know how to develop OL&C. Specific practices OL&C as more than talk Teacher role Use verses Development OL&C doesn't develop automatically Misunderstanding COL&C Teachers can misinterpret talk as dialogue. Teachers can misinterpret talk as OL&C development. Teacher reflection required to advance CK

*BTF - Balancing Teaching & Facilitation; COL&C - the Complex Nature of OL&C; LTK - Limited Teacher Knowledge; Use v Dev. - Language Use versus its Development; PC - Pupil Comfort and Confidence

I began by applying codes to participants engagements which I recorded in *Column Three*. Adopting a *constant comparative method* (Maykut & Morehouse, 1994) meant I had to revisit already coded data with new codes once they had been created.

Generating Themes. Once initial codes were created across all eighteen interview transcripts, patterns identified as themes were sought (Robson, 2015). Table 7 provides an example of how some statements were given a number of codes and these codes were then grouped to provide themes which were recorded in bold print in *Column Three*. I collapsed some themes as described in a journal entry made in January 2024; ‘I feel Theme 5 which is pupil comfort and confidence (PC) may be returned to Theme 1 which is limited teacher knowledge (LTK). I’m still not sure about Theme 6’ (Research Journal, 20.01.24). Codes and themes were removed on occasion depending on their significance (Cohen et al., 2018; Siraj-Blatchford & Manni, 2010).

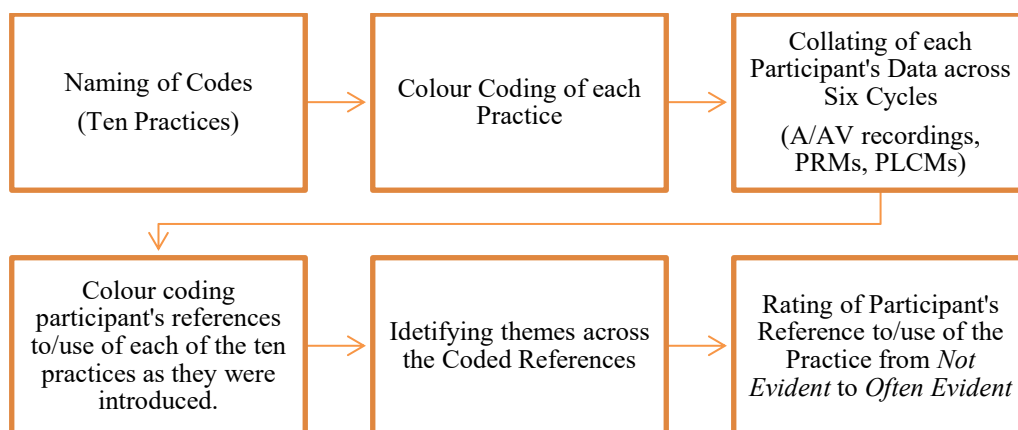
Defining the themes and listing them in codebooks (Braun & Clarke, 2006) required the construction of ‘rules of inclusion’ (Appendix U) (Maykut & Morehouse, 1994). Being able to return to these definitions increased the consistency of my analysis (Mascadri et al., 2021).

Deductive Thematic Analysis

To answer the second research question regarding the impact of PLC membership on participants CK and PCK, I adopted DTA (Kalpokas & Hecker, 2023) as presented in Figure 9.

Figure 9

Deductive Thematic Analysis Process to Create a Trajectory



A Framework for Analysis. Numerous descriptors exist that could potentially produce frameworks for analysing degrees of dialogic engagement practiced by teachers and children including for example, a monologic-dialogic continuum of interaction (Reznitzkaya, 2012). I selected and built an analytic rubric (Edwards, 2017) (Appendix V)

around the ten practices introduced to the participants during *Phase Two* (Bowe & Gore, 2017).

An exploration of extant research identified the ten practices considered central to supporting the development of dialogue in children (Table 13) (Edwards 2017). These were discussed at the PLCMs. I ascribed a different colour to each practice, and they became themes (Appendix V). Similar to a study by Reznitzkaya (2012) I added four descriptors and assigned them values: *not evident: 0; known but not evident: 1; sometimes evident: 2; often evident: 3*. I provide an example of the four descriptors I applied to the theme of *Uptake* in Table 8.

Table 8

Extract from a Rubric to Analyse how Participants were Impacted by the Professional Learning Process

Theme (Practice)	Not Evident: 0	Known but Not Evident: 1	Sometimes Evident: 2	Often Evident: 3
8. Uptake is the act of building on another's comment (Nystrand et al., 2003; Soter et al., 2008). Also described as a connect episode (it can feature listening, elaboration, speculation, correction, and questioning (Boyd et al., 2019).	Not evident in the A/AV recording. No recording available and not noted by the participant at the following PLCM.	Not evident in the A/AV recording but noted by the participant at the PRM or at following PLCM. No A/AV recording available but noted by the participant at the following PLCM.	Evident in the A/AV recording on <u>more than one occasion</u> where it would be possible to do so.	Evident in the A/AV recording on <u>more than half of the occasions</u> where it would be possible to do so.

In the case of each participant I applied the rubric in the following manner:

- Using the different colours, I highlighted participants' references to each practice at the PLCMs and the PRMs and observed whether they adopted the practices in their A/AV recordings. For example, if a participant spoke about *uptake* during a PLCM or a PRM, her comments (from the transcript) were highlighted in green and if she demonstrated *uptake* in her transcribed A/AV recording I noted it and highlighted my notes in green.

- Each participant's colour-coded data was collated onto a table. An extract from Brid's collated data is provided in Figure 10. I also include a description of each column of the trajectory in Table 9.
- Using the values displayed in Table 8, I ascertained the degree to which a participant had adopted the particular practice recording this in a 'comment box' as shown in Figure 10.

Figure 10

An Extract from Brid's Trajectory in Cycle 2

	<p>The benefits of pupils justifying their statements</p> <p>Teachers can overtly impact O&C through their behaviours, Talk Types (Mercer, REF), Disputational and Cumulative Talk, Er</p>	<p>If the pupils engage with <i>tz</i> are they doing so at the expense of developing a story with a peer?</p>	<p>Teachers have different roles with different pupils. The teacher acknowledges communication by pupil who others don't see. Do weaker pupils see dialogue modelled in this context? The role of the MKO for less able pupils – a dilemma – when others only need you to facilitate but end up, deferring to you. The dialogic role of teacher in a play scenario. Are we getting in the way of the story by teaching vocabulary?</p> <p>Adding a justification to the answer</p>	<p>They want teacher to hear them. Teacher unsure if she can extend talk.</p>	
<p>Cycle 2</p> <p>PLC 2</p> <p>05.12.22</p> <p>AV Rec: SAT2 SAT5</p> <p>H/O: Three Talk Types, Connect Episodes, Reasoning words</p>	<p>Identified by Participants:</p> <p>To facilitate O&C in play (SAT2). Trs talk too much (SAT3, SAT5). Pupils talk when teachers stop talking. The impact of how the seating is arranged. Talk moves might help pupils connect and cultivate listening (SAT5). Attending (SAT1, SAT2). Thinking in different ways (SAT4). Grounding (tz) (SAT3). Dialogue is not natural (SAT5). Supporting Dialogue (SAT1). Dialogue is something other than GR lessons (SAT5). Teacher's role in supporting particular pupils (SAT2). Engaging quieter pupils in breakout groups. The impact of recording on pupils' O&C (SAT4).</p> <p>Raised by Researcher:</p>	<p>A/ AV Recording: Small World: Houses and homes. Teacher-Pupil-Teacher generally. Some instances of Teacher – pupil – pupil – teacher. Sufficient wait time as in A/AV 1. Some small pieces of uptake by pupils of each other. Very little evidence of listening. Teacher does not call for engagement across the group. Dialogue with one pupil at a time. Teacher asks closed questions. Teacher follows pupil lead with story lines. Teacher practices uptake. Supporting pupils who appear less confident. Language remains descriptive and about the toys they are handling (LO was recorded as describing).</p>	<p>The participant reported:</p> <p>Pupils generally not engaging with each other and not much dialogue between pupils. Pupils need to be comfortable in order to contribute. In play they are new to each other. Relationships not formed yet. Going in their own direction, thus the need for a shared focus, around a table. Then focus can then be on the language rather than listening all in. Connections are easier when there is a focal point. In role play they played but in small world she had to manage the pupils more. Wanting the pupils to describe but she accepts her aim was very broad. Her engagement was questioning and teachery – testing. She had hoped to ask 'what could we build?'. An open ended question came after she finished recording – 'would they (fish) be able to sleep anywhere else?'. Another pupil commented 'they would die'. Uptake (not the term) and dialogue after the recording. Pupils who gesture rather than vocalise. Pupils who answer yes/ no to closed questions but otherwise won't answer. Using other pupils to ask questions was unsuccessful. Next time (polar bear blubber experiment) she will give some information, step back and observe what they say, their ideas.</p>	<p>At PLC 3 the participant reported:</p> <p>Allowing pupils direct conversation or dialogue – where it goes if they don't decide the topic at the outset (response to motivation LO). Pre-taught vocab gives some pupils an 'in'. Teacher role as sustaining conversation (post video viewing). Demonstration lesson in class (Photograph of Polar Bears and people). The feedback below was provided during the midway interview which happened directly following the demonstration. SAT2 recalls: In play they are too focused on what they want to do. The teacher is learning that having a focus where all can join in will develop dialogue between the group in infants. Having a shared focus in dialogue leads to more authentic dialogue.</p>	<div> <p>Deirdre Walshe</p> <p>1/2. O&C development requires opportunities for pupils to talk more and teachers to talk less (REF). Generally evident.</p> <p>@mention or reply</p> </div> <div> <p>Deirdre Walshe</p> <p>2/2. Wait time (REF) provides pupils with the necessary... Generally evident.</p> <p>@mention or reply</p> </div> <div> <p>Deirdre Walshe</p> <p>3/2. Teacher behaviours can impact O&C dev (REF). Modelling and use of talk moves (REF) can support O&C development. Generally evident. Sometimes evident. Known but not evident. Not evident.</p> <p>18 February 2024, 18:24</p> <p>@mention or reply</p> </div> <div> <p>Deirdre Walshe</p> <p>4/2. Joint attention is necessary for communication (Bruner, 1983; NCCA, 2019; Shiel</p> </div>

Table 9*Description of the Trajectory Table*

Column One	Column Two	Column Three	Column Four	Column Five
<u>The PLCM</u> The targeted practices highlighted in colours similar to those in the rubric. This column was common to all participants' trajectories in a particular PLC.	<u>In the A/AV Recording</u> Colour-coded observations following an examination of a participant's A/AV recording and transcript. Evidence of the practices would indicate a level of understanding (Nystrand et al., 2003).	<u>At the PRM</u> Colour-coded contributions by a participant regarding a practice.	<u>At the PLCM</u> Colour-coded contributions by a participant regarding a practice	<u>Comment Boxes:</u> Attached to each of the ten practices: The box was numbered according to the cycle in which it appeared and defined in terms of the literature. It included four descriptors; <i>Not evident; Known but not evident; Sometimes evident; Often evident.</i> (Appendix 13).

In this way I tracked participants' unique PL journeys across the six cycles as they reflected and acted on each of the ten practices discussed in *Phase Two* (Appendix Z). I ascertained whether and to what degree their comments and actions evolved in a way that reflected the ten practices (Clarke et al., 2015). I developed *learning trajectories* for each participant (Jocius et al., 2023). I present a summary of my findings with regard to each of the ten practices in Chapter Six (Table 13). The limitations of this approach are outlined here.

Limitations of the Trajectory. This was a lengthy and subjective approach to data analysis and while applying a rubric to the process may have increased validity and reliability (Edwards, 2017), attaching values to the four descriptors noted above, may have impacted this. Difficulties emerged as I attempted to interpret participants' understanding from what they said and did. Gaps appeared between their espoused theory and their theory in use (Van Lare & Brazer, 2013). While this meant neither could predict the other, it also highlighted the complex nature of teachers' PL that is not always reflected in their practice.

Template Analysis

To answer the second research question and explore the impact of PLC participation on teachers' PL, I analysed participants' descriptions of their PL experiences

before and following the PL process, drawn from the interviews in *Phases' One* and *Three*. Data was also drawn from the final five PLCMs in each school and the relevant PRMs in *Phase Two*. The settling-in period provided by the first two PLCMs limited the participants' contributions and for this reason, they were not used.

Using template analysis (TA) (King & Brooks, 2017), defined as 'domain summarising', I addressed what Braun and Clarke (2019) label as the 'under-developed' nature of pre-defined codes. These codes, featured in Table 10, reflected extant research. Preliminary coding began with the seven *a priori* codes identified in the literature as contributing to effective PL and presented in Table 10. An eighth code – tools - was added as it was evident from *Phase Three* interviews (Appendix A) that A/AV recordings had played a significant role in the PL process.

Table 10

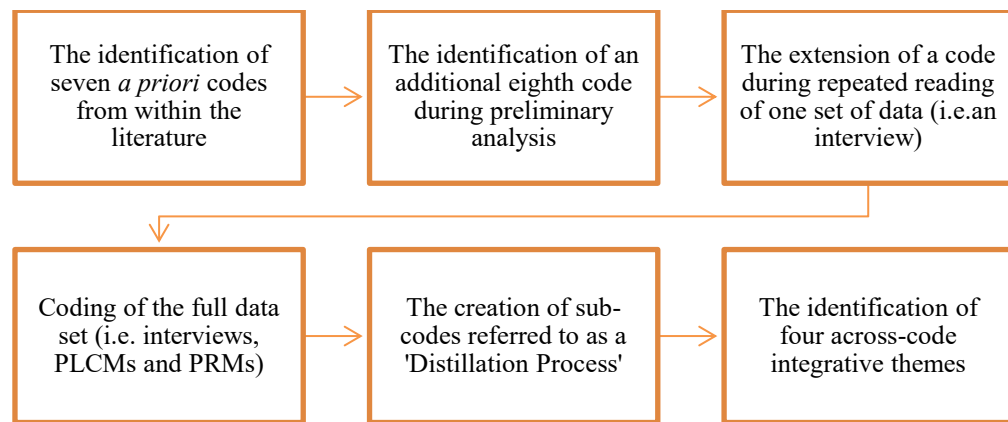
Elements of Effective Professional Learning

- | | |
|---|---|
| 1. Content Embedded in Classroom Practice and National Curriculum | 5. Teacher Agency |
| 2. A collaborative Environment | 6. Facilitation |
| 3. Active Learning Opportunities | 7. Sustained Duration |
| 4. Teacher Reflection | 8. Tools (added following initial analysis) |

Template analysis differs from ITA in so far as information is “organised around a shared topic but not a shared meaning” (Braun & Clarke, 2019, p. 593). It addresses the inflexibility of DTA identified by Kalpokas and Hecker (2023). Despite engaging in TA for pragmatic reasons in that it sped up the initial stages of coding, it required similar levels of reflexivity to ITA and DTA in order to ensure quality interpretation (King & Brooks, 2017). Figure 11 outlines the process undertaken.

Figure 11

Template Analysis to Identify the Effectiveness of a Professional Learning Process
(adapted from King & Brooks, 2017)



Coding. Following repeated reading of one interview transcript from each of the schools (King & Brooks, 2017), I added data pertaining to the PRMs under the code *facilitation*, as participants described how in these meetings, they were ‘coached’ in analysing classroom data which deepened their understanding (Darling-Hammond et al., 2017; Timperley, 2015). In this way, I created an initial and then a final template (King & Brooks, 2017).

The codes became themes, and in adopting a deductive ‘distillation process’ (Finlay, 2021, p. 104) I explored participants’ views, identifying subthemes that were both explicitly stated by participants and implicitly evident within the data. For example, under the theme ‘content’ participants described how their understanding of OL use was extended through reflection on the PLC/CTB (NCCA, 2019), thereby highlighting how teachers can benefit from being supported in interpreting curricula (Appendix X).

In the final phase, I identified, and colour coded six integrative themes (Appendix Y) which were evident across the eight *a priori* codes or themes and their subthemes. Described as ‘undercurrents’ these integrative themes were not explicitly referenced by the participants (King & Brooks, 2017). In moving beyond broad labels like active learning these themes provided a synthesis of how the elements impacted each other. These findings are presented in Chapter Six.

Conclusion

This chapter argued for the use of a qualitative research design and the development of an embedded single case study to investigate (a) what the participants in

this study knew about supporting the development of dialogue in children aged 4-8 years and (b) how their knowledge and practice of developing dialogue was impacted by their participation in a PLC.

I critically examined my research design, my methods of data collection and my approaches to data analysis. Data collection instruments were described in terms of how they were constructed and utilised. A detailed description of the research process was presented in an effort to increase the validity of my findings (Maykut & Morehouse, 1994). I provided reasons for adopting ITA, DTA, and TA in my analysis of the study's data and outlined the steps I took to complete the process. In the next chapter I present my findings in relation to my first research question:

What do teachers know about supporting the development of dialogue in children aged 4-8 years?

Chapter Five

Findings, Analysis and Discussion

Part 1: Teachers' Support of the Development of Dialogue in Young Children Introduction

In this chapter I present participants' experiences of developing oral language, communication (OL&C) and dialogue before and following a professional learning (PL) process and consider how their learning influenced their practice. I begin by providing some contextual information regarding the participants. I then present the three themes I identified following analysis of my study's data. Labelled Sections One to Three, I include under each theme an exploration of subthemes. In Section One I examine how teachers balance transmission and facilitation when developing dialogue. In Section Two I explore the impact of deepening teachers' understanding of dialogue by increasing their knowledge. In Section Three I consider the potential benefits of interpreting OL&C in terms of developing dialogue.

The data from *Phase One* (before the PL process) and *Phase Three* (following the PL process) (Figure 7) provided the data corpus (Braun & Clarke, 2006) for this chapter as outlined in Chapter Four. It featured the contributions of all nine participants in both schools (i.e. Professional Learning Community A (PLCA) and Professional Learning Community B (PLCB)). Analysis of the data revealed participants' unique and shared perceptions regarding the development of children's dialogue before and following the PL process (Appendix AA). These perceptions, organised as three themes, allowed me to answer my first research question:

What do teachers know about supporting the development of dialogue in children aged 4-8 years?

Contextual Information

This study's participants' teaching experience ranged from less than one year to almost 40 years. They reported no PL in the area of OL&C development aside from a one-day in-person presentation delivered to teachers in their schools by Oide, formerly the Professional Development Service for Teachers (PDST) - a Department of Education (DE) support service for the provision of PL to Irish teachers), to support the implementation of the *oral language and communication strand* of the Primary Language

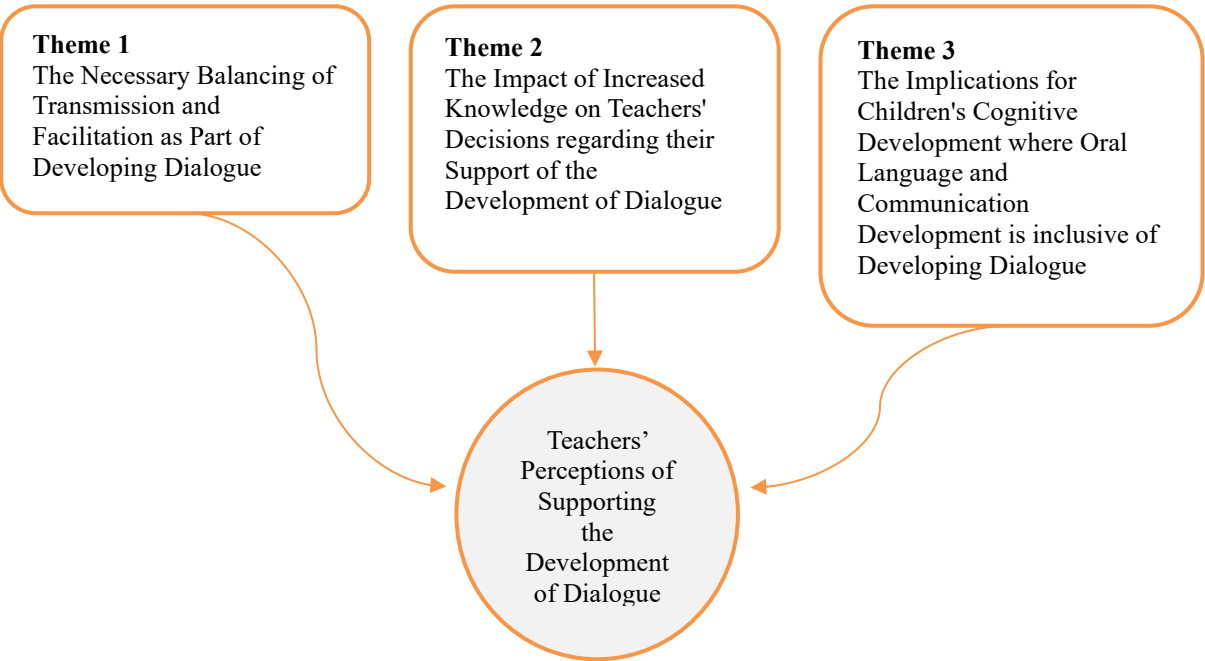
Curriculum/Curaclam Teanga na Bunscoile (PLC/CTB) (NCCA, 2019). This situation is mirrored in teachers’ PL in the UK (All-Party Parliamentary Group (APPG), 2020; Vrikki et al., 2019). Two participants had completed post-graduate studies in areas related to language.

Teachers’ Perceptions of Supporting the Development of Dialogue

Data collected during *Phases’ One* and *Three* resulted in the identification of three themes identified in Figure 12 and presented in three sections. In exploring each of these themes I begin by outlining participants’ perceptions before and following the PL process. I then consider the issues raised under each of the themes and discuss these further under subthemes.

Figure 12

Teachers’ Perceptions of Supporting the Development of Dialogue



Section One

Theme 1: The Necessary Balancing of Transmission and Facilitation as Part of Developing Dialogue

Implicit in a search to identify what teachers know about OL&C and dialogue is an exploration of how they perceive their role. According to Halliday, teachers as more knowledgeable others (MKOs) operate ‘intuitively’ to develop children’s engagements and ultimately their “learning how to mean” (1993, p. 93). If however, according to Tomasello,

language is a ‘social action’ to achieve ‘social ends’ (2008, p. 243), then it would appear that rather than relying on intuition, teachers need to know their intentions when they engage their children orally.

The participants differentiated between facilitation and teaching, interpreting teaching as teachers providing information. Teaching is an umbrella term that incorporates a number of roles “from recitation to reasoning” (Alexander, 2015, p. 482) including transmission and facilitation (Wells, 2007). For this reason, I describe references to teachers “communicating what is required to be known” as transmission (Paatsch et al., 2019, p. 82).

Before the Professional Learning Process

In *Phase One* participants termed themselves *models, facilitators, managers, followers, and listeners* suggesting a continuum. In transmitting they sought to extend children’s vocabularies, similar to “having a toddler and you’re feeding the language” (Eimear, I1) and “giving them specific phrases” (Bríd, I1). Helen “supply[ied] the children with language that they can use” (I1). Niamh was ‘constantly modelling’: “I’ll say - can you open this please - you know and then they would repeat it” (I1). Some participants differentiated support by giving additional time to answer, by speaking slowly and by providing pictures for labelling. Laura and others provided instruction in the pragmatics of language including how to show attending (Mercer, 2008).

Facilitation was suggested in comments by Laura, Ellen and Rachel who reported talking less so their children would talk more. She recalled “drawing children out” (I1) when they told a story. Niamh described her facilitation: “...when they’re eating, I have made it a rule not to turn anything on, any screen on, because I want them to talk to their friends and just talk with each other” (I1).

Five participants across both schools spoke about children leading. Helen described children adding to each other’s contributions. She reported:

One of them said ‘*oh why are they moving*’ or whatever it might be, and another child jumped in and said ‘*oh the door is open at the top of the school. Maybe the wind blew it down*’ and then I think I might have asked a question, and the child was able to extend that a little bit more (Helen, I1).

Participants’ comments reflected widely-promoted teacher behaviours in terms of supporting OL&C development (Ferris, 2013; French, 2014; Jay et al, 2017; Paatsch et al., 2019).

Phase One Classroom Observations. *Phase One* observations confirmed that teachers modelled elements of OL&C (Table 11). Teacher questioning - both open and closed - featured as central to whole-class discussion allowing participants to test children's comprehension of illustrations and texts.

While participants had opportunities to follow their children's lead, only Ellen's and Laura's showed evidence of this as they occasionally practiced *uptake* – the practice of building on children's ideas (Nystrand et al., 2003). Participants evidently controlled the space in which OL occurred by correcting, extending, and providing examples of how language could be used (Mehan & Cazden, 2015).

Following the Professional Learning Process

Phase Three data suggested participants experienced some difficulty combining or balancing their roles as transmitters and facilitators. Their understanding of both roles was evident from *Phase One*: As transmitters of information, they “communicate[d] what is known or what is required to be known” (Paatsch et al., 2019, p. 82). As facilitators, they promoted OL engagement across the class (Soter et al., 2008).

The PL process featured participants exploring the concept of transferring control to their children as part of facilitation (Soter et al., 2008; Sun et al., 2015). Mentioned by some in *Phase One*, and widely reported in *Phase Three*, it was described as ‘a struggle’ (Helen, I2) for participants while also presenting as a struggle for some children (Mehan & Cazden, 2015).

By the end of the PL process all participants accepted that transmitting and having children practice prescribed *talk moves* (Maine & Hofmann; 2016; Michaels et al., 2008; Phillips-Galloway & McClain, 2020) was fundamental to them developing dialogue. However, in a manner that reflects Wood's (1998) *contingent instruction*, knowing when to stop transmitting and begin facilitating had now become central to participants' role. It was no longer enough to know what to say or do (Laura, I2). Rachel spoke about ‘shutting up’ in the first interview: “...we obviously have to be careful that it's not the teacher doing all the talk as well, you know, and sometimes I think I am” (Rachel, I1). In *Phase Three* Rachel spoke about needing to know when to ‘direct’ and when not to say or do anything (Michaels & O'Connor, 2015). She described as ‘a shift’ (I2), now not being afraid of the pauses. Where previously she interpreted her role in terms of transmission, she now considered the importance of ‘not teaching’ directly (Greeno, 2015).

Helen described it as sometimes teaching (transmitting) and sometimes providing the space for children to use what was taught, a sensitivity associated with child-teacher engagement within Vygotsky's zone of proximal development (ZPD). In a similar vein, but in a special education teacher context, Laura provided children with "stepping stones for them to talk about things they might already know" (I2). In this way, Laura gave her children information, while also ensuring they had the necessary space to use what they had learned, to express themselves. Yvonne portrayed her increased awareness in terms of a lesson featuring *The Hungry Caterpillar* by Eric Carle (1969). She would always have provided the necessary vocabulary but was now keen to include opportunities for discussion (Snow, 2017). Niamh who now listened to and built on what children provided (Boyd et al., 2019), considered whether previously she may have 'given' children too much, thus reducing what they contributed to the lesson. These actions reflected a balance or what Helen termed a 'tension' between being prescriptive and allowing children to express themselves.

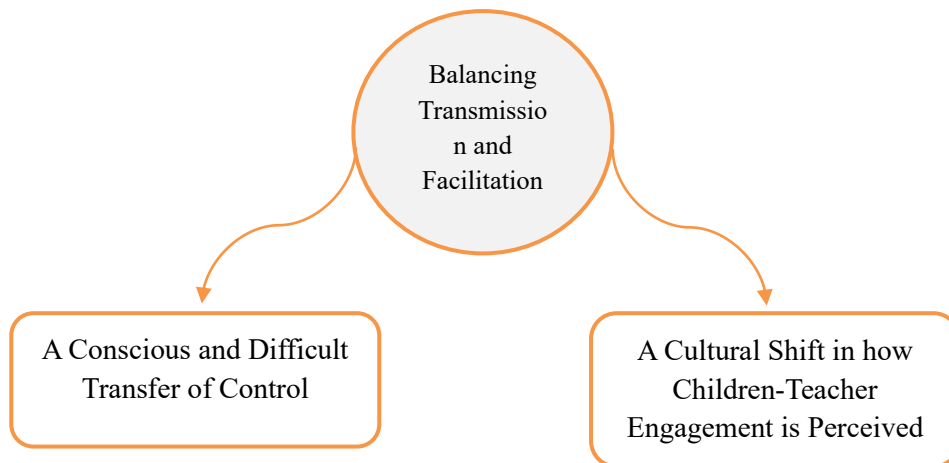
It was unclear from her *Phase Three* interview how Eimear balanced transmission with facilitation. She positioned younger children as 'robots' incapable of independent thinking: "If you tell them the Earth is flat, they'll believe the earth is flat..." (I2). At the same time she encouraged them to tell their story suggesting authenticity. Eimear's *Phase Three* observation featured her children expressing their opinions regarding diet. While planning that they would critique the fairness of bedtimes and request changes in letters to their parents, my field notes suggested facilitation as the children changed the focus and explored why parents had rules around diet. Some dialogue emerged when Eimear challenged children in her *uptake*. However, her control was apparent in the limited time available for children to build on each other's comments (Mascadri et al., 2021). She posed authentic questions but by not asking for justifications the children were not required to reflect (Topping & Trickey, 2014). The children used some of the talk moves suggested during the PL process. However, facilitating a deeper conversation would have required more time and opportunities to speculate. Eimear's intention to have the children write their letters appeared to take precedence over the development of the dialogue (Alexander, 2018), signalling what Halliday (1993) describes as a possible 'regression' where young children simplify their complex thoughts in order to write them down.

Following data analysis two subthemes emerged in relation to teachers balancing transmission and facilitation: Balancing transmission and facilitation is conscious and

difficult for teachers, and it signals a cultural change. These are presented in Figure 13 and discussed below.

Figure 13

Balancing Transmission and Facilitation



A Conscious and Difficult Transfer of Control

Participants' transfer of control appeared to be a conscious act that some, regardless of the class they taught, found difficult. It required a move away from transmission which relied on a deeper understanding of the purpose of engagement. These two subthemes are discussed here.

A Move Away from Transmission. In *Phase Three* participants regularly used the verb 'allow' when describing how they moved away from transmission and facilitated their children's engagement. Niamh described moving away from activities such as labelling, where the teacher determined what was worthy of attention. Niamh's colleague spoke about 'giving' children the role of leading conversations. The potential of phrases to encourage children to develop their ideas, such as *tell me more*, was referenced. Yvonne and Ann attributed their children's contributions to being permitted to 'go off on a tangent' while Helen felt the engagement 'flowed' when its origins were in what the children were 'bringing to the table' (I2).

However, despite these positive results, some participants struggled with sharing control. The silences or pauses contributed to an 'awkwardness' (Laura, I2). Yvonne needed to trust that her children could lead (Mascadri et al., 2021; Michaels & O'Connor, 2015). As in Wilkinson et al.'s (2017) study described in Chapter Two, participants' epistemologies may not have been altered but the dialogic engagement, that had resulted

from their adoption of particular talk moves, caused some at least to reconsider the possibilities.

Participants' decisions around supporting dialogue were impacted by what Theobald and Kultti (2012) describe as the pressure of attending to and prioritising curricular outcomes over process. Yvonne described how "... some days it is hard if you have a tight agenda... 'We'll talk about that later' and you might not think to talk about it later and it's like aagh, I should have just done it then" (I2). Helen, while committed to developing dialogue, was not completely comfortable with the thought that by relinquishing control over a lesson, she might not achieve her learning outcomes. Her adopted stance of not knowing during classroom discussions supported her as evidenced in her *Phase Three* observation where she shared the story *The Royal Dinner* by Brenda Parkes (1990):

Child 1:	Princesses don't go to school.
Helen:	What do they do?
Child 1:	They are home-schooled.
Helen:	What's that?
Child 2:	It's a school and you stay at home.
Helen:	Who's the teacher?
Child 1:	Your mam and your dad.
Helen:	What do you think about that?
Child 3:	I disagree. They are at a royal school where only royal people go.

(Source: Helen, O2)

Helen planned for a whole-class discussion following her reading of the text. The story had culminated in the creation of a pizza with a supporting illustration that featured a queen, a king, a princess and a prince. She had anticipated a conversation about food. Instead, the children explored home-schooling and went on to make connections with television programmes and personal experiences where children who were sick were taught at home. There was further evidence of disagreement with justification provided. Helen was satisfied that her actions were reflected in the DE's recent guidelines - *Preparation for Teaching and Learning* - that required teachers to provide "opportunities for children to take responsibility for and ownership of their learning" (2021, p. 11). However, she reported needing the reassurance of professional learning community (PLC) colleagues who were facilitating their children in a similar way. Eimear reported "... it's our job to

teach them the curriculum” (I2). She needed to quantify what was learned and record results for future teachers and the inspectorate. However, she felt it was impossible to provide evidence of OL development and was therefore not inclined to record how the children engaged orally. This belief was held by teachers in a British report on oracy who felt the lack of ‘proof’ of advancement meant they were not inclined to focus on it (APPG, 2020). Despite engagement in the PL process, Eimear’s focus remained on reading and writing.

Despite their participation in the PL process, their increased CK and their witnessing developments in children’s dialogue, participants like Helen continued to experience difficulty transferring control: “It’s not what I want them to say. So, it’s hard to let that happen but I think it’s something that comes with time (pause) and with confidence in your own teaching” (Helen, I2). The difficulties with transferring control described by the participants in this study are mirrored in the findings of Scraw and Olafson (2002) who describe how teachers who purport to hold a contextualist’s view to knowledge, because of inexperience, adopt transmission-type behaviours. This would call into question Halliday’s (1993) view, noted earlier, that teachers’ intuition as MKOs prepares them for facilitation. It may be the case that while Bruner’s (1983) mothers intuitively passed the responsibility to their children, teachers may not, thereby inhibiting children from changing their environment (Fleer, 2018).

Different types of knowledge undoubtedly require different types of teaching with dialogic engagement not always being appropriate (Alexander, 2018; Reznitskaya, 2012). Object-level learning in Mathematics, for example, can be achieved independently where children apply existing knowledge to new contexts (Sfard, 2015). Creating dialogic engagements where children experience control begins with transmission and the establishment of ground rules (Mercer, 2008; Michaels & O’Connor, 2015; Siraj-Blatchford & Manni, 2008). *Talk moves* (Maine & Hofmann, 2016; Michaels & O’Connor, 2015) are transmitted, ultimately becoming part of dialogic behaviours suggesting a gradual release of control from teacher to child (Gillies, 2015; Mercer, 2008; Soter et al., 2008; Wells, 2007) – an approach acknowledged in the Irish context by Oide (2020).

Dialogic engagement itself features skills to be practiced as well as ways of engaging which in turn can support learning (Alexander, 2018). Sfard (2015) argues that it is not what we gain from the engagement but rather the act of engaging that brings about the learning. Teachers, therefore, play a necessary if sometimes subtle role, following a child’s lead with questioning that results in children extending and clarifying (Alexander,

2018, Reznitskaya, 2012; Soter et al., 2008), reflecting Shvarts and Bakker's (2019) 'adaptive support' and Goldenberg's (1992) 'weaving' of instruction and dialogue.

Research calls for the 'conscious' and 'deliberate' development of OL&C (Shiel et al., 2012, p. 30) and describes children being able to sustain and extend their engagement during discussions. This suggests teachers must balance transmission with facilitation, interpreted by participants in this study as sharing control. This functioning 'in the middle' (Winsler, 2003, p. 256) with teachers being required to decide who is in control, when to transmit and when to facilitate (Michaels & O'Connor, 2015) within lessons, may become too difficult, thereby negatively impacting their support of dialogic engagement.

A Deeper Understanding of the Purpose of Engagement. Having a deeper understanding of the purpose of engagement may support teachers in moving between transmission and facilitation (Greeno, 2015; Walsh & Hodge, 2016) thereby impacting the scaffolding they provide.

Mercer (2008) describes education as "a temporal, discursive, dialogic process" (p. 38). The participants in my study who allowed children more time to contribute, and sought their opinions rather than prioritising recall, repositioned knowledge as something that was co-created, and that relied on children-teacher dialogue (Mercer, 2008; Wilkinson et al., 2017). While referred to by two participants in *Phase One* as 'patience', the positive impact of waiting longer for children's responses to questions (Gjems, 2010), was highlighted by five participants in *Phase Three* (Table 13). Providing increased wait time was sometimes linked with space and participants having less of an agenda which resulted in a flexibility that allowed children to "go off on a tangent" (Bríd) or in a "different direction" (Rachel). Niamh and Helen associated these tangents with letting go of control (Mehan & Cazden, 2015).

Despite believing in *Phase One* that she should "let these things happen" (I1), Helen felt she did not have the time for this type of engagement. In *Phase Three* she continued to speak about curricular pressures but her increased confidence in her teaching allowed her to let conversations go "left, right and centre" (Helen, I2). Yvonne reported similar increases in flexibility: "I don't hold what's in my head as the answer - like freer I suppose is the word - and let them kind of go with it" (Yvonne, I2). By participants giving their children more time to answer a question they had empowered them.

Holding a contextualist's or an evaluativist's (Wilkinson et al., 2017; Zdybel, 2020) view of knowledge alters the identities of both child and teacher (Michaels & O'Connor,

2015). Where the aim of OL&C development is higher-order thinking and problem solving (NCCA, 2005), a critical-analytic stance featuring shared control between children and their teacher can evolve (Soter et al., 2008). However, it is difficult (Wilkinson et al., 2017). Without the teacher it can be impossible for children to disagree with each other (Webb et al., 2015) and yet the teacher's presence can reduce the chance of this occurring.

Where teachers do not believe themselves to possess 'the ownership of talk' (Alexander, 2018, p. 563), Mehan and Cazden's (2015) 'feedback' as part of initiate-respond-feedback (IRF) may be delayed thereby becoming something other than evaluative. It provides evidence of the teacher's listening to the child's contribution and includes possibilities for divergence (Mehan & Cazden, 2015). This suggests that while the ten practices presented in Chapter Six (Table 13) may bring about periods of children-teacher dialogue, if not understood as a philosophy that underpins all teaching and learning, they could be consigned to specific curricular experiences.

The possibility of movement between transmission and facilitation in Western education systems founded on control is uncertain. Paradise et al.'s (2014) study outlined in Chapter Two, considered how culturally teachers may be positioned to control the talk space in classrooms where time is limited. At one level, wishing to maintain efficiency and maximise output, they may have difficulty trusting children to engage. At a deeper level they may be unable to distance themselves from feelings of responsibility that lead to control.

Whether the participants in this study had deepened their understanding of children-teacher engagement sufficiently to alter their view of their role as the source of information or the person in control, is unclear. The data revealed that for some the purpose of engagement became the development of inquiry skills fundamental to productive discussions (Snow, 2017; Soter et al., 2008). However, instruction must co-exist with dialogue (Alexander, 2018; Sfard, 2015). The simultaneous development of different knowledge types (Michaels et al., 2008) may be where the difficulty arose for participants.

Teachers require courage in order to share power with their children (Cregan, 2012; Mascadri et al., 2021; Zook-Howell et al., 2020). Whether the changes evident in participants' practices (Table 13) were underpinned by epistemological changes (Barnes et al., 2020; Vrikki et al., 2019; Zdybel, 2020), is queried by Wilkinson et al. (2017) who argues that pedagogical change is also possible without changes to beliefs about knowledge. I did not assess participants' theory of knowledge in advance of the PL

process. I correctly anticipated discrepancies between participants' reported beliefs and their actions (Topping & Ferguson, 2005; Van Lare & Brazer, 2013) and considered Wilkinson et al.'s (2017) proposal that teachers can experience difficulty explaining their epistemological position. I chose instead, to observe classroom behaviours. Consequently, while confirming whether or not epistemological changes occurred was not possible, participants' reported reasons as to why they altered their practices, suggested some experienced changes in their beliefs as their awareness of what was happening increased. A greater understanding of the significance of their power and control within dialogic engagement may have further enhanced their understanding of the need for transmission and facilitation to co-exist.

A Cultural Shift in how Children-Teacher Engagement is Perceived

The balancing of transmission and facilitation suggested a cultural shift which changed the direction of engagement. Participants were no longer the source of the information by practicing authentic engagement through posing authentic questions, listening to their children's contributions and encouraging speculation.

The Direction of Engagement. In *Phase One* participants described how children liked to talk to and please their teachers: "... when somebody says something then you'll have ten hands go up in the air, and they all want to tell you a bit more about those - the ego is so big especially in junior infants" (Helen, I1). Two other participants, including Bríd, suggested such behaviours prevented classroom dialogue by restricting discussion to child-teacher engagements. Bríd described how her children engaged with the person leading the conversation, preventing them from listening to and building on the contributions of their peers. Her observation demonstrates how classroom culture influences dialogic engagement (French, 2014).

Research suggests dialogue between children can be more difficult to achieve than that reached between a child and an adult (Patterson, 2018; Theobald & Klutti, 2012). In attempting to over-ride children's tendencies to defer to and seek affirmation from their teachers (Grieshaber, 2010; Siraj-Blatchford & Manni, 2010), some participants adopted talk moves (Michaels & O'Connor, 2015) that encouraged children to listen to and respond to peers. In *Phase Three* Laura reported seeing the benefit of these moves as she identified a cultural change in her special education teaching group. She observed changes in children she believed were conditioned to expect their teacher to respond if they failed to do so:

Children are so used to you coming in. Like they have to get used to it as well. But then over time they are better now at filling the space - not filling the space but they feel more enabled I think to come in themselves with something. Like even today when they were doing that like *Mmm I wonder this or maybe that* ... nobody has to get it right. Once that's been established in the group, I think there is less silence (Laura, I2).

Laura's observations seemed in line with Helen's view that children may need to be taught that there is an expectation they will engage dialogically.

Credited with having 'an especially large effect' on dialogue (Nystrand et al., 2003, p. 136), participants in *Phase One* noted the absence of children questioning. They believed children's questions could lead discussion, but this did not happen naturally. In *Phase Three* participants repeated their view that their children were unable to lead by questioning. Some believed the teacher's presence was an inhibitor. According to three participants, children's inexperience may have resulted in their reluctance to take the lead when required to express their own opinions and extend their ideas. However, there was evidence to the contrary. The 'wondering' introduced during the PL process, as a means of supporting participants in their authentic questioning, had begun to impact the children's capacity to question which in turn contributed to dialogic episodes. By legitimising *wondering* in classroom dialogue, teachers support a contextualist's or an evaluativist's view (Wilkinson et al., 2017) that recognises knowledge as something that is created through reasoning. Opinions are valued over recall, allowing children with varying abilities to contribute and potentially lead the discussion. Argumentation is encouraged.

While participants had not intentionally instructed their children on how to construct authentic questions the children themselves had begun to question, using the *I wonder* phrase. Questioning is typical of contexts and cultures that promote more philosophical responses to engagement (Mascadri et al., 2021; Topping & Trickey, 2014). An observation of Helen's practice indicated this:

Child 1:	I wonder why they have dresses on them?
Helen:	Who can give a maybe ... maybe it's because –
<i>Later in the engagement:</i>	
Child 1:	Why is that guy in the castle?
Helen:	Mmm –
Child 2:	Maybe because he makes the food and serves it to them?
(Source: Helen, O2)	

A child in Laura's special education teaching group when discussing whether a giraffe would make a good pet, asked "What would happen if the giraffe had a baby?" Following some other comments, Laura returned to this question to which another child replied:

Child 1: How could it have a baby if there was only one?

Laura: Could you explain?

Child 1: Well, if there's only one?

Child 2: You don't need a husband.

(Source: Laura, O2).

During Yvonne's observed lesson where she began reading a story about a caterpillar, children speculated:

Child 1: I wonder could the caterpillar go in the ocean?

Child 2: Maybe he couldn't because we weren't born in an egg (unclear) we're different.

(Source: Yvonne, O2).

In *Phase Three* all participants reported adopting the Socratic phrase *I wonder* (Topping & Trickey, 2014) explored in professional learning community meeting (PLCM)³. It was 'practical' (Bríd, I2) and 'limitless' (Ellen, I2). These excerpts highlight the participants' effective use of speculation which, according to Niamh and Yvonne, may have resulted in their children feeling 'freer' to pose questions and suggest responses even when they were unsure. Children could feel free to offer their opinions when they went down "that lovely new path of *I wonder*" (Ellen, I2). The excerpts also illustrate how *uptake* and talk moves, referenced in Chapter Six, scaffolded children's questioning and their efforts to engage dialogically.

Research confirms that this study's age cohort have ideas that they can express when the conditions are right (D. Kennedy, 2022; Mascadri et al., 2021; Siraj-Blatchford & Manni, 2010). At home children adopt an information-seeking stance while at school they become information providers (Mehan & Cazden, 2015; Wells, 2007). Attempts to comply with school rules can leave children wary of presenting their views (Alexander, 2018) and questioning adults (Siraj-Blatchford & Manni, 2010). The infrequency of children questioning at school (Wells, 2007) may also reflect the reduced attention of adults when compared with one-to-one home environments where it can more readily occur (Carr & Claxton, 2002; Siraj-Blatchford & Manni, 2010). Alternatively, children may misinterpret

questioning as a display of ignorance (Topping & Trickey, 2014) or where challenging, perhaps a sign of disrespect. Perhaps teachers have limited experiences in facilitating and therefore, developing contexts that actively seek children's questions. The children in this study may previously have been accustomed to information at school being transmitted. Being facilitated in developing their own justified opinions, through speculation and dialogue, positioned their engagement differently potentially empowering them (Alexander, 2018; APPG, 2020).

Listening as part of Authentic Engagement. Listening is fundamental to dialogic engagement (Alexander, 2018; D. Kennedy, 2022). Research shows teachers listen to children's individual responses as part of testing but appear to have difficulty hearing them during group engagements (Mascadri et al., 2021) and are habituated into responding in a manner that evaluates rather than extends (Alexander, 2018).

The participants considered themselves listeners from the outset. However, the fact that *uptake* (Nystrand et al., 2003) in dialogue appeared new to most suggests they may not have acted on their children's contributions (Einarsdottir, 2010; Hayes & Matusov, 2005; Nind, 2003). If so, it was unlikely that other children were required to extend or contest a comment presented by their peers – practices that would develop joint attention and result in shared responses to problems posed (D. Kennedy, 2022; Michaels & O'Connor, 2015; Patterson, 2018; Theobald & Kultti, 2012).

The introduction of *uptake* in *Phase Two* influenced participants' intentions to explore children's ideas. Those who were previously unaware of how controlling children-teacher engagements could impede their development, reported greater success when they purposefully listened to and built on their children's contributions allowing them to lead the dialogue (Hayes & Matusov, 2005).

The initiate-response-evaluate (IRE) model of engagement (Bond & Wasik 2009; Mehan & Cazden, 2015; Theobald & Kultti, 2012) evident during this study, featured evaluative listening rather than listening as part of *uptake* (Greeno, 2015; Siraj-Blatchford & Manni, 2010). This is problematic as it consolidates the view for children that teachers favour accurate responses to test questions over the co-construction of knowledge (Greeno, 2015; Mascadri et al., 2021). If the aim however, is 'genuine' engagement (Maine & Hofmann, 2016) then seeking alternative perspectives may represent an epistemological shift for some teachers. Zook-Howell et al. argue that "inaccuracies in discussions undermine[s] rigour" (2020, p.182). It is suggested accepting all interpretations of a text

may obstruct the development of a deeper conceptual understanding (Maine & Hofmann, 2016; Reznitskaya, 2012; Zook-Howell et al., 2020). However, in this study it appeared that teachers of younger children needed to accept inaccurate information in the early stages of supporting children-teacher dialogue as evidenced in Yvonne’s comment that what was ‘in her head’ may have differed from her children’s views (I2).

Niamh’s classroom discussions presented below (Observations 1 and 2), illustrate how listening to extend rather than to evaluate required her to relinquish control and accept such inaccuracies; the fact that bugs may or may not have mouths was not important, but that she facilitated her children in developing their capacity to engage dialogically (French, 2014).

Observation 1: Before the PL Process (A poster of Humpty Dumpty)	Observation 2: Following the PL Process (A video of butterfly eggs hatching on a leaf)
<p>Niamh: What do you think Humpty Dumpty is? (Chorus: ‘egg’)</p> <p>Niamh: He is an egg. Do you think he looks happy? (child shakes her head)</p> <p>Niamh: What could he be? (Pause) He could be sad.</p> <p>Niamh: What do you think Humpty Dumpty is saying?</p> <p>Child 1: Oh no!</p> <p>Child 2: He could be saying ‘hold on to my hand’.</p> <p>Child 1: Hold on!</p> <p>Niamh: Where is this guy going?</p> <p>Child 3: To the castle.</p> <p>Niamh: He is going (Pause) to the castle. (Source: Niamh, O1)</p>	<p>Niamh: I wonder are they digging?</p> <p>Child 1: How can they dig if they don’t have arms?</p> <p>Child 2: They can dig with their heads.</p> <p>Niamh: X has made a good point. (Pause) I wonder.</p> <p>Child 3: Bugs don’t have mouths.</p> <p>Niamh: Do bugs not have mouths?</p> <p>Child 2: They don’t have mouths cos they don’t say anything.</p> <p>Niamh: Do we only have mouths for talking? (Source: Niamh, O2)</p>

Once children become used to being heard (Alexander, 2018; Ferris, 2013), it would seem appropriate to consider their capacity to substantiate opinions with evidence (D. Kennedy, 2022; Michaels et al., 2008). The teacher’s role moves from modelling talk moves that children can adopt, to supporting rigorous inquiry around bigger questions resulting in “the most reasonable answer” (Wilkinson et al., 2017, p. 67).

In *Phase One* observations children were only required to listen to their teacher. By *Phase Three* there was evidence of children listening to each other in most classrooms marking a change in behaviours as shown above and in Table 11.

Table 11 *Summary of Classroom Observations Before and Following the Professional Learning Process*

Before the Professional Learning Process						Following the Professional Learning Process				
	Lead	Questioning	Uptake	Joint Attention	Language Use	Lead	Questioning	Uptake	Joint Attention	Language Use
Helen	Teacher	Closed & Open	None	Child-Teacher	Labelling; Recalling; Reflecting without justification	Shared	Closed & Open	Throughout	Child-Child Child-Teacher	Dialogue; Speculating; Extending; Reflecting with justification.
Niamh	Teacher	Closed	None	Child-Teacher	Vocabulary development; Labelling; Describing	Children	Open	Throughout	Child-Teacher	Speculating; Extending; Describing; Reflecting with justification; Questioning
Brid	Teacher	Closed	None	Child-Teacher	Labelling; Rhyming and Syllabication; Predicting without justification	Teacher	Closed & Open	Some	Child-Child Child-Teacher	Dialogue; Speculation; Questioning; Predicting without justification
Yvonne	Teacher	Closed & Open	Some	Child-Teacher	Vocabulary development; Labelling; Describing; Recalling; Predicting without justification	Children	Open	Throughout	Child-Teacher	Describing; Extending; Speculating; Reflecting with justification
Rachel	Teacher	Closed	None	Child-Teacher	Labelling; Categorising; Recalling.	Teacher	Closed & Open	Some	Child-Child Child-Teacher	Recalling; Describing.
Ann	Teacher	Closed	None	Child-Teacher	Describing; Recalling	Teacher	Closed & Open	Some	Child-Teacher	Describing; Speculating
Ellen	Sometimes Shared	Closed & Open	Some	Child-Teacher	Labelling; Describing; Recalling; Predicting without justification.	Children	Open	Throughout	Child-Child Child-Teacher	Dialogue; Describing; Questioning; Extending; Speculating with justification
Eimear	Teacher	Closed & Open	None	Child-Teacher	Labelling; Describing; Recalling.	Teacher	Closed & Open	Some	Child-Teacher	Describing; Recalling; Extending
Laura	Sometimes Shared	Closed & Open	Some	Child-Child Child-Teacher	Dialogue; Recalling; Reflection; Questioning.	Children	Open	Throughout	Child-Child Child-Teacher	Dialogue; Speculating; Reflection; Questioning

All participants had adopted one or more talk moves explored during the PLCMs. Children in seven of the nine class groups also used the moves purposefully. These led to greater *uptake* by teachers and children, thus extending the children-teacher dialogue. While instances of children being in dialogue with each other remained infrequent (Table 11), Niamh’s lesson on butterflies above provides evidence that dialogue could be supported.

Similarly children had moved beyond recalling information and describing (Table 11) with justification providing opportunity for participants to challenge their children’s ideas. In three classrooms where the practice had become established, children had begun to question each other.

Questioning as part of Authentic Engagement. In *Phase One* participants reported prioritising authentic questioning above test questioning and described how questioning prompted discussion based on shared book reading (SBR) (Dobinson & Dockrell, 2021; French & Lake, 2022). Four participants also alluded to possible difficulties, describing how they ‘tried’ to pose them: “... we're trying to scaffold and we're trying to let them come to their own understanding and reasoning” (Helen, I1). In the context of timetabled play, participants posed test questions asking children to label objects and describe events., which they believed supported reluctant contributors. During *Phase One* observations four of the nine participants relied solely on test questions in their OL&C engagements (Table 11).

In *Phase Two* some participants reported experiencing difficulty constructing authentic questions when in dialogue with children. Teachers who feel pressurised by time sometimes provide clues to the response they are seeking (Siraj-Blatchford & Manni, 2010), thus allowing transmission to override facilitation. Ann, when she did not receive the answer she had anticipated to an open-ended question regarding a greenhouse, followed with what was effectively a test question, suggesting she had ‘a rubric of possibilities’ (Hayes & Matusov, 2005, p. 343) from which the children could choose.

Ann:	Would the birds be able to get into my greenhouse?
Chorus:	No
Ann:	Because what’s on it?
Chorus:	A door
(Source: Ann, A/AV4)	

This suggests a lack of understanding as to the purpose of facilitation as a move away from transmission and towards authentic engagement.

Helen had not linked the preponderance of closed questions in her A/AV recordings with her concerns that her children engaged directly with her at the expense of dialogic engagement with peers. Recognising this issue, I modelled the use of authentic questioning in her classroom and began exploring the practice in greater depth in both PLCs. The Socratic nature of open-ended questioning (Topping & Trickey, 2014) framed a workshop that focused on their construction and ‘wondering’.

Participants’ use of *wondering* varied. Yvonne believed it led to justification unlike her earlier practices where she asked children to find things in a picture. This was “just the vocab” (I2) whereas now her class was enabled to “give more” as they began to use phrases like “maybe this is or because that” (Yvonne, I2). Eimear who used the wondering phrase when preparing a text for reading, expected the children to check their predictions for accuracy once they had read. It would appear that in this instance the emphasis was on getting the prediction right rather than being able to substantiate the speculation.

The popularity of the phrase ‘*I wonder*’ and the speed with which it was adopted by participants in this study may have been due to its capacity to address participants’ difficulty with posing authentic questions noted above. ‘*I wonder*’ was also easily adopted by some children with its positive impact on dialogue becoming quickly visible (Dobinson & Dockrell, 2021; Michaels & O’Connor, 2015). In PLCM3 (PLCA) I modelled the phrase using the text *Rosie’s Walk* by Pat Hutchins. Participants modelled it in the A/AV recordings that followed and by A/AV5 Helen’s Junior Infant Class were using the term to examine the cover of Jill Murphy’s book *Whatever Next!*

Child 1:	I wonder why there is a name tag there?	
Helen:	There’s a name tag there?	
Child 2:	What does it say?	
Child 3:	I – send – to – the – moon (said slowly)	
Helen:	Child 1 thinks there is a name here... Child 4 you disagree.	
Child 4:	I don’t disagree. I think it says Roger.	
Helen:	Roger?...	
<i>(Child 3 identifies finger spaces on the tag and the teacher confirms this and helps her to read the word ‘fragile’).</i>		
Helen:	Oooh!	
Child 2:	I wonder why there is fire coming out of the box.	(Source: Helen, A/AV5)

PLCB discussed ‘*wondering*’ in their 5th PLCM. Yvonne modelled it throughout A/AV5 and A/AV6, and in my observation of her class in *Phase Three* where the children were discussing caterpillars, one child used the term while children regularly responded with ‘maybe’.

Yvonne:	I wonder can a butterfly swim? (The child’s response is unclear). What would happen I wonder?
Child 1:	They’d drown. They can’t swim under water (unclear) drink (unclear).
Child 2:	You’d have to give them a (unclear).
Yvonne:	What could you use?
Child 2:	A leaf... maybe a leaf. I know butterflies like cold... But swimming pools are warmer than real water (unclear)
Child 3:	He’d get stuck in the sand, the caterpillar.
Yvonne:	Is the caterpillar at the beach?
Child 4:	Caterpillars like to worm away.
Child 2:	I wonder could the caterpillar go in the ocean?
Yvonne:	Maybe they can swim.
(Source: Yvonne, O2)	

Speculation and phrases such as *I wonder* can be problematic where teachers fail to carefully scaffold the ensuing dialogue (Maine & Hofmann, 2016). The potential to develop a critical-analytical stance, identified by Soter et al. (2008) as a product of this type of engagement, may not be reached. Children may, therefore, require direction on how to discuss (Ferris, 2013; Topping & Trickey, 2014). Rereading a text can provide new insights. However, providing opportunities for children to engage dialogically beyond text-based evidence (Maine & Hofmann, 2016; Nystrand et al., 2003) may also contribute to shifts in control from teacher to child.

Phase Three classroom observations indicated that participants who previously asked predominantly test questions had embarked on authentic questioning (Table 11). *Phase Three* interviews suggested participants believed authentic questioning positioned children differently (Nystrand et al., 2003; Soter et al., 2003). Their non-judgemental nature according to some, encouraged children to effectively steer the conversation. Ann no longer asked, “what’s in the picture?” (I2). According to Bríd “You might want the end answer, but it might not go there” (I2). For some, single authentic questions stemmed multiple turns by children, giving rise to more child than teacher talk. Niamh commented that particular questioning styles may previously have left some children feeling afraid to

share opinions. *Wondering* encouraged children to say what they really thought rather than what they felt their teacher was seeking: “I hope I am anyway, asking more questions where there are loads of right answers, and every child has a chance to kind of give an answer rather than just the one answer and that's it, move on” (I2).

Uptake (Nystrand et al., 2003) supported participants in facilitating authentic engagement. However, grey areas exist in *uptake* also. For example, over-facilitation describes what teachers do when they take alternate turns in children-teacher engagements (Zook-Howell, 2020) as was the case for Ann in her conversation with her children about a garden centre:

Ann:	What is that? I wonder what are we going to be opening in our Aistear next week?
Child 1:	I know Teacher. A flower place.
Ann:	A flower place?
Child 2:	A flower garden.
Ann:	A flower garden?
Child 3:	Or a flower shop.
Ann:	A flower shop?

(Source: Ann, A/AV3).

However, later when talking about a garden fork Ann posed a challenging question that provided the potential for a more authentic engagement:

Child 1:	This one's a grown-up one.
Ann:	It's a grown-up one is it?
Child 1:	Yeah
Ann:	Why do you think it's a grown-up one?
Child 1:	Because it's sharp?

(Source: Ann, A/AV3).

Ann became aware from reading her A/AV recording transcripts of her tendency to repeat what her children said. She recognised how controlling the engagement in this way could become an obstacle for children attempting to build on each other's comments (Zook-Howell et al., 2020). *Uptake*, if interpreted as revoicing, however, may support children in the early stages of dialogic engagement (Ferris, 2013). Only teachers, with knowledge of their children and how to develop dialogue, can decide if their talk is facilitating or inhibiting dialogue.

Therefore, what appears fundamental is knowledge of the purpose of moving between transmission and facilitation and the conscious use of whatever moves are required to sustain dialogue (Phillips Galloway & McClain, 2020). Helen's insights regarding the often asked question - 'What do you think about that?' - highlights the significance of CK when seeking change. Following the PL process she understood the significance of seeking justification as part of achieving accountable talk (Maine & Hofmann, 2016) and now felt a response that did not include one was inadequate.

Children's 'deviant response[s]' (Mathews, 1980, as cited in D. Kennedy, 2022) were explored by some who, when able to hear and appreciate such contributions, recognised them as occasions for authentic engagement. However, responding with questions on-the-spot was reportedly impeded by participants attempting to include everyone and maintain the group's interest. By not reacting quickly Ellen felt the opportunity to respond in this way could be missed. In PRM4, she regretted not probing further Child 1's contribution to a discussion about a photograph of children standing in a rubbish dump and the absence of a doctor:

Child 1:	Maybe there's glass and they might step on it, and it might go in their foot.
Ellen:	So what would they do if something like that happened?
Child 2:	They wouldn't be able to get like a doctor, so they'd just do their best.
Child 1:	But what if there was no doctor?
Child 3:	Yeah they'd probably do their best.
(Source: Ellen, A/AV4)	

Participants' responses that challenged or 'perplex[ed]' (Topping & Trickey, 2014) their children, positively affected their dialogic engagements possibly because they represented authenticity. Rachel described how her inclination to 'dive straight in' and not listen caused her to miss opportunities to challenge her children's responses. Yvonne had a more positive experience when a colleague visited her classroom holding two kettles. She described how she challenged a child who asked why a person had two kettles. Her response 'I wonder why she has two kettles?' was followed by a lengthy discussion.

This knowledge-related improvisation, referred to by Grieshaber (2010) as a 'critical moment', with its requirement to combine CK, PCK and knowledge about the children, in advancing children's thinking, was difficult for participants (Stein et al., 2015). Being the 'devil's advocate' (Ellen, I2), or having to respond in a manner that challenged children to extend and justify their position required participants to listen carefully and

interject in a timely way (Stein et al., 2015). In the case of Mathematics, it may be possible to plan the directions in which the dialogue may travel and compose potential challenges to advance the shared response (Stein et al., 2015). In speculative text-led and image-led dialogue, favoured by participants in this study, planning may be more difficult with greater opportunities for interpretation (Theobald & Kultti, 2012). Fundamental to the engagement, however, seems to be an interest in the child's opinions in line with participatory and rights-based pedagogies (Alexander, 2018; APPG, 2020).

The language teachers use can become an 'invitation' for children by communicating to them what is deemed important (Gjems, 2010, p. 143) with their responses deeming children's contributions acceptable or otherwise (Greeno, 2015). Evaluation indicates a single 'correct' response, as evidenced in the IRE pattern referenced earlier, reducing children's engagement as they become anxious that they do not have the required knowledge (Mehan & Cazden, 2015; Mascadri et al., 2021; Siraj-Blatchford & Manni, 2010; Wells, 2007). In *Phase One* some participants spoke regretfully about their children's single word utterances in response to teacher questioning. However, following changes in practice including speculation, children began extending their responses, reflecting Greeno's (2015) view that children's expectations of a communication event are influenced by teachers' practices.

Speculation indicates to children a desire for authentic engagement, the purpose being to negotiate and gather different perspectives (Michaels & O'Connor, 2015; Nystrand et al., 2003). Located within a philosophical tradition (D. Kennedy, 2022; Soter et al., 2010; Topping & Trickey, 2014), it removed what participants termed their children's fear of being incorrect and made possible the development of a positive learner identity (Greeno, 2015).

By the end of *Phase Two*, Niamh was seeking lots of responses to the one question hoping to illustrate that a single correct answer might not exist (Siraj-Blatchford & Manni, 2010). Niamh and Bríd believed this approach gave the children freedom to respond according to how they felt rather than how they believed their teacher wished them to respond. In support of this position, Helen, Bríd and Yvonne reminded their children that teachers did not always know the answer.

In *Phase Three* it was generally agreed that speculation as part of dialogue (Topping & Trickey, 2014), resulted in responses that could not be judged correct or incorrect. It left children free to disagree with anyone including the teacher, as long as they

could offer a justification (Ellen, I2) (D. Kennedy, 2022). In order to speculate, children moved beyond concrete experiences and into a more abstract realm that required higher-order thinking, reflection and creativity – a position at odds Tough’s view (1985) of the significance of experience in relation to talk, and Piagetian practices that Kennedy (2022) argues may be at the centre of current educational provision. Children between one and two years imitate usage of the term ‘I wonder’ and while not speculating, they are beginning the move into a ‘non-experiential’ use of language (Halliday, 1993, p. 105). ‘*Wondering*’ which is intrinsic to philosophising is something that children constantly do as they experiment with their world (D. Kennedy, 2022).

In this study, abstract concepts such as rights and responsibilities featured with the focus on opinions that could be justified. Rachel’s group’s explorations were consistent with Mehan and Cazden’s (2015) ‘big scientific ideas’:

Rachel: Do you all think that burrows fill up with water or do you think there is some way they could avoid that? (sharp inhale generally) Child 6 what do you think
 Child 6: I think the water will go inside the soil
 Child 5: Em I think that when the mud is on the floor the mud sucks up the water because it’s like a sponge but it’s not a sponge
 Rachel: Ok very good. What do you think Child 4?
 Child 4: I think I agree with Child 5 (Pause)
 Child 1: I think that they find a way to plug the hole, so the water doesn’t come in
 Rachel: So what - how might they do that? Can you think of a way they might
 Child 3: They could build it in a big grass. They could build their burrow in a grassland cos grass is grown from dirt and water and dirt absorbs the water so that means the water would get less and less so everyone would be. There’d only be a small bit of water.
 (Source: Rachel, A/AV3).

Rachel’s move away from test questions indicated to her children that there were different ways of thinking. Her role was, in her response, to recognise and use curiosity to advance dialogue and ultimately cognition.

Theme 1: Summary

Prior to this study participants described themselves as facilitators of OL development while the practices of most reflected a transmission model of engagement (Table 11). The PL process concretised participants’ facilitation of dialogue with the introduction of ten practices (Table 13) (Zook-Howell et al., 2020) including authentic questioning and *uptake* (Nystrand et al., 2003). However, despite these practices and the

benefits observed in terms of moving between facilitation and transmission, some participants continued to find balancing the two roles difficult. This difficulty may have represented a cultural change as outlined above. Teachers were required to listen and challenge their children, in a way that positioned the children as sources rather than recipients of information. Speculation, which had not been in use in the participants' classrooms prior to the PL process (Alexander, 2018; Siraj-Blatchford & Manni, 2010), with its multiple answers to questions, for example, supported these dialogic engagements.

Section Two

Theme 2: The Impact of Increased Teacher Knowledge on Teachers' Decisions regarding their Support of the Development of Dialogue

Components of OL&C, often included in measures of teachers' CK are general language use, narrative, vocabulary, syntax, morphology and sound production or phonology (Cregan, 2019; Dobinson & Dockrell, 2021; Piasta et al., 2022). While some of these, such as vocabulary and syntax, arose during PL discussions, they were not the study's focus. The communicative purpose of language (Nind, 2003) described as "the driving force of language learning" (Shiel et al., 2012, p. 174), became the focus, as participants began to consider language use, and in particular listening, extending, reasoning, speculating, challenging and critical thinking (Michaels & O'Connor, 2012), or as described by Alexander (2018) in his reference to dialogic classrooms - students listening to and thinking with others as they deepen their reasoning by justifying, challenging each other, agreeing and disagreeing .

I begin by outlining participants' perceptions of the development of OL&C and dialogue in *Phase One* and *Phase Three* (prior to and following the PL process) and then consider whether and how having a deeper understanding of OL&C and dialogue impacted the decisions they made.

Before the Professional Learning Process

When asked during *Phase One* interviews, to describe events or memorable lessons which featured OL&C and/or dialogue, participants identified formal and informal opportunities for talk (Shiel et al., 2012; Theobald & Kultti, 2012), as well as lessons that focused on for example, building vocabulary, listening to others, understanding others, and asking questions. Participants valued 'chats' that happened during activities planned by them but independent of them. They highlighted lunchtimes and playtime where specific language such as requesting a play partner was modelled. They described the importance

of listening to their children and encouraged questioning. Eimear waited at the classroom door in the mornings to talk to children who were too shy to speak publicly. Six participants noted how children expressed themselves through talk and offered ideas. Five participants described following their children's lead with three providing 'space' by stepping back. Having children reflect on their own drawings was cited by one participant as an aid to children explaining abstract concepts such as friendship. All stimuli were validated in terms of their capacity to provide new vocabulary.

Participants referenced children reporting what happened at events, describing objects and drawings, and retelling play scenarios. Two commented on children being able to use newly acquired vocabulary in the correct context. Seven described OL&C as necessary for developing understanding. They typically instigated the engagements while the children responded. Niamh attempted to extend her children's OL&C:

In *Aistear* play, I take pictures and then we show the pictures on the whiteboard, and I would say 'tell me what you did in *Aistear* play' and 'describe what's happening in the picture'. 'Tower' – 'house'. And then I would say 'give me more, tell me in a full sentence, say what you did' (Niamh, I1).

The *Aistear* framework (NCCA, 2024), originally designed to support early childhood education from preschool into primary school, has since been limited to preschool settings. Its relevance to this study is examined later. In contrast two participants held the view that OL&C might feature children listening and responding to what other children were saying, thus, moving away from children simply telling (D. Kennedy, 2022; Sun et al., 2015).

Oral language and communication development featured as part of whole-class lessons as well as in smaller groups, which in line with research were judged preferable by most participants when attempting to increase confidence in younger and quieter children (Dobinson & Dockrell, 2021). Five participants chose pair work, Show-and-Tell and the Think-Pair-Share approach which again appeared in line with recommendations in the literature (Alexander, 2018; Cregan, 2019; Kirkland & Patterson, 2005).

My suggesting dialogue as a means of developing OL&C resulted in all participants describing children creating meaning with another person (Cregan, 2019). Some used the term 'active listeners'.

Phase One Classroom Observations

In preparation for *Phase One* classroom observations I asked participants to plan opportunities for children to develop OL&C. My focus was on identifying language

learning opportunities and interactions (Appendix H) (Dockrell, et al., 2012). A range of whole-class, group and pair-work tasks were deployed to support oral engagement (Webb et al., 2015) (Table 11). Most of the learning outcomes identified in the *Oral Language and Communication* strand of the PLC/CTB (NCCA, 2019) featured in participants' lesson plans. However, language learning opportunities, which utilised texts, games and visuals, were typically used to develop vocabulary.

In most instances participants selected pictures for children to describe. Where opinions were sought, children were not required to justify them, thus, limiting the shared development of ideas referred to as sustained shared thinking (Siraj-Blatchford & Manni, 2010). The development of joint attention with other children, described as a feature of collaborative group work, was not evident (D. Kennedy, 2022; Maine & Hofmann, 2016; Zook-Howell et al., 2020). For example, in describing a photograph one child stated, '*there is a baby in the washing machine*'. The participant asked, '*why is it strange to put a baby in a washing machine?*' to which the child responded: '*it's dangerous*'. The engagement then ceased indicating missed opportunities in terms of modelling accountable talk, encouraging engagement across the classroom, the development of ideas, and the justification of positions (Michaels & O'Connor et al., 2015).

Participants, similar to those who featured in Walsh & Hodge's (2016) review of SBR interventions, led in tasks where children predicted orally as part of reading comprehension, reflecting the initiate-reply-evaluate (IRE) model of engagement (Alexander, 2018; Greeno, 2015; Maine & Hofmann, 2016; Mascadri et al., 2021; Mehan & Cazden, 2015; Michaels & O'Connor, 2015). They missed opportunities provided by SBR to establish joint attention (Ford et al., 2020; French, 2014). Questioning featured 'controlling moves' (Siraj-Blatchford & Manni (2008, p. 9) with participants commending children for their responses and moving the focus for engagement to another topic (Greeno, 2015). Eimear opened her lesson with authentic questioning (Nystrand et al., 2003) around a spell the children might cast and without building on their ideas, quickly moved to 'test questions' as she focused on phonics.

Over-facilitation, referred to earlier, appeared as participants took every second turn in children-teacher engagements (Zook-Howell et al., 2010):

Helen:	What would you bring if you were going on a bear hunt?
Child 1:	Strawberries.
Helen:	Why would you put in some strawberries?

Child 2: Crisps.
 Helen: What else?
 Child 3: Lots of things.
 Helen: What else would you bring?
 Child 2: A torch.
 Helen: What else would you bring?
 Child 4: A sword.
 Helen: Why?
 Child 4: If it's mean.
 Helen: What else would you bring?
 Child 1: Some bear ham, mac and cheese.
 (Source: Helen, O1).

Disparities appeared between how participants believed OL&C developed, and their actual classroom engagements (Brown et al., 2021). When asked to describe children-teacher interactions, Eimear outlined the support she provided a child with EAL:

I say 'what else have you got there. Chicken sandwich – oh nice, yum' and I'm doing the actions (gesture) and he says 'chicken'. And we had been reading George's Marvelous Medicine and there's a piece where George is going chick, chick, chick, take the medicine. And he's saying 'chick, chick, chick' (Eimear, I1).

By interpreting gestures, scaffolding connections and modelling language, Eimear followed the child's lead. However, she described a recent OL&C lesson where she presented a vowel digraph which the children repeated, a phonics skill associated with developing literacy (Cregan, 2019; Piasta et al., 2022). Phonics was also the focus of the lesson which she selected to be observed, with the children responding orally to test questions. While test questions may have been necessary at stages, the lack of authentic questioning limited the opportunity for children to take the lead. There was little evidence of Eimear listening to and building on children's answers. Her interpretation of OL within the context of a class lesson appeared at odds with her authentic engagement with individual children suggesting she may have been unsure about how to support OL and develop dialogue.

These *Phase One* observations reflected the expressed uncertainty of participants who in interviews spoke about 'hopefully' waiting for children to question (Bríd), extending their learning (Helen), acquiring vocabulary (Ellen) or expressing themselves (Rachel). Participants were satisfied that children had opportunities to talk but were unsure about what was happening when children talked. This impacted their knowledge of how

OL&C could be advanced. Bríd expressed this uncertainty as she queried why some children were not contributing:

... are they not listening because they aren't able to or are they not listening because they're tired, they're not interested in whatever. There's so many reasons why a child might not be actually listening or responding or able to answer the question. (Bríd, I1).

Laura was similarly uncertain about OL&C development. She later commented '... it was something I hoped I was covering but I was never quite sure that I actually was' (Laura, I2).

Following the Professional Learning Process

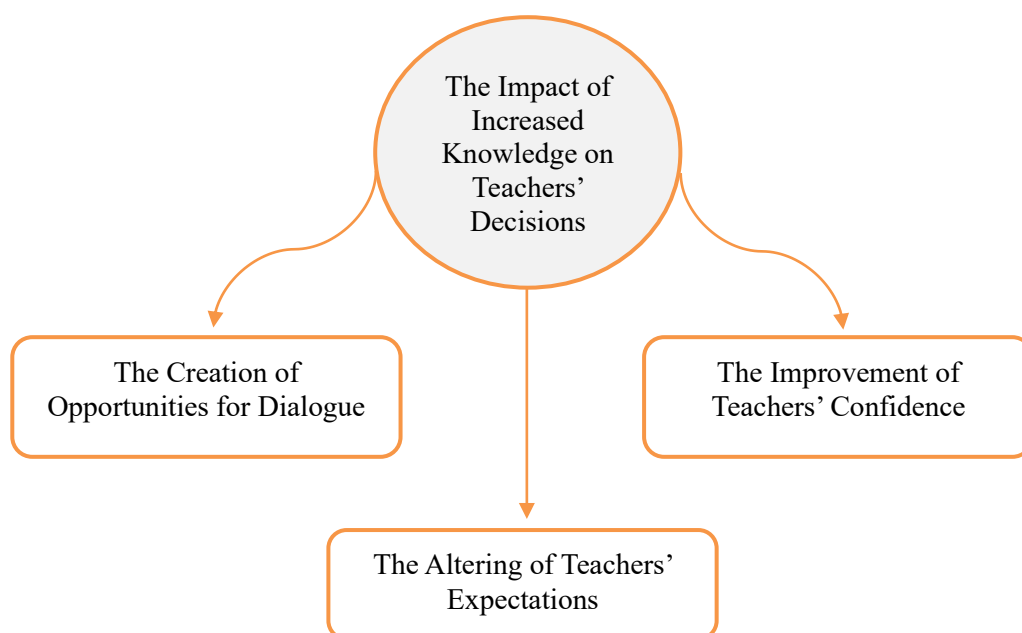
Following the PL process eight participants expressed increased awareness and a deeper understanding of what constituted dialogue. Helen's interpretation of OL&C development had been "a bit too loose" (I2) and along with Ann, recalled her wish at the outset to change her practice. Niamh always believed in the importance of children expressing their opinions. However, following PLC discussions around dialogue, her CK included an additional expectation that her children would be active listeners. Bríd described now using the phrase '*tell me more*' thoughtfully, crediting it with allowing her children to contribute more.

To avoid what could potentially become an evaluation of a 'laundry list of activities' (Little, 2006, p. 3), I accepted that increased CK did not automatically translate into effective classroom practice (Piasta et al., 2022). Eimear, who stated that developing curiosity through questioning was important, remained uncertain as to whether her children in First Class were capable of such engagement. She queried whether decoding text should come before being able to discuss it and referenced her own schooling where students were taught how to critique in Secondary School. Eimear agreed in *Phase Three* that interpreting dialogue as talk might no longer suffice. It was 'one dimensional'. She suggested OL&C might be cultivated through active listening and critical thinking. However, by the end of the PL process she had not modelled these skills.

Analysis of the data revealed, as highlighted in Figure 14, teachers' increased CK and PCK had impacted the decisions they made in terms of the opportunities they created for developing dialogue, the outcomes they expected of their children, and their use of dialogue and the PLC/CTB (NCCA, 2019).

Figure 14

The Impact of Increased Knowledge on Teachers' Decisions around Supporting the Development of Dialogue



The Creation of Opportunities for Dialogue

During and following the PL process participants began discerning between contexts that did and did not support the development of dialogue. Included was their limited influence in play contexts. The study also revealed that teachers may incorrectly interpret play as playful learning in the context of supporting the development of dialogue. These issues are discussed here.

A Discernment between Contexts that Do and Do Not Support the Development of Dialogue. In *Phase One* seven participants agreed that teachers needed to be cognisant of contexts that interested children in order to support OL&C development. They chose terms such as *relatable*, *relevant*, and *meaningful* to describe these contexts. In accordance with the literature, play was widely reported in both schools as a context in which OL&C developed (Bond & Wasik, 2009; Duncan & Tarulli, 2010; Fleer, 2023; French, 2014; Nind, 2003).

Both schools had adopted the *Aistear* framework (NCCA, 2009; 2024) timetabling daily play for the purpose of facilitating play-based learning in the infant classroom. Seven participants described engaging orally with children before, during and after these play periods, referred to locally as *Aistear*. As with the teacher in Hayes and Matusov's (2005)

study, participants provided relevant vocabulary and sentence structures, joined the role play and requested descriptions of what happened following ‘the play’.

In *Phase Two* three participants across both schools who had initially chosen timetabled play as the context for their A/AV recording of children-teacher engagement, changed their position. Play limited them as teachers and their potential impact on OL&C development. Helen reported “... they’re (her children) too engrossed in what they’re doing themselves. They’re using people to scaffold what they want as opposed to you know like it’s not a conversation” (I2). Bríd commented:

I think as well in *Aistear* they’re kind of more egocentric. They are more ‘This is what I’m doing. If I don’t want to talk to her, I don’t have to talk to her. I want to go and play over here with so-n-so or I want to make this. Even though we’re in the same group or at the same activity, I don’t have to talk to you’. And I kind of think they should be allowed to do that (Bríd, I2).

As the data from this study was being analysed the *Aistear* framework was being updated (French & McKenna, 2022), and in primary schools would be replaced by the Primary Curriculum Framework (PCF) (NCCA, 2023). However, the data remained relevant insofar as it demonstrated the impact of teacher knowledge on providing suitable opportunities for developing dialogue. The difficulty with play as a context for developing dialogue is examined further in the next section.

Further evidence of discernment in relation to selecting suitable contexts for OL&C development, came from three participants who had abandoned timetabled play as a suitable context, choosing cross-curricular books and images to support the development of dialogue (French & Lake, 2022) (Appendix L). Following two attempts using images, Bríd settled on shared book reading (SBR): “...it was structured enough that I was able to kind of do the *I wonder* at the start, a bit of speculating and then the connect. I just felt like it was a nice structure, but it still allowed them to kind of talk” (Bríd, I2). Analysis of questioning as part of the PL process deepened Helen’s awareness, leading her to choose books more suited to exploring than recalling information.

Once their awareness increased and they began establishing targets, participants transitioned from simply providing opportunities for talk to developing it. Their intention to have children purposefully use language (Bruner, 1983; Tomasello, 2008) meant they were required to be more conscious of the opportunities they provided. Dialogue, according to Helen, did not ‘just happen’ but required a considered approach (Cregan,

2019). Helen's colleague in Junior Infants described how previously, not knowing what she was looking for in OL&C, had made creating the context more difficult.

Ellen, who worked in special education teaching, used photographs throughout the process believing it provided predictability and security for children who may have been reluctant to contribute. However, she, like the majority of participants, had begun examining whether the materials she selected provided her with opportunities to challenge her children and in turn cause them to think differently.

Selecting their own contexts for developing dialogue was intended to contribute to participants' sense of agency as part of the PL process (Timperley, 2015), and their adaptive competence in developing dialogue capable of withstanding future challenges (McGuinness, 2018). However, their changes to contexts also provided evidence of more conscious decision-making around what participants believed was most conducive to developing dialogue. Participants' evaluation of the effectiveness of the opportunities they provided demonstrated the metacognition of teachers who consciously change contexts and stimuli following analysis of classroom discussions (Kucan, 2007; Topping & Ferguson, 2005). They moved from the 'incidental occurrence' (Kirkland & Patterson, 2005) of OL&C. Contexts that challenged children's thinking through authentic or purposeful engagement were necessary if children were to engage dialogically with their peers (Hayes & Matusov, 2005; Patterson, 2017; Wells, 2007). While show-and-tell, book-based conversations and news-telling may all have resulted in OL&C (Kirkland & Patterson, 2005), participants began to consider the degree to which such experiences provided for dialogic engagement (Wilkinson et al., 2017).

Participants considered the argument that the age group with whom they worked communicated best around familiar themes such as those that originate at home and that reflect the language of home (Nind, 2003). However, their experiences during the study led them to believe that content familiarity had been superseded by the need for stimuli that could challenge children's views.

The widely accepted practice of pair work, observed in five classrooms in *Phase One*, also came under scrutiny (Table 11). Equating children talking in pairs and small groups with greater opportunities for OL&C development is dubious (Alexander, 2018; Chi & Menekse, 2015; Patterson, 2018). Often these contexts are devoid of the challenges presented by MKOs (Alexander, 2018; Chi & Menekse, 2015; Nind, 2003), necessary for *exploratory* talk and dialogic engagement (Mercer, 2008; Patterson, 2018; Wells, 2007). By

Phase *Three* participants reported moving from a general appreciation of the importance of OL&C to a more conscious approach to its development. Rachel's heightened consciousness following PLCMs and discussions around dialogue in particular, caused her to view OL&C with 'slightly different spectacles' (I2). Laura and others drew a clear link between greater teacher understanding of what they were doing and contentment with dialogue as a learning outcome. Now "focused on specifics rather than just generating chat" (I2), Laura described no longer accepting as sufficient, children's capacities to talk independently of others. Instead, she queried children's ability to listen to and build on a peer's contribution.

Creating meaningful opportunities for dialogue is fundamental to its development (Bond & Wasik, 2009; French, 2014; Hayes & Matusov, 2005). While teachers provide occasions for OL&C use, these contexts do not automatically result in children critically engaging with the curriculum. Eimear's desire to have her children 'decompress' by creating contexts where they were comfortable to 'chat' while valid, may not have provided them with opportunities to use talk in an empowering way (Alexander, 2018). Laura suggested teachers may feel "...as long as everyone is saying something, they think that's a box ticked when actually it's not" (I2). The prioritising of reading and writing over OL&C, often evident in teachers' practices (APPG, 2020), was apparent in how Laura described previously needing to follow class discussion with a literacy activity. Rather than viewing OL&C and writing as inter-dependent she believed writing validated the engagement. Following the PL process, she explained:

I would have seen that as not productive enough previously and I would have been like well, we better write something, or we better do an activity or we'd better you know record something or do something on whiteboards or whatever. And just the talking about it wasn't enough in my mind, and maybe that's because I wasn't facilitating it in the right way (Laura, I2).

It might be surmised, therefore, that an increased knowledge of what constitutes the development of dialogue is required in order for teachers to advance from contexts that support OL&C use to ones that develop it.

A Recognition of the Limitations of Play in terms of Influencing Dialogic

Engagement. The issue of play as a context for developing OL&C caused some participants to contest what they felt were commonly held beliefs. Its status as a 'leading activity' (Duncan & Tarulli, 2003), described in Chapter Two, is undisputed in terms of its capacity to support linguistic, physical and social learning (Duncan & Tarulli, 2003; DE, 2022; Gray, 2017; NCCA, 2023). Interpersonal skills including communication are at its

heart (French & Lake, 2022). It can feature more complex language than may be apparent in classroom discussions (Fleer, 2023; Gray, 2017). Readily available objects of reference present opportunities for concretising concepts and vocabulary development (Bond & Wasik, 2009; Duncan & Tarulli, 2009; Fleer, 2023; Hayes & Matusov, 2005). However, play prioritises process over product and is directed by what motivates the child (Duncan & Tarulli, 2003). This may explain the difficulties experienced by this study's participants who attempted to impact their children's dialogue during timetabled play periods.

Participants had agreed that play, and the *Aistear* framework (NCCA, 2009; 2024), provided opportunities for children to orally engage with each other (French, 2014; Pyle & Deluca, 2017). The data suggested however, that once they engaged, the control shifted to them. Their oral interjections were at odds with the essence of play and "the real lessons of play are [were] lost" (Gray, 2017, p. 221). The children's intrinsic motivation was impacted. Their immersion in the experience was overshadowed by participants who, as recommended by Bond and Wasik (2009), required them to talk about what they were doing while playing. This reduced play to something that met the participants' rather than the children's needs.

Bríd initially queried if it was her limited skills as a teacher that reduced the effectiveness of play contexts:

I even remember thinking, no, no, no! *Aistear* is definitely the place because you kind of hear that in teacher training that oral language is all in *Aistear*. It is but I think it's almost impossible to go into an *Aistear* session and go 'I'm going to look out for you know, X Y and Z's oral language'. You just don't know what's going to happen (laughter). You can, but I just don't know if *I'm* at that point now where I can manage that (Bríd, I2).

Bríd resolved the issue by introducing SBR as a context that was sufficiently structured to enable speculation and connection. Her children's egocentric behaviours, evident in play, could be managed and she could scaffold or "do" (Bríd, I2) the wondering.

Contexts most suited to productive dialogic engagement are those that accommodate *uptake* and open-ended questioning (Soter et al., 2008). It would be difficult to imagine how teachers might support the development of dialogic skills in a context that is self-chosen and self-directed by children (Gray, 2017), and where the value for teachers may be in observing and listening to the play rather than 'interrupting' it (French, 2014, p. 45). In fact, a teacher arriving with language targets may mark the end of the creativity necessary for abstract thought (Gray, 2017).

It is argued that children whose OL&C is impacted by their home environment benefit from teacher-facilitated OL&C development in a play context (French & Lake, 2022). If this is the case, then perhaps the skill of knowing when to engage and when to step back, explored in Theme 1, may be of even greater significance if children are to be afforded the benefits of self-directed play while at the same time being supported in developing dialogue. An appropriate response might be the explicit development of OL&C skills based on observations of but following play.

It may also be the case, as it was for this study's participants, that the *Aistear* framework (NCCA, 2009) was misinterpreted as the facilitation of a daily timetabled play period during which teachers observed and engaged with their class (NCCA, 2023). A more accurate interpretation might have positioned the framework (NCCA, 2009) as the means by which children's learning is made playful over the course of the school day (Primary Curriculum Framework (PCF), NCCA, 2023). The issue, therefore, may not be whether play is a suitable context for developing OL but how teachers interpret playful learning as something defined by a timetable.

While periods of free play may be best preserved as free from teachers' interruptions, a playful approach to learning can positively impact OL&C and conceptual understanding. Following their reading of *The Scarecrows Wedding* by Julia Donaldson and the building of scarecrows, Laura asked her group to judge if Reginald Rake should be permitted to come inside (Appendix AA). She used a similar approach to explore animal extinction, facilitating scientific inquiry through playful engagement in story and drama (Fleer, 2023). Careful to have the children justify their reasons for animals becoming endangered using previously learned facts, Laura scaffolded the children's discussion beginning with the facts, thereby providing Rogoff's (1990) 'guided participation'. She then sought possible solutions, and the children collaboratively constructed a single response (Fleer, 2023). Such playful contexts while clearly motivating in terms of dialogic engagement permit teachers to scaffold children's learning by modelling behaviours that support the development of dialogue (Duncan & Tarulli, 2003).

With analysis of the data revealing that the PL process caused participants to discern between opportunities for talk and contexts that facilitated dialogic engagement (Appendix AA), it may not, therefore, have been solely the ten practices summarised in Chapter Six that influenced participants' choice of context. It may have been a deeper understanding of what occurred during dialogic engagement and the significance of their role that impacted their decision-making.

The Altering of Teachers' Expectations

This second subtheme examines how participants' knowledge impacted the decisions they made regarding their expectations for three particular groups of children; young children, children for whom English is an additional language, and children with additional needs and those who may have been reluctant to contribute.

Young Children. In *Phase One*, eight participants described how teachers' knowledge of their children, their preferences for communication, the extent of their confidence in expressing themselves and their proficiency in English, led to differentiated support and expectations around engagement. Some noted children's single-word answers to their questions and expected more dialogic behaviours that featured the extension of ideas through longer sentences. Some participants believed children aged 4-8 years were perhaps too young for what the PLC/CTB (NCCA, 2019) perceived as appropriate for them. Niamh, a Junior Infant teacher, postponed the introduction of *Circle Time* (Mosley, 1996) – a programme for developing children's social skills - believing her children were too young to converse with each other. Her colleague felt COVID 19 may have impacted on play behaviours resulting in communication difficulties for children. Others adopted an outdated Piagetian perspective referenced in Chapter Two, describing as egocentric, the behaviours of children who, because of their young age, had difficulty 'decentring' (Fleer, 2018). They sought the attention of their teachers rather than engaging in class-based discussions with peers.

During the first PLCM participants expressed surprise at the capabilities of children, aged 6-7 years in a sample A/AV recording, as they sustained engagement with minimal teacher input. However, in subsequent PLCMs participants returned to questioning the readiness of children to listen to their peers. In PLCM3 Helen queried her children's capacity to speculate. Later, following implementation of an evidenced-based approach to speculation in literacy (Gregory & Cahill, 2010), she and her colleague reported surprise that 'it' – the group speculation - was 'actually working' (Helen, I2). The advanced thinking that Michaels et al. (2008) describe became evident once they challenged their children.

By *Phase Three* participants across both schools were surprised and 'astounded' (Rachel, I2) by their children's capabilities. Ellen who saw "... how capable these younger children were of doing the higher-order stuff", described the possibilities as 'endless' (I2). Experienced in teaching older children, Ellen described how she had observed her First Class special education teaching group justifying, having previously felt they would not

have been able. She had identified a child who had been a reluctant speaker but now was ‘able to deliver’ (I2).

Some participants, while upholding their original view that children needed to feel comfortable and familiar with their teacher, their group, and the setting, now reported expecting more than the recall of facts. Ann reported previously ‘giving children information’ rather than seeking what they thought. Niamh, who before aimed to have children repeat what she had said, expected responses that included explanations and justifications. She now believed that when teachers modelled what they expected and challenged children to think deeply, dialogue could be developed. While most had begun to challenge their children, two who agreed language facilitated cognitive development, still believed their children were not ready to reflect and therefore, be challenged.

Yvonne in Junior Infants described changing her assessment of children that required them to locate something in a picture, believing this confined children to labelling when many were capable of justifying. Yvonne’s increased trust in her children’s capacity to respond orally resulted in the children taking the lead in engagements. Helen could now hear her children building on their peers’ contributions. It was also proposed that children aged 4-8 years might be less inhibited than older children and therefore better placed to engage in this type of dialogue.

Despite these changes in expectations, Eimear continued to believe her children were too young to practise listening to and building on their peers’ contributions – a view that may have been due to her somewhat irregular attendance at the PLC meetings (Appendix N). While she felt her children ‘love[d] to talk’ she maintained:

... most of them in the group are not really able to extend on, you know, the whys or listen to somebody else's perspective and justify, or agree or disagree and justify their point (Eimear, I2).

Later in the *Phase Three* interview Eimear appeared to be reconsidering what Pritchard (2017) describes as her propositional knowledge in terms of children’s thinking:

I would have made certain assumptions with the class group given that I've quite a young class group. I suppose it (the PL) challenged those assumptions ... that they're too young a group to have to think about you know critical thinking or to think about a perspective (Eimear, I2).

Teachers can doubt that very young children can engage in a meaningful and dialogic way (Bond & Wasik 2009; Gjems, 2010; Nind, 2003; Patterson, 2018) which in turn can impact how children perceive their role in classroom engagement (Mascadri et al.,

2021). Supporting authentic and child-led dialogue requires an expectation by teachers that young children can speculate (Fleer, 2023) and therefore, this type of engagement is possible. Similarly, if listening as part of building on what others say, had not been demonstrated by their teachers, it was unlikely the children were going to extend their ideas (Topping & Trickey, 2015).

Whether it was increased teacher knowledge or in fact the children's maturation, that brought about greater children-teacher dialogue in this study was raised by Rachel. She described as a 'huge' change how she listened more to children and now accepted that silences were important. She had 'honed her skills' and was more adept at determining the difference between children simply talking and them building on what others said. However, from the outset she referred to the language 'explosion' she believed naturally occurred in young children. Cregan (2019) who debates the same issue, positions both child development and school experiences as being of equal importance.

The literature describes infants displaying and controlling joint attention (French, 2014; Tomasello, 2008). From the age of two children test hypotheses (Kennedy et al., 2023). Preschool children argue (Gjems, 2010; Siraj-Blatchford & Manni, 2010), problem-solve (Hayes & Matusov, 2005), question (Wells, 2007) and engage in collaborative dialogue (French, 2014; Nind, 2003) independent of adult support. Therefore, the argument may not be that without teachers' increased CK and PCK dialogic engagement would not happen, but rather whether teachers' practices can inhibit dialogue, or their engagement may be ineffective in supporting it (Hayes & Matusov, 2005).

Earlier references to children becoming passive (Einarsdottir, 2010; Gjems, 2010; Nind, 2003), asking less questions at school (Siraj-Blatchford & Manni, 2010) and believing that teachers' listening is directed towards correct rather than novel or unique responses (Greeno, 2015; Mascadri et al., 2021), are concerning in terms of their potential impact on children's views of dialogue at school. The children at the centre of this study were at the early stages of schooling. They may have been unaware of what they did not know, and this may have benefitted them, allowing them to speculate freely. Ensuring the dialogic behaviours of preschool children are continued in the infant classroom would seem prudent.

Children with English as an Additional Language. Approximately forty percent of one of the study's school's enrolment comprised of children with English as an additional language compared with about ten percent in the other. In *Phase One* six

participants across both schools described how the diversity of children's home environments resulted in a changing school environment. Some believed children's vocabulary and their general language skills were negatively impacted by limited opportunities to practise English at home. Some also believed that children in infant classes, who were at the early stages of learning their first language, were being negatively impacted by also having to learn English.

One participant in each school referred to the possible impact of less book reading in homes where English was the first language, leading to a reduction in the amount of language used by children at school. In the same vein, television and electronic devices in use in homes were perceived to negatively impact vocabulary acquisition.

Interestingly the issue of English as an additional language did not arise during *Phase Three*. It might have been expected that children with English as an additional language would have been disadvantaged by their limited vocabulary and knowledge of the language of engagement (i.e. English) (Alexander, 2018; Soter et al., 2008). However, participants' propositional knowledge (Pritchard, 2017) was, once again, tested. Ann was surprised at how a child with English as an additional language used the word 'drain':

... to have that vocabulary is amazing... to even think of that word... I wouldn't have taught the word drain. That wouldn't have been on the plan. We were working on the farm. You wouldn't think about the word drain (Ann, PRM5).

Commonly held beliefs that placing children with English as an additional language in dialogic situations may put them under undue pressure to contribute publicly (Michaels & O'Connor, 2015), were challenged. Participants were satisfied that while their OL&C may not have been accurate these children engaged dialogically, extended their ideas and offered justifications for their opinions (Kennedy et al., 2023; Michaels & O'Connor, 2015).

Teachers who have been sensitised to language types may be more able to hear and support this type of engagement as they consider the skills children are displaying rather than those that may be absent, such as missing vocabulary and incorrect syntax. Yvonne commented that, in terms of children with English as an additional language, she was now less concerned about gaps in their vocabulary:

Like the vocabulary doesn't hugely matter ... There was one girl as you know in my group who was like communicating, didn't have all of the language but when I was helping her along, then others were helping... They were nearly team working

at points and I find that in the class as well. They've started working more as a team like (Yvonne, I2).

Yvonne had begun questioning the appropriateness of existing practices in her school regarding ability grouping for children developing OL&C. She referred to children in her class who struggled with OL&C wondering if a mixed ability setting where they could model engagement for each other, would better meet the children's needs (Kennedy et al., 2023).

Children with Additional Needs and those who may be Reluctant to Contribute. Dialogic engagement appears along a continuum with attending and participation at either end (NCCA, 2019). However, reluctance to contribute to group engagements is complex (Clarke, 2015; Michaels & O'Connor, 2015). It may be evidence of a learned passivity as children progress through school (Mascadri et al., 2021). Beginning their schooling in a state of engagement (Nind, 2003) and wonder (D. Kennedy, 2022), children may become negatively impacted by rule-based environments with extended periods of sitting and hand-raising, and engagements that may not be founded in their interests (Mascadri et al., 2021). Children learn to expect feedback or further questioning (Greeno, 2015) from teachers who may be fearful that children will not be able to contribute to dialogue (Michaels & O'Connor, 2015), thereby controlling talk spaces that might otherwise have been shared (Mehan & Cazden, 2015; Theobald & Kultti, 2012).

Described as 'low contributors' (Clarke et al., 2016), teachers query if and how children who do not participate in dialogue should be supported. They consider if being present in a group in which there is dialogic engagement, is sufficient for some children. While research suggests there may be some benefits (Chi & Menekse, 2015), Clarke et al. (2016) argue that in order for cognitive development to occur there must be active engagement.

In *Phase Three* Rachel, Ellen and Laura described children in their groups who previously were reluctant to contribute to OL&C activities. They agreed that with their careful management, these children whose special education teaching included targets around receptive and expressive language, had advanced (Nind, 2003). Rachel had been surprised by a child's insightful contributions in a range of areas not previously explored in School. A child in Ellen's group had begun to express opinions where previously she would have simply agreed with others. Laura had moved away from content-based objectives and was concerned "more about how they interact[ed] with each other" (I2). In

her view, children who were previously reluctant to answer her questions, were now more willing to engage orally.

The findings suggested some children required a settling in period where they did not contribute orally. Others may have been impacted by a limited conceptual understanding of what was being explored (Clarke et al., 2016). Laura in A/AV3 presented her group with a story with a social justice message (i.e. that people regardless of differences should be included). She noted at the PRM that despite implementing the practices discussed at the PLC there was limited dialogic engagement:

What was happening in that book, was a real obvious theme and maybe actually it wasn't that obvious to them ... Maybe actually it was a bit above them.
[Researcher: Obscure?] Yeah. They are a little bit more innocent... (Laura, PRM3)

In A/AV5 Laura's efforts to scaffold her children by providing them with links to the story (Clarke et al., 2016), reflected a conscious decision to ensure her group had some conceptual understanding prior to their dialogic engagement. Quieter members of her group were prompted to speak about animal endangerment following a book she had presented about animal welfare.

Before her final recording, Ellen advised her children of the topic for discussion. In her PRM, she noted the participation of children who previously had not engaged, being significantly stronger. She was unsure if prior knowledge was the catalyst for this increased engagement or whether it was familiarity with the discussion format. Regardless, Ellen believed the children's reluctance to contribute to earlier recorded discussions and discussions in their classroom, could have been misinterpreted as a difficulty with OL&C.

Providing advanced notice and using familiar stories and scaffolds such as Gregory and Cahill's (2010) 'wiggling finger' (Appendix L), successfully supported this study's reluctant children to contribute. This suggests that when teachers intentionally support contributions (Clarke et al., 2016), children can develop their ideas through dialogue.

Brid considered whether children equated participation in dialogue with correctness - a view proposed by Clarke et al. (2016) and referred to earlier. Prior to her final recording, she informed one of her Junior Infants of the topic and explained how she would ask for her ideas, reflecting later that this had a positive result:

... one of the main things I wanted from this video was to get X. So, I called her before I did the video, kind of saying, "I know you have really good thoughts about this story we read and I'd love for you to say something and if you put up your

hand or if you tell me *I have something to say*, I'll make sure everyone listens to you". And then I got her to practice '*I have something to say*' ... (Bríd, PRM6).

The data revealed that when participants believed children were capable of dialogic engagement, the children responded accordingly. The extent to which teacher expectation could restrict development was evidenced in Eimear's comments. She reported that her children struggled with active listening for maturity reasons, and she was therefore not inclined to facilitate it.

This study featured children who were assessed as having specific speech and language disabilities and/or language delay. There was evidence of some advancement in their engagement in A/AV recordings. Again, an increased awareness of language types appeared to assist participants in supporting these children. Having a clearer understanding of the purpose of dialogic engagement, ensured participants did not exclusively focus on recitation which can prove difficult for children with working memory difficulties (Holmes, 2010).

Participants agreed that topics that offered opportunities for speculation appeared to support less-vocal children. Where the focus was on justification, for example, illustrations provided support to children in Laura's group as they justified their positions (Appendix AA). While teachers may be required to manage the talk space, and while some aspects of lesson content may be unsuited to speculation, its use for periods in the day may make children-teacher engagement inviting for reluctant contributors.

The Improvement of Teachers' Confidence

This third subtheme examines how participants' acquired knowledge allowed them to address classroom dialogue and access the PLC/CTB (NCCA, 2019) with confidence. This is discussed here.

Classroom Dialogue. The literature highlights the positive impact of teacher confidence on children-teacher engagement and classroom practice (French, 2014). Teachers adopt a controlling style in their engagements when they themselves do not feel effective (Nind, 2003). In *Phase Three* participants felt comfortable with children-teacher dialogue and were not "so hung up" (Bríd, I2). Evidence of Ann's increased confidence appeared in her comment that by children going 'off topic' they were provided with opportunities to develop OL&C. Previously she would have stopped such 'tangents':

Before I would stop them and said no that's not news and go onto the next thing. But no, it's actually okay to talk about it and be listening to their point of view and maybe working on something from that (Ann, I2).

Yvonne reported “a fabulous discussion” she’d had with her class. Referred to in Theme 1, someone entered her classroom with two kettles and a child asked why the person had two kettles. Yvonne continued:

... I was like, I wonder why would she have two kettles? And like it was a spur-of-the-moment like twenty-minute conversation that when she came back later that day, they were like, but you still haven't told what were the kettles for. They started that. Like I would have just left her walk in and fill the kettles (Yvonne, I2).

The knowledge gained from analysing their children’s OL&C left most participants feeling confident that regardless of the context in which dialogue happened they could ‘hear’ skills in use. They described being satisfied that their new CK and PCK influenced their practice. It appeared therefore, that increasing participants’ knowledge around OL&C development resulted in increased confidence which was necessary for them to engage dialogically with their children. Conversely, without this confidence in their CK participants were unlikely to have created opportunities to develop the dialogic aspects of OL.

Curriculum Implementation. Confidence acquired with increased knowledge may have impacted participants’ capacity to implement the PLC/CTB (NCCA, 2019). Data gathered in *Phase One* indicated varying degrees of Curriculum usage by participants, ranging from non-use, to matching learning outcomes to existing plans, to addressing some learning outcomes. According to Ann “We don’t really start from the curriculum. We start from the theme. If that’s right or wrong, I don’t really know” (I1). Participants expressed uncertainty around the OL&C strand of the PLC/CTB (NCCA, 2019) and the abstract nature of its learning outcomes. According to Rachel learning outcomes that could be measured and concretised were ‘easier to hit’ (I1). There was general acceptance that what was happening may not have reflected best practice.

In preparation for *Phase One* observations participants were asked to include in their lesson plans learning outcomes from the OL&C strand of the PLC/CTB (NCCA, 2019) (Appendix H) presented here as LO1 to LO12. With the exception of one participant who listed Phonics, a learning outcome within the *Reading Strand* of the PLC/CTB (NCCA, 2019), participants referenced Learning Outcome Three to Learning Outcome Twelve (Appendix X). Sentence structure (LO4) was noted as the focus of one lesson. Two others provided practice in categorisation (LO8). Opportunities to express opinions (LO7),

demonstrate understanding (LO6) and retell (LO9) were planned for some. However, there was little evidence to suggest that along with opportunities to talk, language use was being developed. For example, participants who referenced LO12; *describe, predict* and *reflect*, did not appear to be extending children’s contributions or challenging them to consider alternative viewpoints (Table 11). It seemed unlikely that dialogic engagement could be developed in contexts that were teacher-led, where questioning was generally closed, and where there was limited evidence of *uptake* by teachers and children.

In *Phase Two*, during PLCM 3, I facilitated participants’ exploration of all twelve learning outcomes from the OL&C strand of the PLC/CTB (NCCA, 2019) (Appendix X). We deciphered the expectations of the strand and discussed, for example, the roles of vocabulary and questioning (Table 5). We examined how, individually and collectively, the learning outcomes impacted OL&C development. I identified LO11 and LO12, shown here in Table 12, as pertinent to the development of dialogue and reflective of Bloom’s Taxonomy of Teaching, Learning and Assessment (revised 2001) (<https://tudublin.libguides.com/c.php?g=679803&p=4845688>). Participants in both PLCs reported not having considered them in depth. They noted, for example, the significance of ‘justification’ and their role in its facilitation. They acknowledged how expecting children to ‘describe’ without seeking to extend their contributions could limit their cognitive development. The discussions that evolved around LO11 and LO12, established these outcomes as suitable references for subsequent analyses of language use. Participants also referenced the *progression continua* (NCCA, 2019) and the variations within their groups and classes. However, I decided not to examine them within the PLCMs as I believed this could impact the confidence the participants gained from increased understanding of the learning outcomes.

Table 12

Learning Outcomes Identified for the Purpose of Analysing Language Use

*LO11	Information giving, explanation and justification	Supply, explain and justify points of information to familiar and unfamiliar audiences using topic-specific language.
*LO12	Description, prediction and reflection	Describe, predict and reflect upon actions, events and processes relating to real and imaginary contexts.

*Taken from the PLC/CTB (NCCA, 2019)

By *Phase Three* participants described how their improved understanding of what the Curriculum’s learning outcomes meant made the document “less daunting” (Laura, I2).

Brid had “not touched” LO11 and LO12 heretofore: “I was just like, woah, they’re too big or how do you assess them” (I2). Two other participants had previously included the two learning outcomes in their planning without understanding them. Others described how they used to read them but did not break them down into the six constituent parts (Table 12).

Brid, who now placed more value on LO11 and LO12 than other learning outcomes, reported needing to understand them before she could use them. Described now by Ellen as *massive*, before she would have read the two learning outcomes as sentences and would not have considered how the skills within them ranged in complexity. Yvonne spoke excitedly about now wanting to be “on 11 and 12” (I2) so that her children could be developing these skills. Niamh believed they provided her with some direction on how to question children. Their usefulness in terms of planning for dialogue, was generally agreed.

Phase Three observations supported participants’ claims that, following the PL process and their increased understanding of LO11 and LO12 (NCCA, 2019), they confidently adopted the Curriculum’s terms (Cregan, 2012; French, 2014). Seven of the nine participants referred to one or both of the two LOs.

In her *Phase Three* interview Niamh referred to the skills explored during the PL process. She continued not to use the PLC/CTB (NCCA, 2019) in her classroom planning:

Currently I do not use them when planning my teaching. X and I plan together and so we would often say when we are planning oral language activities that A, B and C would be a great way of getting children to think and justify their answers. However, we would rarely have the language curriculum document open when we plan (Niamh, I2).

Prior to the PL process, participants had not understood the Curriculum’s LO11 and LO12 which prevented them from using them to plan their lessons. They had not discussed the fact that LO5 (i.e. vocabulary) was only one aspect of the strand or how LO1 (i.e. joint attention) contributed to dialogic engagement. The PL process supported participants in translating it into practice. In *Phase Three* they reported a greater understanding of the document that made it more accessible. Reading it properly (Ann), talking about it (Helen), deconstructing it (Brid, Laura) and thinking about it more (Niamh, Yvonne) left participants feeling more comfortable in using it. Brid was “a bit more at ease with what I’m [she was] looking for” (I2), Laura found it “less daunting” (I2) and Rachel felt “more comfortable” (I2). According to Helen, “... without us talking about it altogether, I would have just been like, I wouldn’t have known what to do” (I2). Ensuring teachers understand

the Curriculum's constituent parts (i.e. the learning outcomes) and how they fit together to support cognitive development may be necessary if they are to be expected to implement it with confidence.

Theme 2: Summary

Participants' acquired CK and PCK allowed them to select contexts that supported dialogue rather than simply providing opportunities for oral language use where it could be relegated to becoming an 'incidental by-product' of classroom talk (Kirkland & Patterson, 2005). The participants began to interpret OL&C and dialogue as the means by which knowledge is created rather than transmitted, reflecting perhaps Pritchard's (2017) 'intellectual conscience' and signalling a possible epistemological change for some. Some had become judicious about their use of play. Acquired knowledge also brought about increased teacher expectations in terms of particular groups of children and an increase in confidence when engaging dialogically with children and accessing the PLC/CTB (NCCA, 2019).

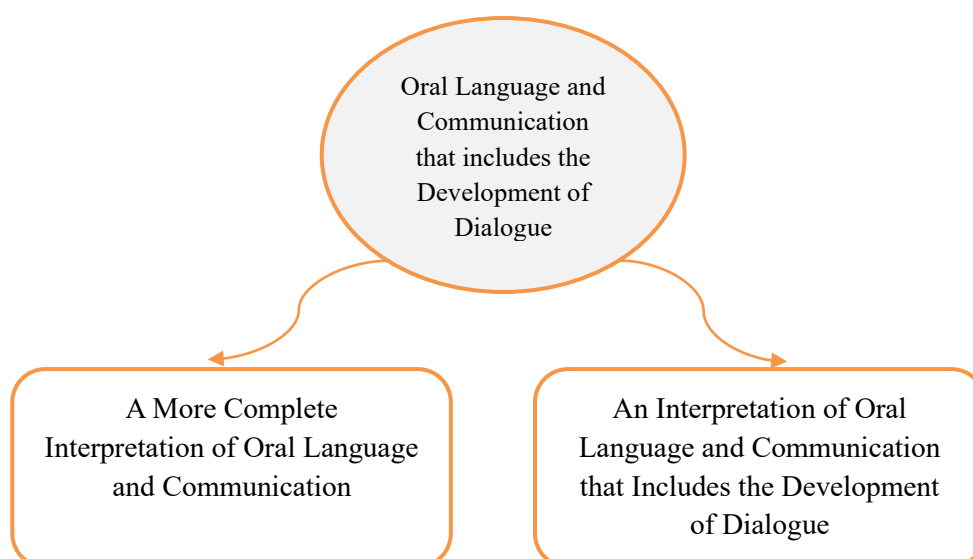
Section Three

Theme 3: The Implications for Children's Cognitive Development where Oral Language and Communication Development is inclusive of Developing Dialogue

Analysis of this study's data revealed that following the PL process participants who had broadened their interpretation of OL&C to include dialogue were better placed to support their children's thinking. The subthemes in Figure 15 are discussed below.

Figure 15

Oral Language, Communication and Dialogue



Before the Professional Learning Process

I began this study aiming to explore how teachers developed children's OL&C, believing dialogue and its role in advancing thinking, to be implicit in the process. An initial analysis of *Phase One* data suggested that the participants thought similarly. They reported OL&C was an intrinsic part of reading and writing, it featured in other curricular areas such as Social Environmental and Scientific Education and underpinned their use of the *Aistear* framework (NCCA, 2024). They identified instances when they consciously planned for and supported OL&C development. All nine participants described children using OL&C to move from the familiar to the unfamiliar: "... it's always good to start off at the point where they have a certain amount of language on something" (Helen, I1). Background knowledge and/or experience left children better placed to explore a topic (Nind, 2003). One of the schools supported this position by reducing the number of textbooks thus leaving more time for discussion based on children's experiences (Buckley, 2003).

However, a reference to oral language being "what's happening at that moment" (Eimear, I1) along with the comment "you don't necessarily think of it as being an outcome" (Helen, I1) suggested an incidental rather than an intentional approach to its development. Participants' plans for their observed OL&C lessons, while including the learning outcomes presented in the PLC/CTB (NCCA, 2019), appeared to focus on extending vocabulary (LO5), with no apparent reference as to how OL&C might be used to develop children's thinking. Two participants had not considered how they might develop OL&C in L1 English speakers having only considered OL&C development in terms of children with English as an additional language.

I revisited my theoretical framework (i.e. a socio-cultural theory of learning) that positions language as a tool for thinking (Vygotsky, 1986), and my study's focus shifted. I began examining teachers' perceptions regarding their support of the development of dialogue in their children – a move described as common in 'sensitive research' (Cohen et al., 2018, p.169).

Following the Professional Learning Process

By *Phase Three* participants in both schools agreed that while children may have previously been talking, they were probably not developing skills beyond supplying and describing. Helen described how her earlier style of questioning while open, had not required children to justify their opinions. For Rachel the addition of dialogue meant she

was no longer satisfied when children simply spoke on a topic. Teachers had begun to examine the 'interpersonal plane' referenced in Chapter Two in terms of *dynamic assessment* and were considering their own actions (Rogoff, 1998; Sybing, 2021).

A More Complete Interpretation of Oral Language and Communication

In *Phase One* participants described OL&C as 'talk' (Ann, Eimear, Ellen, Laura, Niamh, Rachel, Yvonne) and 'chat' (Ann, Ellen, Eimear, Yvonne), and "dialogue was happening when everyone says [said] something" (Laura, I2). They spoke in general terms about 'discussion' and 'conversation' appearing alongside problem-solving and hands-on learning. At the end of the process some continued the practice of first orally establishing what children knew about a topic but were satisfied this was not their aim in terms of OL&C development. Analysis of the data revealed the significance of understanding OL&C to mean more than 'talk' and the development of vocabulary. This is examined below.

Oral Language and Communication as More than Talk and Vocabulary Development. By *Phase Three* OL had become about 'making connections' (Helen), 'challenging' (Ellen) and 'critical thinking' (Brid). The PL process, which had provided participants with skills to analyse their children-teacher engagements, resulted in them appreciating OL&C as something beyond what children acquired before coming to school (APPG, 2020). Exploring terms such as *describing* and *reflecting* while assisting participants in recognising language types (Kucan, 2007), increased awareness of the functions of OL&C. At the same time, areas for advancement were identified – a process described by Alexander (2018) as knowing what to do with what children say.

Phase One interviews revealed that participants in both schools provided opportunities for children to acquire and use new vocabulary. Their written lessons plans for their *Phase One* observations reflected this. The participants from one school described how their whole school plan (WSP) for OL&C emphasised vocabulary development.

While in *Phase Three* some participants continued to refer to deficits in vocabulary, it was widely accepted that other aspects of OL&C development also required attention. Niamh explained following the PL process:

... when children were engaged in oral language discussions that challenged them to think more deeply and search and use words that they don't use every day, it helped with their language development and their ability to engage in dialogue (Niamh, I2).

For Niamh, removing the focus on vocabulary did not appear to impact its development. In fact, it could be increased when addressed as part of purposeful communication (Alexander, 2018; APPG, 2020; Cregan, 2019; French & Lake, 2017; Hart & Risley, 1995; Kennedy et al., 2023; Shiel et al., 2012). Niamh believed prioritising vocabulary reduced opportunities for children to build on each other's contributions and concluded that focusing on labelling pictures limited children in terms of them showing the extent of what they knew.

At the end of each school year the children in Yvonne's school completed an *Early Risk Assessment*. Following the PL process, she queried whether its OL&C section that focused on retelling a story and recalling information, correctly reflected the cognitive abilities of some children. She queried whether whole-school practices that focus on vocabulary within organised language groups might be reconceptualised to feature a more communicative approach to OL&C development with "less vocab and more explain..." (I2).

Vocabulary measures are easily acquired, and along with a capacity to manipulate and use words, are regularly used as indicators of OL&C development (Cregan, 2019; Dobinson & Dockrell, 2021; Hart & Risley, 1995). Vocabulary knowledge and morphology are clearly linked to decoding as part of reading and comprehension. They are often considered when addressing socio-economic influences on learning (Paatsch et al., 2019) and "narrow[ing] the achievement gap" (Kennedy et al., 2023, p.219). This study does not dispute the significance of vocabulary development as part of OL&C. Neither does it contest that the age cohort at the centre of this study are capable of significantly increasing their vocabulary with directed classroom instruction (Dobinson & Dockrell, 2021). However, prioritising vocabulary development and labelling in schools may contribute to a limited view of what constitutes OL&C development (Snow, 2017). It may be the case, that the ease at which vocabulary development can be measured positions it as a panacea for perceived difficulties with OL&C development in general.

The PL process revealed to its participants that children with limited vocabularies were capable of engaging dialogically once facilitated by their teachers and peers. Previous practices around vocabulary development including labelling were replaced by immersive experiences, with children listening to and being supported by their teacher to build on their peers' contributions (Gray, 2017). This would suggest that teachers need to be wary of focusing on vocabulary at the expense of dialogic engagement and that measuring a child's OL&C ability should not be limited to labelling items using newly acquired terms.

Equating OL&C development with vocabulary development is an over-simplification that may negatively impact children's experiences and teachers' practices.

An Interpretation of Oral Language and Communication that includes the Development of Dialogue

In dialogue we accept elements of other's ideas in order to reach a consensus (Sybing, 2021). The intellectual activity of dialogic engagement (Mercer, 2008) requires more than 'verbal exchanges' (Hayes & Matusov, 2005). In *Phase One* participants' descriptions of children's oral and non-verbal engagement (Eimear, 11) with their teachers and peers (Sybing, 2021), were in line with extant research. Authentic questioning, challenging children's views and ensuring children's comfort were all referenced.

However, by *Phase Three* it appeared that participants' engagements with their children had been significantly impacted by their recognition of OL&C development as being inclusive of dialogic engagement. Niamh described children in her class who were not the focus of her A/AV recordings as 'just talking' and proposed that the emphasis placed on dialogue was the reason for progress in her recorded group. Iterative analysis of the data revealed that in conceptualising OL&C as encompassing dialogue, participants were required to think more deeply about what occurred in terms of active listening, agreeing, disagreeing, justifying, and explaining one's perspective, and this had implications for how they supported their children. During *Phase Two* some observed children using language to explore concepts, challenge each other, expand on their peers' contributions, speculate and justify. According to Ann,

Before it was 'oh what's in the picture? What can you see?' Now I'm like 'why do you think that? Why is that happening?' and 'I wonder what would happen if?' (Ann, 12).

Participants attributed children achieving what they described as the 'latter' or 'higher order' learning outcomes of *explaining, justifying, predicting, and reflecting* (NCCA, 2019), to their newly adopted dialogic practices. Analysis of the data revealed how considering OL&C as being inclusive of dialogue meant participants now believed dialogue promoted cognitive development. It was founded in authentic engagement and required facilitation for its development.

Dialogue that promotes Cognitive Development. In *Phase Three* I asked participants to consider the link between dialogue and cognitive development (Alexander, 2018; Lantolf et al., 2015; Mercer & Dawes, 2018). Despite me having referenced their

connectedness in both PLCs, two participants reported that we had not explored the topic during the PL process and believed that some discussion might have been helpful.

However, analysis of the interview transcripts revealed that participants had considered dialogue in terms of their children's thinking. Bríd had altered her earlier interpretation of dialogue which included eye contact to include evidence of critical thinking. Participants recognised cognitive development in how their children challenged each other (Mehan & Cazden, 2015). They observed children beginning to use terms like *agree* and *disagree* and providing justifications for their arguments. All participants were able to access children's thoughts through their dialogue with eight of the nine acknowledging the 'complexity' of engagements. It was also agreed that all children were not engaging dialogically, and their cognitive advances could be recognised in more literal oral interpretations of information.

Introduced originally as a means of developing critical reading, collaborative reasoning within a dialogic context (Sun et al., 2015) explores the bigger or more philosophical questions reflected in initiatives such as P4C (Topping & Trickey, 2014) – an approach to teaching philosophical inquiry in the UK - and the work of Mathew Lipman in the USA. While in one PLC participants examined arguments for adopting philosophy in schools (D. Kennedy, 2022; Mascadri et al., 2021), both PLCs were introduced to the act of speculating which Bríd argued, supported her children's critical thinking. Establishing the link between speculation, dialogue and cognitive development or 'high-level' thinking was important for participants. Once they acknowledged that their children could engage at this level, their role became the provision of opportunities that facilitated dialogue with and amongst children.

Eimear also considered critical thinking within the context of dialogue but continued to believe that the children she taught were not capable of 'complex thinking' (I2). She agreed that developing dialogue was more complex than 'talk' but once again she relied on her propositional knowledge (Pritchard, 2017), suggesting it was not relevant for children in First Class, who she described as emerging readers and writers. These were the "nuts and bolts" and as such were prioritised. She described how the junior classes in her school focused on recount writing. What she termed 'the thinking part' of writing and reading were not a priority and was therefore satisfied to defer opportunities for critical thinking to more senior classes. The critiquing which supported children's agreeing, disagreeing, and justifying, would 'come later'.

Later in the *Phase Three* interview, Eimear appeared to alter her position, describing how the PL process challenged her assumptions regarding her children being too young to engage critically. It may, however, have been our conversation during the final interview that had challenged her views (Pugh, 2013).

Dialogue Founded in Authentic Engagement. For Niamh in *Phase One*, having children listen meant they were well placed to repeat what she modelled in terms of speaking in full sentences. Following the PL process she repositioned listening as pivotal to children being able to build on each other's contributions. She now believed her role was to support her children to 'orient' themselves (Michaels & O'Connor, 2015, p. 343) towards dialogue by helping them listen to their peers. Yvonne surmised that perhaps her children were now responding to peers' questions rather than merely 'saying words' (I2).

The significance of listening, discussed as part of Theme 1, which positions all contributions to dialogue as "worthy of careful consideration" (Wells, 2007, p. 264), brought Ann to the realisation that while initially her children talked over each other now 'they actually were listening to each other' (Ann, I2). Opportunities to move off topic were fundamental to active listening and were defended by Ann who now agreed that redirection by the teacher could impede children's engagement.

Children actively listening was believed by Eimear to be beyond her First Class. She described how while they "loved talk and discussion" (I2) they would struggle with actively listening and offering alternative perspectives to those of their peers – a position that might be disputed by the extract below, taken from my observation of her children-teacher engagement in *Phase Three*:

Eimear: What should X's mam and dad have done? (pause). Child 1, if you were in charge what would you have done?

Child 1: I would say I'm just going to make one more thing.

Eimear: Does anyone else think it's a bad or a good idea?

Child 2: I think it's a bad idea because if she makes more it will be a waste of food.

Eimear: That's interesting.

Child 3: (unclear)

Eimear: So Child 2 you think –

Child 4: (child interrupts, unclear)

Child 5: There are people in the world who don't have food.

(Source: Eimear, O2).

The children in Eimear's class appeared to actively listen to each other, and Eimear facilitated this through her *uptake* and open-ended questioning.

Participants who were now in pursuit of dialogue, agreed on the central role their active listening played in cognitive advancement. It presupposed the view that what their children said mattered (Boyd et al., 2019; Gjems, 2010). Participants argued that while children learned to talk by talking, they also needed to believe what they were saying had worth (Cregan, 2019; Shiel et al., 2012). The resulting authentic children-teacher engagement (Wilkinson et al., 2015) while difficult, was attempted through *uptake*.

Dialogue that requires Facilitation in order to Develop. While the cognitive benefits of dialogic engagement are undeniable (Alexander, 2018; Clarke et al., 2016; Michaels & O'Connor, 2015; Shiel et al., 2012), it is complex and challenging (Jay et al., 2017; Stivers, 2021; Topping & Tricky, 2014). There are benefits in terms of children's agency (Topping & Tricky, 2014) but social structures may inhibit children's participation (Clarke et al., 2016; Mercer, 2010). Equally, teachers may fear reduced control (Alexander, 2018; Mascadri et al., 2021; Wilkinson et al., 2017) as a result of the acceptance of multiple perspectives. Such constructivist or tentative views of knowledge (Ferguson & Lunn Brownlee, 2018) present the potential for shifts in the identities of teachers and children (Michaels & O'Connor, 2015).

This study's findings suggested that while teachers are central to supporting the development of dialogue, they may be unsure of their role (Jay et al., 2017). Participants' use of the PLC/CTB's learning outcomes (NCCA, 2019) revealed the limited attention paid to LO11 and LO12 (i.e. information giving, explaining, justification, describing, prediction and reflection). Previously they were satisfied when their children provided information when questioned and described events. Most had not considered the need for justification for example, and 'productive interactions' (Clarke, et al., 2016, p. 27) or accountable talk (Michaels et al., 2008) that occurs when elaboration is sought (Topping & Tricky, 2014). However, if the aim of OL&C is the development of reasoning (Alexander, 2018; Mercer, 2010; Soter et al., 2008), then the OL&C opportunities provided by teachers should feature dialogic engagement (Jay et al., 2017).

The apparent newness of the experience of 'hearing' their children and their limiting expectations referred to earlier, suggested that the participants in this study did not anticipate dialogic engagement with their children (Boyd et al., 2019). Stivers (2021)

describes how teachers may struggle to hear their children's contributions when engagements move beyond dyadic child-teacher participation. Difficulties also arise when along with monitoring the content of the dialogue, teachers are required to actively facilitate interaction across a group (Boyd et al., 2019; Topping & Tricky, 2014). It is unlikely therefore, that dialogue will naturally occur in classrooms where teachers are unaware of its significance or are unsure of their role.

Being challenged or the capacity to challenge another's opinions while impacting positively on cognition (Clarke et al., 2016; Patterson, 2018), is not dialogue-dependent. One can disagree with something one hears or reads. However, it is also possible that a child's intention to engage might be altered by experiences or environments that do not encourage dialogic engagement (Carr & Claxton, 2002). Similarly, the act of altering one's opinions may be unfamiliar to younger children and therefore, may require support (Gjems, 2010; D. Kennedy, 2022; Patterson, 2018). It would appear therefore, that teachers have a role in establishing a positive disposition to dialogic engagement. In challenging their children's contributions and inviting challenges by peers, they can advance their children's dialogue and their cognition (D. Kennedy, 2022; Patterson, 2018; Topping & Tricky, 2014).

Theme 3: Summary

For the participants in this study OL&C development became more complex than they had previously considered. Their deeper understanding of OL&C that included dialogic engagement resulted in participants being better able to support its development and maximise cognitive gains for their children. The PL process highlighted the significance of listening for participants in terms of critical thinking, as children and teachers built on each other's contributions. While the process did not automatically result in children-teacher dialogic engagement, participants' awareness as to the cognitive benefits of dialogue increased.

Conclusion

The findings presented in this chapter answered my first research:

What do teachers know about supporting the development of dialogue in children aged 4-8 years?

The study revealed:

- It was necessary for participants to consciously balance transmission and facilitation when supporting the development of children's dialogue. This required a shift in control towards their children and the necessity for increased listening.
- Participants' confidence, expectations of their children, choice of OL&C context and practices were positively impacted by the knowledge they gained during their PL experience.
- Once participants interpreted OL&C as inclusive of dialogue, they began to recognise its role in children's cognitive development.

Most of the participants in this study believed at the outset that their knowledge was sufficient to develop OL&C and their descriptions of their practices reflected the literature. This was sometimes at odds with what was evident in classrooms, presenting a potential obstacle to PL in so far as some participants were unaware of their limited CK and PCK (Kennedy & Beck, 2018). Analysis of the findings including comments made in *Phase Three* regarding what participants had learned (Table 13), highlighted that some had previously experienced difficulty engaging dialogically with children.

The data also revealed that participants were successful when they adopted a philosophical stance to developing dialogue. With an emphasis on speculation and reasoning (Boyd et al., 2019), teachers and children experienced genuine engagement supportive of dialogic and collaborative inquiry (D. Kennedy, 2022; Topping & Tricky, 2014). In wondering children were facilitated to think and thus develop their cognition by building on the contributions of peers.

In the next chapter I present an example of what participants reported as acquired CK and PCK: *Uptake*. I include a summary of the remaining nine practices which received attention during the PL process, and I explore the PL process.

Chapter 6

Findings, Analysis and Discussion

Part 2: The Impact of a Professional Learning Community on Teachers' Knowledge and Practice

Introduction

Research suggests that the form professional learning (PL) takes, as well as its content, impacts its effectiveness (Darling-Hammond et al., 2017; Desimone, 2011; A. Kennedy, 2014; Little, 2006). In this chapter, I first outline my data sources for this set of findings. I present a summary of the content knowledge (CK), and pedagogical content knowledge (PCK) participants gained from participation in the PL process. I include an example of one practice - *uptake* (Nystrand et al., 2003) to illustrate the process. Next I examine whether and how the form of the PL (i.e. a professional learning community (PLC)) impacted the participants. I report my findings according to eight elements associated with effective PL and present some key issues underpinning teacher PL. In my conclusion, I reconsider my conceptual framework as presented in Chapter Three. Discussion based on my analysis of these findings responds to the study's second question:

In what way is teachers' knowledge and practice regarding the development of dialogue in children aged 4-8 years impacted by participation in a Professional Learning Community?

Data Sources

The participants spoke positively about their PL experiences. However, being mindful that this does not imply effectiveness (King, 2014), and that membership of a PLC alone may be inadequate in terms of bringing about pedagogical change (Doğan & Adams, 2018; Little, 2006), I sought to identify how participants were impacted by the process. My data sources, the findings and my discussion are presented (a) in terms of participants' acquired knowledge and practice (b) in terms of their perceptions of the process.

The three phases of this study provided the data for this chapter (Chapter Three).

- Data from *Phase Two* (i.e. professional learning community meetings (PLCMs), post-recording meetings (PRMs,) audio/audio-visual (A/AV) recordings) allowed me to identify the CK and PCK acquired by participants as part of the PL process.

- Data from *Phases' One* and *Three* (i.e. semi-structured interviews with all nine participants before and following the PL process), provided insights into participants' views of PL.
- Data from *Phase Two* (i.e. final five PLCMs and PRMs) provided further insight into how participants' PL was impacted.

As in Chapter Five, rather than comparing the PL experiences of the participants in each of the two PLCs, I explored the range of their experiences. The pseudonyms used in Chapter Five are applied here.

Measuring the effectiveness of a PL model is generally linked to confirming improved learning outcomes for children (Desimone, 2011). This study did not examine the impact of participants' PL on children's learning. Rather, the findings presented here in Table 13 and in Chapter Five suggested children-teacher engagements changed through participants' involvement in the PL process. These changes reflected what the literature reports as supportive of children's learning. The question raised in Chapter Three as to whether the depth of teachers' reflection could be considered evidence of effective PL is also addressed here.

The Acquired Knowledge of Participants

In *Phase Two* the participants explored ten practices, listed in Table 13, as part of the PL process. Deductive thematic analysis (Kalpokas & Hecker, 2023) of the findings as outlined in Chapter Four revealed the practices were adopted to varying degrees by each participant. This represented acquired knowledge for participants and an increased awareness that influenced their practice. Providing numerical values for each practice was difficult as for example, participants may have occasionally adopted a practice or known about a practice without adopting it (Table 13). Similarly they may have implemented a practice at a time when it was not recorded. Therefore, the terms 'few', 'some' and 'most' while not exact, create a sense of what occurred over the course of this study.

Table 13*Ten Practices to Support the Development of Dialogue*

Practice	Before the PL process	Following the PL Process
Time to Talk	Some participants balanced their talk with children's talk.	While all participants were aware of the need to balance their talk with their children's talk, it remained difficult for some.
Wait Time	Some participants sometimes provided sufficient wait time for children to respond.	All participants knew about wait time but continued to find it difficult to provide.
Talk Moves	Two teachers used talk moves to extend their children's engagement. They may have been unaware of their function.	Most participants used talk moves purposefully to extend their children's engagement and support dialogue. They found this difficult.
Joint Attention	All participants achieved child-adult joint attention. Joint attention across their group was generally not evident.	All participants actively sought joint attention across their group. Few achieved it.
Teacher Role	Most participants reduced the possibility of dialogue by leading children-teacher engagements.	All participants understood the impact of facilitating children taking the lead. Most achieved this occasionally.
Dialogic Talk	Few participants sought to advance children's oral language use beyond labelling and describing.	Most participants had begun to engage in dialogic talk with their children.
Authentic Questioning	Some participants used authentic questioning but found it difficult.	Most participants attempted authentic questioning. They believed speculation and wondering supported this.
Uptake	Most participants did not practice <i>uptake</i> . They did not intentionally develop oral language through dialogue.	Most participants used <i>uptake</i> purposefully to develop oral language through dialogue.
Differentiation	Participants believed reduced group sizes supported less-vocal children. Limited vocabularies meant children with English as an additional language could not engage dialogically.	Participants purposefully supported less-vocal children using a range of approaches. They believed children with limited vocabularies could engage dialogically.
Assessment based on Language Use	Participants did not assess or analyse oral language and were unfamiliar with language use terms.	Most participants attempted to identify language uses in their children's oral language. They continued to find language analysis difficult.

Here I present *Uptake* (Nystrand et al., 2003) as an example of what occurred in terms of the ten practices.

Uptake as an Example of Acquired Knowledge

Uptake, or building on someone's comments (Soter et al., 2008) through questioning for example, is a feature of effective and authentic classroom engagement

(Maine & Hofmann, 2016). It signifies recognition of a child's utterances (Nystrand et al., 2003). Regularly used by two participants in their first A/AV recording to extend dialogic encounters, all participants had adopted *uptake* by the end of the PL process.

In *Phase One* (prior to attending the PLC) participants identified themselves as listeners who facilitated OL development by responding to children's contributions (French, 2014; Maine & Hofmann, 2016; Shiel et al., 2012). Four spoke about following a child's lead and 'building on' (Helen, I1) what children said (Topping & Ferguson, 2005). However, analysis of *Phase One* data suggested participants had not considered how they might support children in building on the comments of peers. Therefore, in the first PLCM and the sample A/AV recording described in Chapter Four, I identified *uptake* (Maine & Hofmann, 2016; Soter et al., 2008) and *connect episodes* (Boyd et al., 2019) to concretise the 'abstract' nature of OL development (Helen, I1). Rather than the terms provided here, the participants adopted the 'building on' analogy. *Talk moves* (Michaels & O'Connor, 2015; Michaels et al., 2008) were subsequently introduced as an effective means of achieving this in children-teacher engagements.

In *Phase One* (before attending the PLC) Helen and others had prioritised vocabulary over dialogue. Some, including Ann, were satisfied when the children 'chatted'. Rachel queried dialogue in Social Environmental and Scientific Education for example, where she required the children to provide factual information. By PLCM2 both groups acknowledged a difference between talk and dialogue describing how dialogue was not automatic and required facilitation. Ann agreed: "You'd think by looking at it (A/AV recording) but when you look at the transcript, there wasn't a lot of dialogue, you know - to and fro" (Ann, PLCM2).

Difficulties associated with children building on each other's comments included some reports of children only being interested in engaging with their teacher. This may have been reinforced by a misconception expressed by Niamh and Laura in *Phase One* that dialogue was about children answering teachers' questions, similar to the initiate-respond-evaluate (IRE) engagement pattern described by Hayes and Matusov (2005) and Greeno (2015) as being at odds with authentic engagement. This perspective may explain why initially only child-teacher engagement was practiced and reinforced.

Purposeful *uptake* coincided with the facilitation of children questioning through the practice of 'wondering'. Children began briefly building on each other's comments. Teachers sustained the engagement using talk moves like '*Mmm*' and '*really*' while

children built on contributions by agreeing and disagreeing. These dialogic episodes were strengthened when justifications were added. By Cycle 5 of the PL process participants had begun identifying their role in facilitating dialogue through *uptake*. As with Alexander's (2018) intervention, changes in teachers' practices had resulted in changes in children's engagements (Jay et al., 2017). Participants located revoicing in transcripts and began hearing themselves doing so when in dialogue with the children. Revoicing, however, sometimes interrupted children's engagement. Presented by one participant as a habit, the study suggests that positive results come from purposefully adopting behaviours as part of Michaels et al.'s (2008) 'careful orchestration' referenced in Chapter Two.

Ellen, in Cycle 4, described listening as fundamental to her being able to provide *uptake* that would result in extending dialogue. However, participants reported that hearing the children was difficult (Mercer, 2004), and missing opportunities for *uptake*. Attempts to facilitate discussion across the group impacted participants' capacity to build on what was being said by individual children. Bríd's capacity to listen to her Junior Infants was negatively impacted by her efforts to have everyone attend and contribute.

Bríd: You think like in the story we read where the pig is looking for the farmer and they're going to follow the voice?

Child 1: Yeah they're lost.

Bríd: You think they're lost. And what do you think about these little piglets Child 4?

Child 4: I think they are following the big pig.

Child 2: Cos –

Bríd: Child 3 do you know?

Child 3: So they don't get lost.

Bríd: So they don't get lost – maybe. C4 what do you think? (Child 4 shrugs her shoulders)

Where do you think the pigs are going? (Pause) Do you have any ideas?

(Source: Bríd, A/AV3)

As Rachel moved away from test questions and facilitated children extending their responses as part of developing *accountable talk* (Michaels et al., 2008), the children began to also practice *uptake*. In A/AV4 they agreed, commented on, and occasionally challenged each other. However, when asked closed questions they returned to only engaging with their teacher. Rachel's final recording provided evidence of children building on each other.

Child 1: It's not right to kill animals and also killing animals is so bad because once I saw on TV a little lamb being killed by somebody.

Child 2: That's cruel even though you want to eat them you have to wait until they die. You get a big lamb but not when it's alive. Wait until it's died, or you could eat something better.

Rachel: Child 1, can I come back to you? Why do you think they were killing the lamb?

Child 1: Because they showed us, they had a knife, and they were creeping up on a little baby lamb and they just struck it, and it fell down.

Rachel: And what were they going to do with the lamb do you think?

Child 1: Eat it!

(Source: Rachel, A/AV6)

By the fifth cycle Yvonne felt her Junior Infant group which included three children with English as an additional language, practiced *uptake*.

They did really good turn taking and listening to each other and there **was** like – one of them X went to interrupt Y while he was speaking but then she waited, but she responded. Like what she was saying was to do with what he was saying (Yvonne, PRM4).

Participants described hearing dialogue with and between children in their classroom engagements and using *uptake* to develop dialogic episodes. Helen declared: “I probably wasn’t even as much aware until you analysed it very carefully exactly how they weren’t necessarily acting on or expanding on what the other person was saying” (I2). While some may have used *uptake* prior to the PL process, participants in a ‘culture of language consciousness’ (Phillips Galloway & McClain, 2020), agreed they were now more aware of its impact on developing dialogue.

The perception persisted through a number of cycles that younger children struggled to practice *uptake*. Participants were disappointed by the brevity of the engagement which Helen, Niamh and Bríd believed might be due to children’s limited experiences and having insufficient information to extend ideas.

During Cycle 6 I invited participants to use a glance card (Appendix P) to examine their final A/AV recording for dialogue. Niamh was surprised with the outcome:

I didn't think that it would be possible for all of that to be there, you know, to be happening - like not at this age. I thought, yeah, maybe older, you know. I was like 'ah poor D (researcher). This is delusional - whoever Alexander is (source for glance card). I didn't think that they would have all of that. So, I was really surprised and pleasantly surprised (Niamh, PLCM7).

By the end of the PL process, participants were listening carefully to children and most practiced revoicing by repeating what children said (Ferris, 2014). The purposeful use of *uptake* that included talk moves (Michaels et al., 2008) and authentic questioning, positioned the participants as facilitators within Nystrand et al.'s 'sites of interaction' (2003). To increase its effectiveness and extend it beyond repeating, in PLCM7 I introduced three types of *uptake* (i.e. repeating, extending and challenging). In their transcript analysis, participants differentiated between instances when they repeated or invited extensions (Siraj-Blatchford & Manni, 2010) and challenged the children (Maine & Hofmann, 2015). As in the study by Kazemi and Franke (2004) outlined in Chapter Two, facilitation, that included my timely provision of relevant information in response to participants' reflections, was significant to the advancement of practice.

Participants' Perceptions of the Professional Learning Process

To answer this study's second research question and identify how professional learning communities impacted their participants' knowledge and practice I created two PLCs. I aimed to establish the elements listed in Table 14 and defined in Chapter Three, which are considered central to effective PL (King et al., 2022).

Table 14

Elements of Effective Professional Learning

- | | |
|---|---|
| 1. Content Embedded in Classroom Practice and National Curriculum | 5. Teacher Agency |
| 2. A collaborative Environment | 6. Facilitation |
| 3. Active Learning Opportunities | 7. Sustained Duration |
| 4. Teacher Reflection | 8. Tools (added following initial analysis) |

(Source: Darling-Hammond et al., 2017; Desimone, 2011; Doğan & Adams, 2018; Fler, 2002; Kazemi & Franke, 2004; A. Kennedy, 2014, 2022; King & Stevenson, 2017; Šarić & Šteh, 2017; Schön, 1983; Timperley, 2015; Vygotsky, 1986).

Nelson et al. (2012) suggest that while data analysis enables us to answer questions it should also generate new questions. Examining participants' perceptions in terms of each of the eight elements of effective PL, allowed me to identify the potential benefits and challenges presented by the PL process. The eight elements appeared first as codes and then as themes with a number of subthemes, as outlined in Chapter Four (Finlay, 2021). In the case of each theme I present the participants' perceptions before and following their

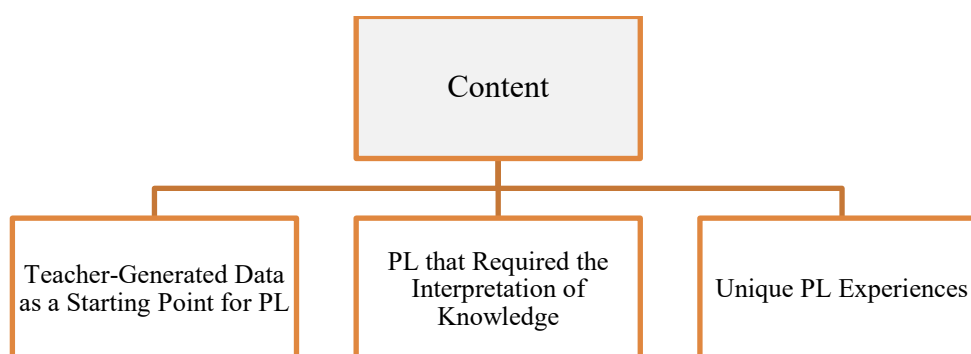
engagement in the PL process. I then discuss the subthemes that emerged. I conclude each section with a summary.

Theme 1: Content

I begin by identifying participants' perceptions of content at PL events before the study and compare this with their views of teacher-generated content which featured as part of this study's PL process. This theme revealed three subthemes presented in Figure 16. They are discussed below.

Figure 16

The Impact of Teacher-Generated Data as Content for Professional Learning



Participants' Perceptions of Content before the Professional Learning Process.

In *Phase One* participants talked generally about their experiences of PL describing PL content as theory, and the application of theory which Yvonne referred to as 'things to do in the classroom' (I1). While not referencing particular theories Helen's perspective had changed over a number of years. She sought evidence for why new practices were being promoted, crediting it with the power to influence whether she adopted them. Theory provided her with a rationale for doing what she did.

Yvonne believed there could be 'too much theory' (I1) in PL. She sought guidance on how to implement programmes. Theoretical explanations caused her to 'zone out' (I1). She was disappointed by a recent Summer Course (i.e. optional week-long PL courses available to primary school teachers in Ireland) that did not provide 'loads of practical examples'. Bríd's attendance at a recent PL event that included reading strategies, had given her the confidence to teach the particular approach. A *Sustained School Support* visit from Oide (i.e. facilitated PL opportunities available to schools on request), had 'instructed' Helen on tips around questioning. Helen and Bríd pursued PL opportunities

that would excite them and that could be easily implemented in their classrooms thereby ‘hook[ing]’ them in (Helen I1, Brid I1).

The data suggested participants generally received their PL from people outside their school context. They expected to receive ideas, whether specific to the needs of particular children, or direction on how they could apply new content to their practice, sometimes reflecting the ‘helpful hints’ Timperley (2015) hoped to avoid as part of coaching. Changes to their pedagogy such as the teaching of reading, were influenced by evidence they received of how practices ‘work[ed] on the ground’ (Laura, I1).

Participants’ Perceptions of Content following the Professional Learning Process. The literature suggests that PL effectiveness may be determined by the degree to which its content is ‘embedded’ in teachers’ experiences (Darling Hammond et al., 2017; Little, 2006; Timperley, 2015). Where, as was the case in this study, the foci are pedagogies, subject knowledge, and accessing new curricula (Darling-Hammond et al., 2017), it is recommended that the content reflect “a more complex vision of teacher thinking, learning and practice” (Little, 2006, p. 3). Classroom-generated content can, according to Nelson et al. (2012), provide opportunities for deepening our understanding of how children learn.

This PL process required participants to generate content (Alexander, 2018; Hultén & Björkholm, 2016; Wilkinson, 2017) in the form of A/AV recordings of their engagements with children which they made available to their respective PLCs. The recorded content, participants’ pedagogies and their knowledge became potential catalysts for ‘deep sustained conversations’ (Timperley, 2015) around classroom practices (Table 13). How this impacted participants in unique ways is considered later in this section.

While different when compared with how participants described PL in *Phase One*, and valuable in terms of teachers reflecting on their practices (A. Kennedy, 2022), front-loading classroom experiences may be limiting where teachers’ knowledge is limited (Timperley, 2015). If PL is ‘rooted’ in ‘problems of practice’ (Little, 2006, p.4) then the participants first needed to accept their children-teacher engagements could be advanced (Michaels & O’Connor, 2015). What resulted for this study was an attempt at balancing a safe exploration of participants’ existing practices, with an offering of sometimes challenging alternatives. This is explored later as part of facilitation.

Teacher-Generated Data as a Starting Point for Professional Learning. Most spoke positively about using their teacher-generated data as a catalyst for professional

conversations. However, participants were unfamiliar with the process, and initially, some found it difficult. According to Lefstein et al. “sharing and investigating problems of practice is rare in the wild” (2020, p.8). Aside from recording issues referenced in Chapter Four, participants were unsure about a learning process that valued errors and successes equally:

I suppose it was confusing me at the beginning. What am I meant to do? Which is right? Trial and error then I suppose, whereas in the other one (Webinars) you are told this is right. I'll just do that. That's what's right (Yvonne, I2).

Helen was similarly concerned with receiving the ‘right’ information and this continued through the process.

I kind of feel when I'm going to things, if I've given my time to something, like everyone is brilliant and you learn loads from everyone. It's not to disrespect anyone at all but I like when I'm getting maybe something that's right (Helen, I2).

Initial uncertainty dissipated for all but Eimear after the first cycle. Eimear's ongoing discomfort with a PL process that relied on self-reflection and critiquing one's practice illustrates the potential difficulty for teachers with Brown et al.'s (2021) proposal that teachers be required to challenge their beliefs as part of improving their teaching.

Professional Learning that Required the Interpretation of Knowledge.

Participants described applying the CK and PCK they received from their peers and me to their practice, suggesting they interpreted it to suit their context. They recalled successfully incorporating specific practices into their engagements suggesting they may have critically reflected on, rather than accepted without question, the ideas presented to them (A. Kennedy, 2022). Ellen, Bríd, Yvonne and Niamh referenced instances outside their recordings where they applied their new knowledge. Despite Eimear's struggle with critiquing her practice referenced above, her repeated use of the term ‘on the back of our discussions’ (I2) illustrated a connectedness between her PL experience and her classroom practice. Whether as part of implementation, Eimear critically engaged with and interpreted the suggestions to suit her context is unclear.

Ann and Bríd described how applying their new knowledge differed from other PL experiences:

... you had a chance to bring it into your classroom. Where I know in a whole school one, they say you can try it out, but you might not necessarily try it out. You might do it. You might not do it (Ann, I2).

I think if you're watching something abstract or kind of someone coming in or even just someone showing a video from the PDST, and obviously those are helpful, but

you kind of glaze over them a bit and you're kind of thinking 'oh yeah, that's a nice idea' and then you instantly forget about it (Brid, I2).

The fact that the content reflected participants' contexts and their practices, and those of their peers motivated participants:

I found the videos useful because it was like children I knew. It was me. Like it was teachers I knew so it related to me. ... at the beginning I would be like what is she talking about? That didn't apply to me at all until I see the video and think oh it does (Yvonne, I2).

Brid felt 'instantly connected' (I2) when she recognised the children in others' recordings. Knowing the children and the fact that the recordings were not 'case studies' also appealed to Laura. She described the 'relevance' of content that was situated in participants' own classrooms as a motivator in terms of teachers implementing new learning.

Unique Professional Learning Experiences. The content in each PLC was common to the members in that PLC. However, being required to critically engage meant their PL experience was impacted by the degree to which they reflected, thereby creating unique learning journeys (Appendix AA). Helen who worked closely with another member of the PLC described this: "I'd say even with XX, like my experience is very different to her experience... the same type of setting, but you know you take your own kind of spin on it" (Helen, I2).

Participants were challenged in different ways. Eimear described how her assumptions throughout the process may have prevented her from supporting her children's critical thinking. Brid reported becoming more 'thoughtful' in her engagement later in the process, while in *Phase Three* Ann felt she could now allow the children to 'go off topic' – an approach adopted earlier by others. Rather than comparing the degree to which participants engaged or evolved in their practice, it may be preferable to regard this use of teacher-generated data as accommodating of participants' different starting points and other influencers such as professional experience, epistemologies and classroom culture.

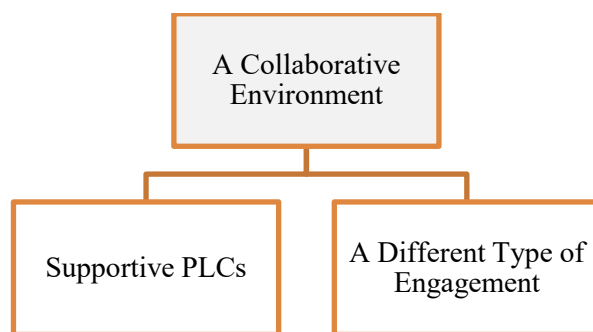
Summary: Content. Described by Darling Hammond et al. (2017) as highly contextualised PL, content that emanated from participants examining their own classroom data was accepted as beneficial by the majority of the participants. It marked a shift in how they defined PL as it featured knowledge that was generated through discussion rather than information that was transmitted from a source outside the participants' contexts.

Theme 2: A Collaborative Environment

A second element synonymous with effective PL is collaboration. In this section I examine participants' perceptions of collaboration within the context of PL and consider the two subthemes presented below.

Figure 17

Professional Learning in a Collaborative Environment



Perceptions of Collaboration before the Professional Learning Process.

Collaboration in the context of PLC membership was first introduced to participants at an introductory meeting held in both schools in *Phase One*. In the semi-structured interviews that followed I outlined the principles of a PLC describing it as a collaborative approach to PL (Appendix A). When asked if they had ever been a member of such a group participants spoke positively about collaborative endeavours where they questioned themselves and colleagues. Working with colleagues around a common issue made the learning ‘meaningful’ (Helen, I1). According to Laura “...the wheels are in motion and people are talking and something is going to happen from this” (Laura, I1). Eimear referred to the support she received from a PLC outside the education sector. Yvonne and Bríd both referenced online group discussions on social media (i.e. Instagram and WhatsApp) where teachers displayed their practices. Bríd, Rachel, Laura, Niamh, Yvonne and Ann referenced the benefits of ongoing informal conversations that occurred on corridors or in neighbouring classrooms (The Teaching Council, 2016).

When asked how they felt a PLC might operate, participants described collaborative decision-making (Helen, Niamh, Yvonne) where they would decide their own agenda. While possibly ‘intimidating’ (Helen) and ‘awkward’ (Bríd) at the outset, they were confident it would become ‘a safe space’ (Niamh) for like-minded people, providing collegial support (Bríd, Rachel, Laura, Niamh, Ann, Eimear) and professional recognition (Bríd, Ellen). Laura presumed ‘a lot of complimenting’ (I1). While collaboration was

viewed positively, participants believed they were embarking on something unfamiliar and were recognisably cautious.

Perceptions of Collaboration following the Professional Learning Process. My review of the literature caused me to change my initial plan to establish communities of practice where members would collaboratively seek solutions to common problems in ‘joint enterprise’ (Wenger, 1998). On recognising the potential impact of my presence as a more knowledgeable other (MKO) I opted for a PLC that could accommodate my presence. Analysis of *Phase Three* data suggested that most participants willingly shared their experiences in supportive and comfortable PLCs. However, it appeared they were unprepared to disagree with colleagues in order to resolve issues pertaining to their children-teacher engagements.

The term ‘community’ rather than ‘collaboration’ better described what occurred so far as participants established supportive and comfortable discussion spaces (Darling et al., 2017). Their group discussions did not appear to include attempts at shared inquiry and problem solving – believed to be a benefit of collaboration (Brown et al., 2021). Leifstein et al. (2020) who concur with this finding, suggest like Eshchar-Netz et al. (2021), that it may be norms such as privacy and autonomy, typically associated with teachers in classrooms, that impede a collaborative approach to problem solving, and that this type of engagement requires an expression of vulnerability unfamiliar to many in the sector.

Supportive Professional Learning Communities. The participants felt reassured by their membership of the PLC, typical of the support teachers’ groups provide their members (Broderick et al., 2012), and the affective benefits for PL models that recognise adult learning theory (ALT) (Merriam, 2017). At a fundamental level, it provided feedback participants believed was absent for teachers who worked in isolation, “wondering if what they’re doing is right or wrong” (Laura, I2) (Little, 2006). Members adopted each other’s practices. Niamh, Ellen and Rachel described encouraging each other outside the scheduled meetings. Participants congratulated and consoled each other on their A/AV recordings. This support was evident in the identities the PLCs appeared to develop. For Bríd it was ‘a bonding thing’ (I2), for Rachel ‘a community together’ (I2). Yvonne believed her group were “all kind of on the same level” (I2). Ellen declared a significant outcome for her was ‘us as a group’ (I2), feeling members were open with one another. Whether they were a “robust teacher community ... at ease with disclosing their teaching dilemmas” (Little, 2006, p.17), or what was required to achieve this level of collaboration demanded more of their relationships, is queried below.

Participants believed that the comfort and security they felt within the PLC facilitated their collaboration and ultimately their PL. Initially uncertain about how the group would operate, Helen's fear of being judged meant she did not contribute to early PLC discussions. She and Ann reported participation later when they were more comfortable. Feeling themselves becoming 'relaxed' within the group increased the contributions of Rachel, Ellen and Laura.

Two participants described the significance of being listened to and having a 'voice' (Lefstein et al., 2020). For Bríd it was a 'nice connection' while Rachel felt safe. Ellen noted she and her colleagues being open with one another reflecting the literature's argument for considering trust as intrinsic to PLC development (Darling-Hammond et al., 2017; Desimone, 2011; A. Kennedy, 2014; Little, 2006). It was generally accepted that knowing each other as colleagues on the same staff contributed to PLC engagement.

A Different Type of Engagement. Ann described knowing her colleagues 'better' following PLC engagement. This perhaps meant knowing them differently. The PL process may have demanded a different level of familiarity or 'a greater knowing of people' (Helen, I2). Perhaps the nature of the participants' engagements had changed and therefore, their relationships were altered. Despite collaborating previously, participants were now engaging in "professional dialogue based on what we [they] were all doing" (Ellen, I2). Collaborating on what might positively impact their practice was according to Yvonne, a new experience for participants. Their existing relationships may have been unable to support this new engagement which included critical reflection.

This suggests that the PL acquired by members of a PLC may be somewhat reliant on the degree to which relationships evolve. Niamh had remained positive about teachers meeting to talk about their practice: "... it's always nice to get together with your colleagues and discuss things that are going on in your classroom" (Niamh, I2). However, based on the findings, without the greater development of relationships such meetings may not bring about changes in practice. Findings regarding the role of the post-recording meeting (PRM), explored later, may dispute the observation by Helen, Niamh and Yvonne that comfort levels at the end of the process were sufficient to allow participants say what they thought and 'talk away' (Yvonne, I2).

Initial experiences of the PLC were intimidating for some. It made Eimear 'feel bad' (I2) about her practice. Rachel felt 'out of her depth' (I2). Laura questioned her ability: "... the first video, everyone is so nervous and oh my God what have I done? Has

everyone done something amazing and then you go into the room, and everyone is the exact same” (I2). The act of observing colleagues was new to participants. Commenting on their practices may have added to the discomfort. It was understandable therefore, that participants needed the support of each other. However, whether this support enabled what Cochran-Smith envisages of professional engagement - the questioning of practices and exploration of others’ perspectives (Fiorentini & Crecci, 2015) - or it was inhibited by a desire to ensure colleagues were supported, requires consideration.

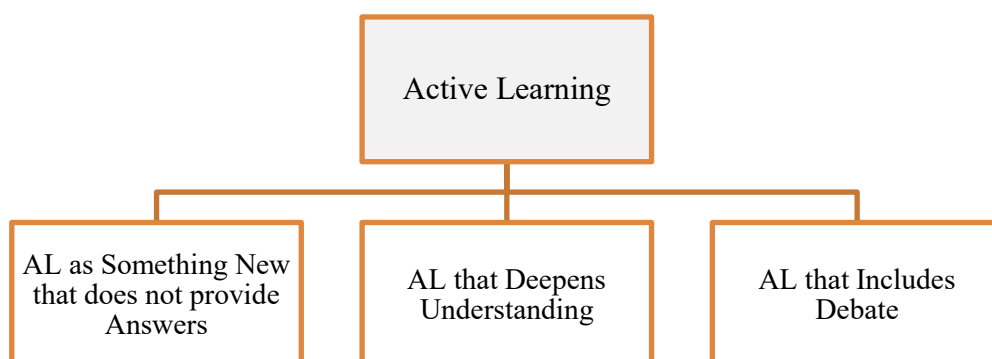
Summary: Collaboration. In this study community membership, while supportive and conducive to sharing ideas may not always have resulted in PL. Timperley (2015) describes how by not challenging ‘the status quo’ and attempting to remain supportive of colleagues, classroom practice is unlikely to change. While a level of discomfort may have increased PL, this may have been something participants were anxious to avoid. Preferring to establish supportive spaces, participants did not tend to focus on resolving common issues and were happy to rely on information I provided (Nind, 2003). Collin and Karsenti’s (2011) recommendation for in-service teachers, that reflective practice occur within an interactional space may not, therefore, operate similarly for those who are qualified.

Theme 3: Active Learning

Analysis of the data revealed the significance of active learning (AL) in supporting PL. This is explored below across the three subthemes presented in Figure 18.

Figure 18

The Impact of Active Learning on Professional Learning



Active Learning before the Professional Learning Process. Active learning features opportunities for teachers to make sense of new information (Darling-Hammond

et al., 2017). In *Phase One* participants equated AL with group discussions. Ann compared her online PL experience around the Primary Language Curriculum/Curaclam Teanga na Bunscoile (PLC/CTB) (NCCA, 2019), to that of her staff who had engaged with their in-service PL in-person at school:

There were discussions going on whereas I was by myself, sitting at home. Like I did listen to it. You had to but that time we had the whole one for the whole staff - they would have been talking about it, writing things down whereas I would just have to show I completed it. So, I think when you are by yourself you are not going to do it as well as if you are in a group (Ann, I1).

Helen believed examining ideas in a group meant participants could come to their own understanding of how new learning might be applied to their classroom context. She spoke about ‘bouncing ideas’: “It’s like adding a bit on to someone else’s story, you know, so you’re in dialogue – it’s discursive” (Helen, I1). Bríd was similarly committed to discussion, commenting that with this involvement she could concretise into practice what might otherwise remain abstract. Conversely, Rachel was less interested in contributing to the discussion, preferring to receive information: “You know I’m not good in a crowd and so being an active participant in terms of maybe group discussions and that kind of thing and reporting back - that’s not what - I don’t find that of huge value” (Rachel, I1). Preference in terms of facilitation related to participants’ engagement styles. Those who valued discussion and questioning were evidently happier when this was available as part of PL.

Active Learning following the Professional Learning Process. Linked with ensuring PL is ‘embedded’ in teachers’ classroom experiences is the view that actively engaging with information provides opportunities to deepen understanding of one’s practice through reflection and discussion (Darling-Hammond et al., 2017; Desimone, 2011; Kazemi & Franke, 2004; Little, 2006). Instead of layering new information on top of older thinking (Darling-Hammond et al., 2017), teachers reflect on how what is being explored might be applied to their practice, and having applied it, they examine the outcomes in a ‘rinse repeat’ cycle (Bríd, I2). This collective engagement through peer coaching and modelling (Timperley, 2015), differed to participants’ original interpretations in so far as what was being discussed was directly linked to the work of PLC members.

The professional learning community meeting (PLCM) provided one context for AL. A second was the post-recording meeting (PRM) discussed below. Analysis of the data related to AL within the PLC revealed that participants had not previously based their PL discussions on their own practice. Participants found this difficult possibly because of their

hesitancy to critically examine each other's practice described earlier, and the nature of their comments which were congratulatory. The move from a 'proving' to an 'improving' stance (Nelson et al., 2012) while not always evident, was made possible by teacher-generated classroom data and while AL did not provide answers, it raised questions that may have deepened participants' understanding.

Active Learning as Something New that does not Provide Answers. The participants in this study appeared unfamiliar with the act of reflecting on practice in order to develop it. In *Phase Three* they described how at the outset they were uncertain how their engagement would look. Helen and Eimear believed they might not have anything to offer the process, with Helen 'sitting back' feeling her contributions might not have been 'beneficial' (I2). In her words she did not wish to sound like 'an idiot', preferring to be surer before offering an opinion. She believed she contributed once she had acquired information in the form of classroom practices. This model of PL, she believed, expected more from her.

... you threw it back to us a bit more than my previous experiences. Whereas, in the past in different sessions ... there would have been a lot more content and then maybe you were asked a question or two and that was you done (Helen, I2).

Eimear, 'at a loss' initially, recalled thinking "Am I actually contributing anything? Are you just ... humouring me here? Because I'm not really sure I'm adding anything of value here to this conversation" (Eimear, I2). Eimear's search for a "a clear path in terms of what to do" (I2) mirrored Yvonne's initial uncertainty around the act of teachers sharing practices that were not being judged "right or wrong" (I2).

The participants in this study gleaned knowledge from four sources; their reflections on their practice and that of their colleagues, their discussions within the PLC, their conversations with me at PRMs, and material I provided in the form of evidence-based recommendations and academic articles. This information was open to interpretation with participants selecting what was relevant to them and adapting it to suit their context. Bríd's 'rinse repeat' reflective cycle referred to earlier meant neither I nor the process could provide answers to issues raised.

In PLCA4 three participants described how despite preparing their questions and adopting some of the practices explored during previous PLCs, there had been no dialogic engagement. During Cycle 3, Niamh reported that her A/AV recordings were not providing her with additional knowledge. However, later she acknowledged how they had made her reflect on the difference between children engaging in dialogue and simply answering

questions. While she felt her questioning had not changed, she willingly waited for the opinions of more than one child to a question. What participants had previously interpreted as AL – discussion around transmitted material that was uncontested and deemed correct – was inconsistent with the ‘adaptive’ nature of the PL model (Timperley, 2015) being asked of them in this study. Timperley (2015) describes it as moving away from a passive stance where external agencies attempt to advance teachers’ practices. There was also the suggestion that knowledge could be subjective and changeable depending on how it was interpreted (Zdybel, 2020). Participants’ inexperience with this process may have contributed to their initial hesitancy around engagement.

While four participants reportedly enjoyed the PLC, most agreed that AL was difficult. According to Helen “you have to really look at what works for you and adapt things” (I2). It required ‘work’ (Bríd, I2). Laura, Ann and Rachel described being uncomfortable and ‘leaving their comfort zone’. Ann was slowly becoming more comfortable suggesting a somewhat difficult move from more transmission type PL models. Rachel recalled feeling ‘out of her depth’ in terms of the analysis she was being asked to do but agreed that challenging herself was important. Niamh believed the process ‘forced’ her to look at and think more about curriculum. The process provided Helen with ‘a starting point’ (I2). While she had learned how to advance her children-teacher dialogue, she continued to struggle with it. Ann and Eimear described their ongoing struggles with OL&C assessment. Rachel, who felt she had improved in this regard, noted how the process had challenged her to think more deeply and ‘read up a bit about it’ (I2).

Active Learning that Deepens Understanding. In reflecting on how this PL process differed from other PL experiences, Bríd described it as “practically doing things and talking about what went wrong - what didn't - what can I do next?” (I2). This engagement took three forms; the provision of content in the form of A/AV recordings, oral contributions to meetings, and implementation of practices explored at these meetings.

In line with research by Kucan (2007), Nelson et al. (2012) and Wilkinson et al. (2017), Yvonne and Niamh described how the PL process caused them to reflect which provided perspectives they had not previously considered. Participants in general described how AL and trialling new practice brought a deeper understanding of issues that impacted their children’s dialogue. Rather than suggesting generic solutions to teachers’ problems (Timperley, 2015), or simply extending children’s utterances for example, PLC engagement and AL deepened participants’ understanding of children’s learning (Cochran-Smith & Lytle, 2009). This was evidenced in Helen, Rachel, Yvonne and Ellen’s positivity

expressed in *Phase Three* around the discussions that took place to decipher the intentions of learning outcomes in the Curriculum (PLC/CTB, 2019). Previously Ellen had read the LOs without considering their meaning.

Helen, Ellen and Laura noted the positive impact of members ‘sharing’ their ideas in what Ellen termed ‘a professional dialogue’ (I2). Enabled by the smaller group size, and facilitation by me, Ann excitedly recalled not only listening to colleagues but responding to their recordings and providing opinions. Ellen became equally active: “I don’t contribute an awful lot to an awful lot of stuff. I tend to be more of a listener rather than contributing but I think overall, in all of the meetings I think I spoke a good bit” (Ellen, I2).

While analysing children-teacher engagements in the PLCM was difficult, according to Laura it “definitely taught us” (I2). The recordings provided evidence on which discussion could be based (Niamh, I2). The resulting discussions were focused and differed from ‘passive’ or broad general comments made at staff meetings (Bríd, I2). Bríd gave the example of using more manipulatives in mathematics: “a great suggestion but what did that mean and what should she actually do?” (Bríd, I2). The value of in-person discussions was reiterated by Yvonne:

Like a lot of the ones (online courses) I’ve done, I wouldn’t be on camera, and I can’t talk back. It’s like they’re just telling you the stuff. Whereas here it was like we would be questioning each other and like, why isn’t it working, why is it working and what can be changed? (Yvonne, I2).

In a similar vein, Niamh described how sometimes in-service delivered by people from outside the school was devoid of school-based discussion. The PLC provided Ellen with the opportunity to question, something she felt was more readily available as part of PL in DEIS schools (Delivering Equality of Opportunity in Schools), a programme to address educational disadvantage in Irish schools, when compared with non-DEIS schools.

Active Learning that includes Debate. With a socio-cultural theory of learning underpinning this study it was necessary that participants questioned each other and sought clarification. Participants’ speculations about whether strategies would work suggested that while changes to pedagogy could occur without AL, deepening one’s understanding required the facility to question and/or disagree as part of the discussion (Brown et al., 2021). They sought additional information from their colleagues and me to increase their understanding.

While participants may have believed they were questioning each other, contesting what someone else said was less evident. *In Phase One* when asked about the value of discussion, Ellen commented: "... if you don't necessarily agree with the person, you could voice your disagreement. Now I might not be inclined to do that (laugh)" (Ellen, I1). Those who believed critiquing might provide new learning were also fearful of it being misinterpreted and spoke about the need for cautious or 'respectful' language (Bríd, I1). The possibility of offending a colleague was raised by several participants including Eimear:

Nobody would want to critique even positively because I think the fear of being critiqued yourself is so immense that you wouldn't want to offend your colleague. It comes from a place that you know, you wouldn't want to upset or takedown what you know your colleague has killed themselves to do (Eimear, I1).

Eimear went on to describe a collaborative project with colleagues: "There was nothing but positivity at the loss of constructive criticism because nobody wanted to take away from their colleague" (Eimear, I1).

It appeared this position had not changed for participants by *Phase Three*. Teachers "gloss[ed] over differences so as not to offend" (Timperley, 2015, p. 4). Aside from an instance cited by Helen, when they debated when to intervene in children's discussions, participants were unsure if they witnessed differences of opinion in their engagements. Participants challenged me and I them during PRMs, but in PLCMs participants preferred to respond positively to their colleagues' contributions.

While engagements within the PLC may have been influenced by its members, the school in which it operated also impacted how it functioned (Broderick et al., 2021; Eshchar-Netz et al., 2022). In *Phase One* participants from both PLCs described school relations as positive. Teachers talked to each other about their work, but experiences of school-based collaboration and discussion were limited. Participants were unsure whether their existing school cultures could support reflective practice within a group. Regardless of leadership styles there was a sense that teachers operated in isolation and as such the advances they made could go unsupported. Alternatively, they engaged with small numbers of like-minded colleagues.

The PL process provided opportunities for participants to advance engagement with their colleagues. While it encouraged them to move beyond complementing and towards questioning, the study may not have lasted long enough for this to occur. It may also have been the case that the culture underpinning each PLC's engagements could not have

supported challenging by peers (Timperley, 2015). Participants instead displayed loyalty to their colleagues by commending them – a feature of PLC membership they deemed important.

Culture also operated at a deeper level than school-based norms. In *Phase Three* participants alluded to what Ellen had suggested in *Phase One*, that they were ‘conditioned’ (Helen, I2) to seek affirmation from others: “In our job we don’t get that. We never have somebody saying - not that you’re looking for praise - but you don’t get any sort of feedback from anybody. And I think you need it” (Ellen, I1). According to Helen “even at this age, you want someone to say, ‘yeah well done that was great’” (I2). Another participant described her disappointment at me not commending her work on occasions when I was attempting to extend her analysis of her recordings. My questioning her practice left her feeling ‘defensive’ (I2). While she recognised my role as necessary, she also needed to have her work acknowledged and this appeared to take precedence over her reflection. If the disappointment of these two participants at not receiving positive comments regarding their work, reflected a general need in teachers for reassurance, this may have had implications for a PL process that is based on questioning as part of critical reflection and that values differing perspectives (Alexander, 2018).

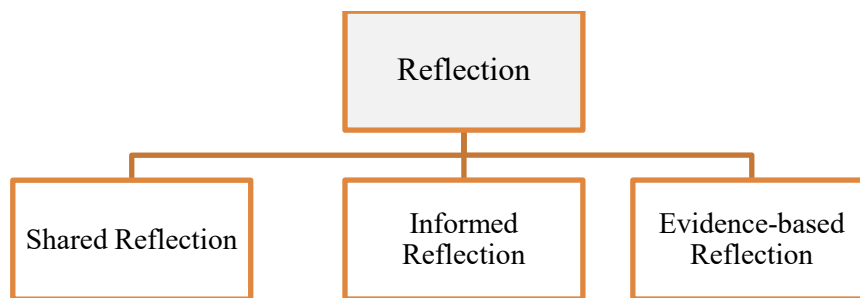
Summary: Active Learning. Active learning was interpreted differently by participants following the PL process. Participants were encouraged to question fellow PLC members and me which was reported as sometimes difficult. Helen described herself now as ‘both recipient and creator’ (I2) of her PL. As suggested by Darling-Hammond et al. who describe AL as “designing and trying out teaching strategies” (2017, p. v), Helen believed that in developing and then engaging with the content, teacher understanding was being prioritised over the adoption of recommendations. While debate may have been evident in the PRMs, something that is examined later as part of facilitation, it did not generally occur during the PLCMs.

Theme 4: Reflection

This fourth element – reflection – is examined first in terms of participants’ practices before and following the PL process. The three subthemes presented in Figure 19 are then discussed.

Figure 19

Reflection as Part of Professional Learning



Reflection before the Professional Learning Process. When asked in *Phase One* interviews whether and how they reflected, all participants responded positively describing how their practices changed as a result of reflection that was largely informal. While one participant believed she had not been taught how to reflect, most believed it was easily done. Yvonne did it driving home in the car. Niamh felt she was ‘constantly thinking’ (I2). Defined as something that was ‘good for us’ (Rachel, I1), participants described reflecting independently, judging the effectiveness of their own lessons and adapting them accordingly. When asked to consider PL in terms of self-critique, all participants aside from Yvonne and Bríd, felt that they currently did this.

Bríd, who was more recently qualified, critiqued her lessons in writing. She described herself as ‘transitioning into informal reflections’ where she would ask colleagues for advice. She believed her limited experience impacted her capacity to reflect independently and resolve issues.

The act of reflecting with others was referenced by six participants who described discussions with colleagues and teachers in other schools. It was agreed this was both meaningful compared to that which occurred independently, and difficult. However, Eimear and Ann described being ‘afraid’ to ask for advice or offer an opinion. The necessary openness required for this type of engagement could, according to Helen, leave teachers feeling vulnerable: “You don’t want to be talking about things that didn’t work out well for you but then you learn so much” (Helen, I1). As noted earlier, Eimear did not feel ‘confident’ to contribute to such discussions (I1). Reflection on summer courses and during in-service featured questioning which left some participants uncomfortable. Eimear described it as a ‘necessary evil’ (I1).

Participants were asked if as part of their PL they could envisage critiquing each other's work as they questioned "their own assumptions and practices and the assumptions and practices of their colleagues" (Cochran-Smith & Lytle, 2009, p. 151). Some responded positively: "... it's great for somebody to challenge you on something that you really think strongly about because you see different avenues" (Helen, I1).

Niamh who spoke positively about her experience of *school learning walks* (i.e. brief visits to the classrooms of peers for the purpose of PL) in another jurisdiction, felt teachers in general did not like to hear negative comments about their work. Similarly, Yvonne and Bríd reported the unlikelihood of disagreeing with what was posted online preferring to ignore it. It appeared that as Ellen and Ann reported, people were unlikely to publicly disagree with each other.

Therefore, while the majority of participants considered conversations with colleagues as reflective and deemed them valuable in terms of impacting their practice and increasing understanding, it was unclear the degree to which these engagements challenged existing views. Participants described the need for 'openness' and 'honesty' around one's own practices but were concerned about reflecting on the work of colleagues in a way that was anything other than complementary.

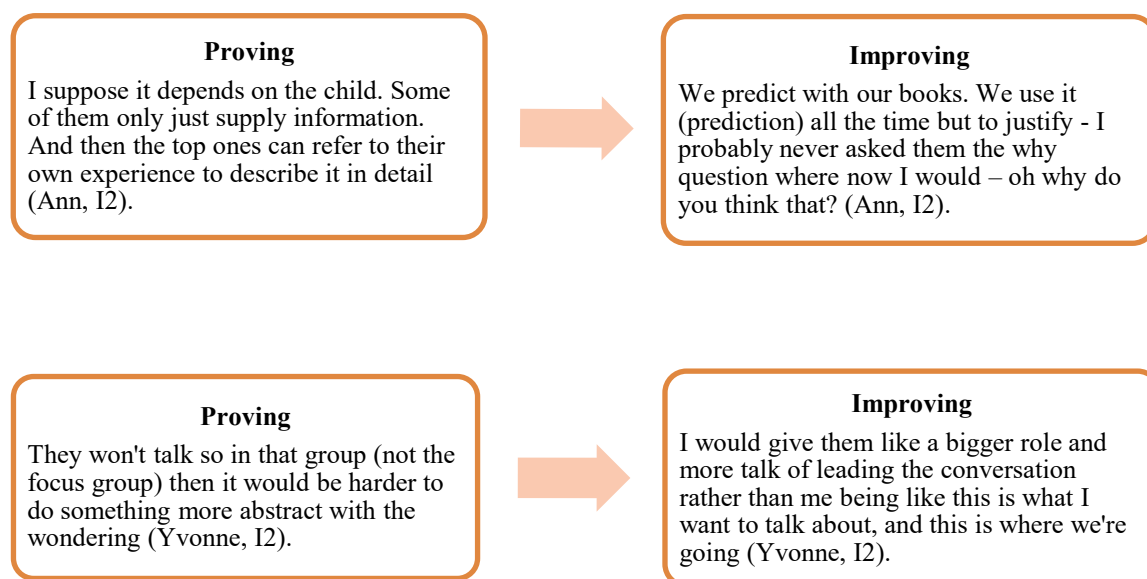
Reflection following the Professional Learning Process. Teacher reflection is central to PL (Brown et al., 2021; Cochran-Smith & Lytle, 1999; Doğan & Adams, 2018; Šarić & Šteh, 2017). However, it can remain at a 'superficial' or storytelling level (Timperley, 2015, p. 17) with deep inquiry dependent on teachers developing new knowledge and applying it to their practice (Hoogland et al., 2016). In *Phase Three* participants continued to report sharing their experiences as conducive to reflection, thereby agreeing with Hoogland et al. (2016) and Brown et al. (2021) that their increased CK and PCK allowed them to provide evidence to support their claims. Their reported changes to their perceptions and practice (Table 13) provided evidence of reflection (Van Lare & Brazer, 2013).

There was a suggestion also that their reflection was beginning to allow participants to "doubt and broaden the limits of their comfort zones" (Šarić & Šteh, 2019, p. 81). I examined to what participants attributed their children's difficulties and coded them as in Nelson et al.'s (2012) terms *proving* or *improving* as shown in Figure 20. Where they considered their own functioning, I coded the example as *improving* (i.e. the participant addressed the child's difficulty by altering her own practice) (Appendix W), consistent

with Argyris' double loop theory (as cited in Brown et al., 2021). Where they reported the child's need as due to within-child factors such as maturity or problems with school materials, I labelled their explanation *proving*. The teacher had chosen not to reflect on her own role and what she might do to address the issue. I was not concerned if participants responses were successful but rather if they reflected sufficiently to alter their behaviour "rather than simply transmit [ting] what is known" (Brown et al, 2021, p.6). While there was evidence of both perspectives within *Phase Three* interviews, the fact that participants had begun to question their practices suggested evidence of doubt as sought by Šarić and Šteh (2019) and the questioning of assumptions referred to by Cochran-Smith (Fiorentini & Crecci, 2015).

Figure 20

Reflection and the Movement from Within-Child Factors to Self-Critique



Shared Reflection. Most participants maintained their position that shared reflection with one or more people was preferable to reflecting on one's own. Ann described how the PLCMs featured 'looking for what went well' (I2). Helen recalled 'comparing stories', "Oh, you did this. Oh, I didn't do that. Why didn't I do that? Is that something that I could do?" (I2). While they did not challenge each other, it appeared that by reflecting on each other's practices participants questioned themselves. Bríd, a less experienced teacher, described learning from observing others reflecting in the PLC. She felt opportunities for this level of shared reflection had not existed for her outside this

study. Eimear, however, was less positive feeling ‘foolish’ as she publicly reflected on her practice.

Informed Reflection. Five participants described how their newly acquired CK and PCK caused them to look for something different in their children-teacher engagements which in turn deepened their reflection. Rachel described herself being “more conscious then, that they would actually build on ... I suppose am I more sure what I am aiming for?” (I2). Acquired CK and PCK (Table 13) impacted the depth of participants’ reflections as it provided possible reasons for why their children were or were not engaging. As outlined above they moved beyond within-child factors such as having English as an additional language: ‘You would have said oh that’s EAL ... but I wouldn’t have been able to put them on a continuum. Like (pointing to LO12) ...if they were able to reflect on it, you’re very high up on the continuum’ (Niamh, I2).

Evidence-Based Reflection. Participants’ reflections appeared to benefit from them being able to draw on evidence from their A/AV recordings: ‘I probably wasn’t even as much aware until you analysed it very carefully, exactly how they weren’t necessarily acting on or expanding on what the other person was saying’ (Rachel, I2). The extent to which participants referenced being enabled to ‘see’ practices of which they were previously unaware, was noteworthy. Brown et al. describe teachers noticing and how it “disrupts our conceptual models” or causes us to “re-see what we had often regarded ... without thinking” (2021, p. 7). It appeared that this stage was necessary if participants’ reflections were to impact their practice.

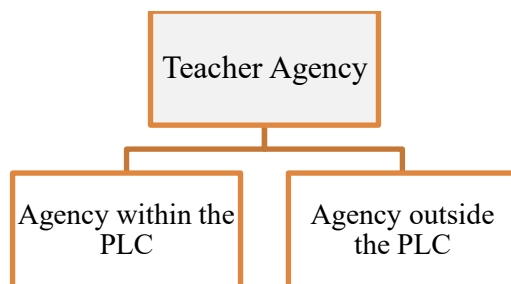
Summary: Reflection. Participants had always reflected on their practice. Now most were confident that because of their increased CK and PCK, these reflections would impact it. Having something on which to reflect (i.e. their A/AV recordings) was beneficial as it supported their claims. While participants did not always share their reflections at the PLCM, group discussions caused them to reconsider their practices.

Theme 5: Agency

PL that is committed to developing teacher agency or the capacity to exert influence (Merriam-Webster, <https://www.merriam-webster.com/dictionary/agency>) is widely supported (Cochran-Smith & Lytle, 1999; King, 2014; King et al, 2022). The study’s data when analysed produced two subthemes presented in Figure 21 and explored below.

Figure 21

Agency as Part of Professional Learning



Agency before the Professional Learning Process. While not asked directly about agency in relation to their PL in *Phase One*, participants' descriptions of their PL experiences suggested their agency was limited to their selection of particular PL courses. Their satisfaction with this arrangement mirrored findings by Louws et al. (2017). With course content generally predefined, and the format often reflecting a transmission model of delivery, agency appeared limited to their questioning of facilitators. Both inexperienced and experienced participants believed being able to ask questions and seek clarification was important.

Agency following the Professional Learning Process. I anticipated that in establishing a PLC participants would be agentic in designing and facilitating their PL. I naively envisaged participants identifying their areas of need, investigating possible solutions and sharing these within the PLC, thereby reflecting Kennedy's (2014) more *transformative* model of PL. While I stipulated OL&C development and dialogue as the general area of focus, I believed participants would determine the direction the PL would take. The data revealed that agency within the PLC was limited and relied on acquired knowledge. However, participants were agentic in how they addressed their children's needs in the classroom. Some displayed agency in how they influenced whole-school decision-making around planning and assessment.

Agency within the Professional Learning Community. By the end of the first PLCMs, it was evident that my facilitation of the meetings would impact their direction and therefore, participants' experiences of agency (Nind, 2003). Participants were not inclined to take the lead in PLCM discussions, and most did not view their A/AV recordings independent of my facilitation. This highlighted the need for an MKO.

Two participants who appeared to struggle with agency as an aspect of PL, and adopting Timperley's (2015) adaptive expertise, regularly sought instruction as to what to do. A tendency to interpret suggestions literally and without question may have resulted in one participant practicing limited reflection and having limited success in terms of her classroom practice. Her *Phase Three* interview responses featured my suggestions to her rather than her reflections on them indicating she had implemented them without question.

In *Phase Three* I asked if participants experienced agency during the PL process (Appendix A) – a broad question with participants free to interpret it as they wished. Differing interpretations of agency and control impacted their responses. For example, one participant was satisfied I controlled the meeting content while a colleague from the same PLC reported that while I selected the A/AV recordings, the members directed the discussion and therefore, the content.

All participants reported that initial uncertainties brought about by inexperience around the PLC resulted in them following my lead. It was generally accepted that I suggested steps that might be taken to bring about dialogue and four participants described how I modelled analytical behaviours (Darling-Hammond et al., 2017). However, it was also agreed that my influence over what was discussed lessened as the PLCs progressed, and with participants' increased CK and PCK (Table 13). In both PLCs participants described it as me having an 'agenda' and participants providing the 'content'. Yvonne believed I knew the direction in which the group was moving, but it was the members who controlled the discussion, based on their classroom experiences.

On three occasions, participants supplied information that influenced the direction of their PLC. These included Bríd's reference to the comprehension hand signs she had located in an article I had recommended by Gregory and Cahill (2010):

Obviously, I know that you'd kind of provided that article (Gregory & Cahill, 2010) and you were like take what you want from it, but I think me actually applying it and then going to the group and going 'this is working'. I think that was a contribution (Bríd, I2).

Interestingly only Rachel independently sourced information around a topic suggesting a reliance on the facilitator to provide solutions.

Helen and Laura used the term 'steer' to describe how I managed the discussions. Laura commented: 'I don't feel like you were controlling it, but I feel like you probably had to steer it because one of us wasn't going 'well next week I really want to talk about''

(I2). When asked why she believed PLC members did not play a greater role in deciding the direction of their PL, she responded:

I suppose it's very comfortable isn't it to let somebody steer and we'd all trust you to be the best person for that job (laugh). So it's much easier to do. But then things did come up within the chat, that I'm sure you didn't plan for you know and I suppose in those kind of examples we were being autonomous, but it certainly didn't feel like we couldn't suggest something (Laura, I2).

Laura's experience of agency in terms of the conclusions she drew from the meetings reflected the satisfaction expressed by most participants in a process that provided them with sufficient control to interpret the CK and PCK according to their needs. The result was all members did not implement the same practices, or if they did as was the case with *wait time*, they did so at different stages and with different results (Table 13). Participants selected 'pathways' (Ellen, I2) that would bring about greater dialogic engagement in their classrooms.

Helen's comments about initially 'sitting back' suggested participants may have been uncomfortable in a more agentic role that required their decision-making. Niamh was similarly wary.

I wouldn't have been able to say 'let's not talk about this. I think we should do this' ... I don't think I'd be confident enough to say 'this is what we should discuss today' (Niamh, I2).

Analysis of the data suggests participants' agency may have been impacted by participants' limited knowledge and their previous experiences of transmission-type PL referred to earlier. Regardless of the cause, Laura's comment above that teachers may adopt the 'easier' position, which is not to demonstrate agency, reflects the significant change this model of PL presents, and the 'nudge' described by Guskey (2002), necessary to stimulate this type of engagement and the transition to transformative PL (A. Kennedy, 2014).

Agency outside the Professional Learning Community. By *Phase Three* some participants in both schools had begun speaking about OL&C and dialogue with colleagues outside the PLC.

... the teachers who are involved with this have kind of brought that to the meetings in terms of the whole school approach to the oral... (Eimear, I2).

I think for next year we are kind of saying for infants again, I think we came up with an oral group in every class setting ... (Ann, I2).

... we're going to give more time to kind of talk and discussion, you know, around a topic... (Niamh, I2).

Niamh and Yvonne reported their school's approach to OL&C assessment as needing revision so that it could better reflect children's abilities. Bríd cited a whole-school planning meeting where she confidently expressed views about OL&C. At the same meeting, another member had suggested other staff members outside the PLC might adopt content explored during the process. These actions may reflect the early stages of Kennedy's (2022) 'educational movement' referred to in Chapter Three where teachers view knowledge as something that changes. They may also indicate the affective benefits of adult learning theory whereby teachers feel positive about sharing what they know (Merriam, 2017).

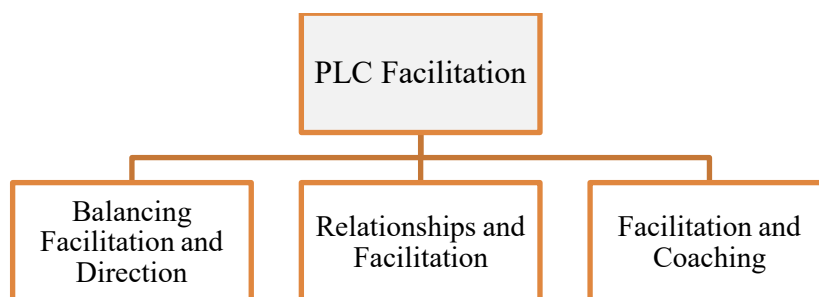
Summary: Agency. According to the participants, the PL process was directed by me. The newness of the PLC model may have contributed to this. I had an over-arching view of how the meetings were advancing (Niamh, I2) and as MKO, knew how participants' skills could be developed. Some participants' experiences in the PLC led them to display agency beyond the PLC as they raised some of the issues explored during PLCMs with colleagues in their respective schools.

Theme 6: Facilitation

The positive impact of effective facilitation on PL is widely appreciated (Beauchamp, 2015; Darling-Hammond et al., 2017; Doğan & Adams, 2018; Šarić & Šteh, 2019). Analysis of the study's data revealed three subthemes with regard to facilitation of PL which are presented in Figure 22 and examined below.

Figure 22

My Role as Facilitator of the Professional Learning Community



Perceptions of Facilitation before the Professional Learning Process. In *Phase One* participants described a range of PL experiences from transmission and training to

coaching (A. Kennedy, 2014), including references to initial teacher education. Comments in relation to in-service provided around the PLC/CTB (NCCA, 2019) included the ‘cursory’ examination of the Curriculum document’s content.

References to the role of the convenor or facilitator included whether they were engaging by nature (Rachel, Ellen, Laura). The distaste for feelings of being ‘lectured to’ was associated with the volume of material being presented being too much (Helen, Ellen, Yvonne, Eimear). This format resulted in limited time for questions and seeking clarification. Participants reported ‘tuning out’ because of lack of involvement (Helen, Laura). Rachel however, preferred the ‘lecture’ format and was less interested in opportunities for discussion. She described herself as ‘that empty vessel’ (I1).

Perceptions of Facilitation following the Professional Learning Process.

Participants referred to my role as facilitator in both the PLC meeting and the post-recording meeting (PRM). The PRM, described by Laura as ‘coaching’, evolved in terms of its significance to the PL process – a development that is examined later in this section. Analysis of the data suggested that for the PL to be effective a facilitator was required who would balance direction with facilitation. The fact that I was a colleague of the members of one PLC and had no previous relationship with those in the second PLC, also had implications in terms of facilitation, though reportedly not as significant as I would have thought.

Balancing Facilitation and Direction. Participants were satisfied that their uncertainty around the topic of dialogue and where they were going (Niamh, I2) meant they required a MKO (Darling-Hammond et al., 2017; Little, 2006; Timperley, 2015; Vygotsky, 1986) with a broader ‘sense’ of the skills being developed (Yvonne, I2). According to Bríd, I “understood what the group wanted without us [them] maybe knowing” (I2). In managing the PL process, I also provided Helen, Ann, Eimear and Niamh with logistical support (e.g. e-mailing information about upcoming meetings).

For some it was important that as MKO, I presented information with the understanding that participants could adopt and adapt it as they saw fit (Timperley, 2015), thereby reflecting Merriam’s (2017) recommendation that PL draw on people’s past experiences. I provided options (Ellen, I2), while remaining non-judgmental and open (Yvonne and Niamh, I2). My questioning, which caused Helen to think differently, would not have been possible where “someone just talks and goes through slides” (Niamh, I2). In this way I balanced direction with upholding participant autonomy.

... this is what came out of the philosophy thing (discussion). So then you went, and you got the philosophy reading for us and then it brought us on (Helen, I2).

... you obviously came and said today we'll look at this video, so you were in control of choosing. Then we did the talking about it (Yvonne, I2).

In their reference to learning from one's actions and the timely introduction of glance cards (Appendix P), Laura and Helen described my role in creating learning opportunities.

Were you looking to get information from us before going into that? Were you trying to get our thoughts on it? (Helen, I2).

You needed everyone to make their mistakes first and be in the pit and then claw their way out. Isn't that the way it goes though (Laura, I2).

Balancing direction and facilitation featured once again as according to Helen and Laura, if I had provided the information sooner, the deeper learning might not have occurred.

Relationships and Facilitation. The participants in both groups believed my relationship with them was important only insofar as we knew each other or got to know each other. Being able to engage with the same facilitator throughout the PL process was important to some, suggesting that perhaps consistency in facilitation may have resulted in relationships being consolidated thereby increasing the effectiveness of the process. It might also be suggested that without our relationship, PLC members like Yvonne may have been 'afraid' to ask questions (I2).

The following interaction between Eimear and me in PLCM5 illustrates the importance of an established relationship that allowed Eimear to be forthright in terms of her limitations:

... I was kind of poking. 'Come on guys. If you don't know what to say you can always ask a question' [Researcher: Could I be the devil's advocate and suggest that maybe they weren't interested in it (the topic being discussed)?] So maybe they are not interested in it. Yeah. I agree. (Eimear, PLCM5)

Later I suggested Eimear ask a question building on what one of the children said, while also requiring the children to speculate. She argued that it was difficult to think of such questions while engaging with the children. Previously in Chapter Four I described how my attempts to maintain participation may have limited the degree to which I challenged participants. Suggesting to participants that they may be the cause of their children's limited dialogic engagement may be possible as part of cultivating an 'inquiry stance' (Brown et al., 2021; Cochran-Smith & Lytle, 1999). However, facilitation remains difficult

as one balances challenging participants sufficiently to bring about advancement, with the reassurance required to keep them engaged (Nind, 2003).

Facilitation and Coaching. *Phase One* interviews did not explore coaching as part of PL. The PRMs were originally intended as brief check-ins to ensure participants were happy with their engagement in the process. I also believed they would provide evidence of reflection.

However, following PLCM1 where I observed participants' apparent difficulties with analysing a sample video, I reviewed their purpose and began regarding them as support for participants addressing issues arising from their recordings and the PLCMs. The PRMs provided the opportunity for participants to analyse their A/AV recordings thereby making room at the PLCM for discussion (Nelson et al., 2012). Their significance in terms of the PL process became apparent during *Phase Three* when Helen deemed them 'essential' (I2). Reflecting Timperley's (2015) practice analysis conversations as part of cognitive coaching, they provided a different type of learning to that available through the PLC (A. Kennedy, 2005).

The PRM offered a bespoke experience where participants critiqued (Helen, I2) and 'dissected' (Bríd, I2) their own children-teacher engagements ensuring discussions remained relevant (Bríd, I2). Ann and Yvonne received materials and examples of questions they could use. Participants with different challenges, levels of knowledge and experience were supported as they advanced their PL. The question may therefore be if without the PRM, or coaching (Timperley, 2015), the PLC could have supported the range of experiences within the group and ensured relevancy for all its members.

Despite the PLC being considered a safe space, participants like Eimear (I2) felt less exposed at the PRM, preferring to discuss her children's behaviours there. The PRM rather than the PLC may have provided the opportunity for Brown et al.'s (2021) "productive balance of comfort and challenge" (p. 6). What members were being asked to do in terms of subjecting their practice to group analysis, was new and difficult. The PRM provided a preparation space for Bríd and Ann that gave them the confidence to talk about their recordings and observations at the PLCM. Without this opportunity participants may have been reluctant to contribute to PLC discussions.

While shared reflection was valued, as discussed earlier, participants believed my 'expert support' positioned me better than their colleagues, to facilitate in-depth analysis

(Darling Hammond et al., 2017; Nugent et al., 2023). For Bríd (I2) this resulted in her believing she had something to contribute to the PLC.

Most participants did not look at/listen to their A/AV recordings outside the PRM and those who did, did not generally pause them to reflect. They knew they were experiencing difficulties with dialogic engagement but were often unsure why. The PRM ensured participants examined their own practices. According to Ann, they ‘made you look’ (I2) indicating the directive/reflective balance struck in coaching (Nugent et al., 2023). They provided the time necessary for participants to observe their behaviours, read their transcripts and explore options suggesting a depth of inquiry that went beyond ready-made solutions (Timperley, 2015). The PLC, while initially attempting to examine two recordings in one session, ultimately focused on one. Regardless, the meetings appeared not to be long enough to address all that required examination. The PRM afforded all participants the opportunity to have their practice examined more regularly than the PLC could offer.

Rachel, Ellen and Laura were eager to show their recordings to me suggesting the PRM provided them with a type of reassurance associated with coaching and believed absent for teachers working alone in classrooms (Nugent et al., 2023). Their *Phase One* reference to the absence of feedback around their work was satisfied during the PRM: “... it was that sort of thing of somebody coming in, somebody seeing you and somebody saying something to you which (pause) doesn't happen” (Ellen, I2). Laura concurred:

I suppose we get so little feedback, good, bad or indifferent that actually it's just a really nice thing to do for your confidence... You know, you're going to be meeting the same person the next time and you'd like to impress them (Laura, I2).

The findings explored in Chapter Five revealed that participants’ CK and PCK was impacted by their attendance at PRMs (Table 13) (Timperley, 2015). As suggested in Wilkinson et al.’s (2017) study, meeting participants’ individual needs was possible at PRMs which contributed to successful engagement in the PLC. Inconsistencies in terms of PLC attendance (Appendix N) were also managed at the PRMs where I provided input that a participant may have missed at a PLCM.

It may have been the case that with more time the PLCMs could have evolved to include what occurred at the PRMs. It may in fact have been my desire to ensure the participants in this study benefited in terms of their CK and PCK that increased the significance of the PRMs.

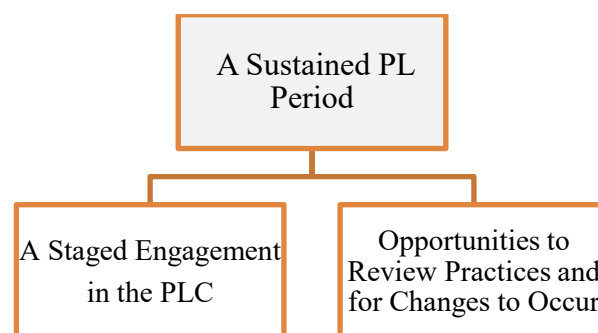
Summary: Facilitation. Analysis of the data suggested facilitation by an MKO was necessary for PL to occur at a PLCM (Appendix T), and consistency in the role was important. As MKO I provided information as well as opportunities for participants to implement and then reflect on changes to practice. The PRM and the individual support it provided positively impacted the success of the PLC. It also provided opportunities for conversations participants were unable to have with colleagues.

Theme 7: A Sustained Period of Professional Learning

There is no definitive answer as to how long PL experiences should last in order for them to be effective. However, providing teachers with the opportunity to revisit issues is widely endorsed (Cochran-Smith & Lytle, 1999; Darling-Hammond et al., 2017; Desimone, 2011; Little, 2006; Timperley, 2015). In analysing the impact of a sustained period of PL on the participants in this study two subthemes were identified. These are presented in Figure 23 and are explored below.

Figure 23

The Impact of a Sustained Professional Learning Period



Views on the Duration of Professional Learning before the Professional Learning Process. In *Phase One* participants described both once-off and more sustained PL experiences with the majority expressing a preference for the latter. Laura referenced the ‘feedback loop’ she experienced in an Education Centre when engaging in several weeks of training in an approach to teach reading (Laura, I1). Others also described PL where they practiced new strategies, reflected on learning and returned with questions (Helen, Bríd, Ellen, Laura, Niamh). For Bríd, this made the advice received more meaningful, as it related to an actual event. For Ellen the ‘follow-on’ available through sustained PL could promote ‘in-house discussion’ (I1). Eimear’s reflections on an in-service experience highlighted the importance of being able to return with questions:

The day of the training, it seemed so straightforward, and I go yes this is manageable. Yeah. I can see how you would do that and then I go home and go ‘Ah but that's like one lesson for one piece but there's like 600 pieces’ (Eimear, I1).

The effectiveness of online PL, noted earlier in this chapter in terms of convenience, was disputed by Niamh. Yvonne who described her online learning more positively, agreed but she used once-off social media events in a way that mirrored sustained PL:

I like to keep going over things, so I usually have the webinar minimized on one side like a half screen and a Word document open on the other and I'll type. So, I actually save the Word document then for myself. So, I have all these folders. So, even though it is like a one off, anything I find useful I've typed away and saved so I can go back (Yvonne, I1).

Sustained PL was believed by most to support reflection and implementation of new learning. The value of PL online was determined by whether participants returned to its content (Yvonne, Niamh).

Views on the Duration of Professional Learning following the Professional Learning Process. The participants engaged with a PL process that lasted approximately eight months (Appendix I). They attended up to seven PLCMs each lasting approximately an hour and six PRMs each lasting approximately thirty minutes. While the data analysis suggests that this may not have been long enough for some behaviours to become established, other aspects of PL were achieved, not least changes in classroom practice (Table 13).

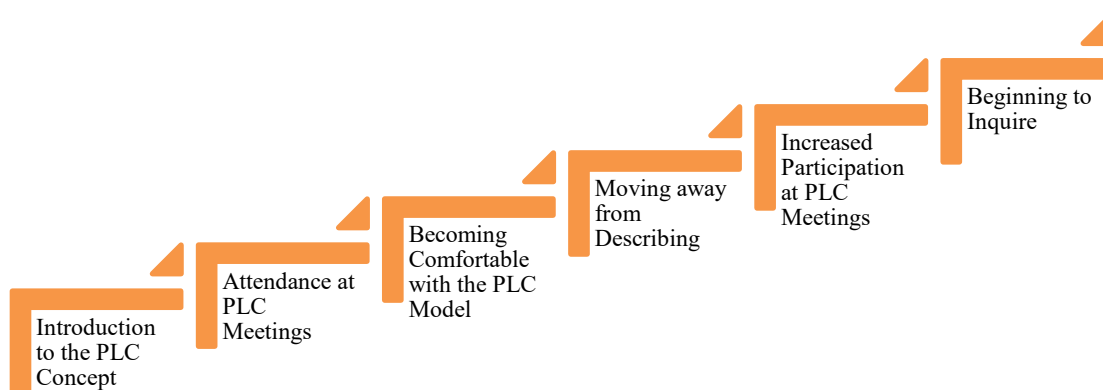
Analysis of the data revealed that sustained PL supported a staged engagement (Stoll et al., 2006) that included a period of becoming comfortable in the PLC. It allowed time for changes in practice to occur and meant participants could observe the impact on their children's behaviours. The opportunity it provided to review practices contributed to participants' development.

A Staged Engagement in the Professional Learning Community. Following the PLC some of the participants, who referred to their initial uncertainty around what was expected of them as PLC members, described themselves moving through stages which included a period of becoming comfortable. They described involving themselves more in later meetings when they understood their role: “I was starting to understand it around Christmas time and had a bit of a turning point and then I think kind of slowly got there” (Brid, I2).

The information I provided at the introductory meeting, the Plain Language Statement I distributed as part of the ethics process, and engagement in the *Phase One* interview which introduced some of the underlying principles of the PLC (Appendix G), may have been insufficient in terms of preparing participants for the experience. Alternatively, establishing the PLC as a means of reflecting on classroom practice marked a significant change in participants' PL and therefore, took time to establish.

Figure 24

A Staged Engagement



Reflection and analysis did not begin immediately. Nelson et al. (2012) describe this period in terms of moving the ‘tone’ of conversations from descriptions of events to ones of inquiry and ultimately negotiation. Despite existing professional relationships with their colleagues, participants reported requiring time to become comfortable in their PLC as shown in Figure 24. Referred to earlier in terms of collaboration, the findings suggested the work of the PLC demanded a different type of relationship. Helen became comfortable towards the end. Ellen described the group as becoming “a lot more maybe natural and relaxed in speaking about the stuff as it went on...” (I2).

Embarking on this new practice required courage as participants revealed themselves to the group (Lefstein et al, 2020). While I understood that a settling in period would be necessary, I had not foreseen it lasting as long as it did. The structure and values of the PLC were unfamiliar to the participants and the relationships on which they were based, needed time to become established before they could support analysis and reflection. The time I allowed to fully realise this aim may have been insufficient.

Opportunities to Review Practices and for Changes to Occur. Bringing about changes in teachers’ beliefs is complex (Barnes et al., 2020). As outlined in Chapter Four,

new practices were sometimes difficult to implement which meant their impact was not immediately evident. However in *Phase's Two and Three* participants described being able to 'see' changes in their children's behaviours. As participants became more adept, their practices became embedded, and the results became visible: "... seeing the kind of the end result or seeing what I see now, I think it was very valid" (Niamh, I2).

All participants spoke positively about being able to revisit their practices over a period of time. Some noted how reviews that took place at the beginning of each PLCM contributed to increased understanding. It would appear that being able to discuss the concepts that were being proposed a number of times, was important for participants, and increased the chance of their practices being impacted by their newly acquired knowledge.

More significantly perhaps, was the suggestion that participants benefited from opportunities to 'try' (Helen, Bríd) or experiment with new strategies. Mastery was not intended. Neither were participants expected to accept what was being proposed without question (A. Kennedy, 2022) (Appendix T). Once attempted, then they could "bring it (the practice) back (to the group) and see what everyone else thought about it" (Helen, I2). Ann compared this facility to other PL experiences:

You had a chance to bring it into your classroom. Where I know in a whole school one (in-service PL) they say you can try it out, but you might not necessarily try it out. You might do it. You might not do it (Ann, I2).

What appeared central to the adoption of new practices was the opportunity for participants to follow implementation with a return to the PLC to talk about their experiences (Zook-Howell et al., 2015). Despite the length of their engagement in the PL process participants believed they had not achieved mastery in terms of their children-teacher engagements. They described them as 'a work in progress' (Helen, I2) and an ongoing 'struggle' (Bríd, I2). Ellen described herself practicing, continuing to make mistakes and in turn becoming more experienced. Perhaps this was exactly how participants were supposed to feel as they engaged with the doubt referred to earlier (Šarić & Šteh, 2019). Helen had believed younger children were incapable of speculating and justifying but with repeated attempts to develop these skills she, like the participants in Wilkinson et al.'s (2017) study, altered her views on recognising her children's capabilities. Rachel's reference to habits "take[ing] a long time to die" (I2) highlighted the need for sustained PL experiences where teachers have time to examine their beliefs.

This model of PL celebrated continuous reflection on practice and the trial and error referred to by Laura as participants brought their difficulties to the PLCM. It provided

participants with time to discern for themselves what would impact their own practice. While for some the aim was to increase the prospect of joint attention across the group, Eimear's (I2) focus became critical thinking: "At the start I would have said talk and discussion but like the critical thinking piece, I think, is the piece that is new" (Eimear, I2).

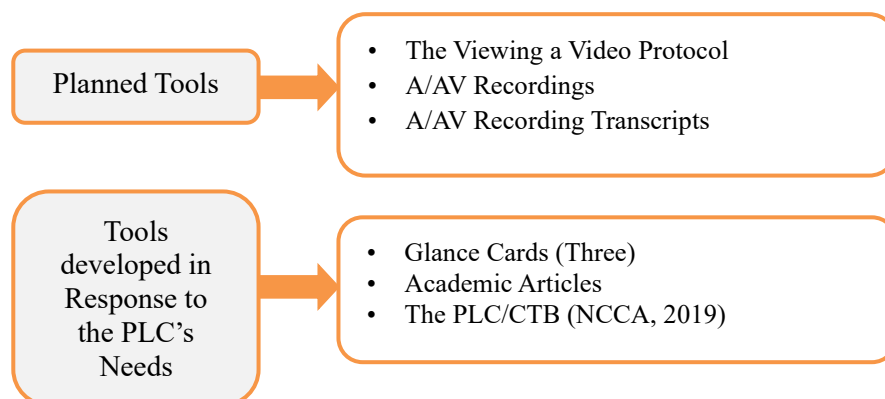
Summary: A Sustained Professional Learning Period. The sustained nature of the PL process was valued by participants insofar as it supported participants in trialling, reflecting on and revisiting skills in their classrooms. The changed nature of their interactions required time to evolve, and they reported being positively impacted by visible changes in their children's interactions.

Theme 8: Tools to Support Professional Learning

A tool in this context is broadly defined as a support for reflection and investigation (Timperley, 2015). I adopted a number of them over the course of this study. Their reported impact on participants' PL experiences as described in *Phase Three* resulted in me adding 'Tools' to the original seven elements of effective PL. Following analysis I identified two subthemes (i.e. tools that were part of the study's design and those that were developed in response to the needs of the PLCs). These are presented in Figure 25 and their impact on the PL process is examined below.

Figure 25

Tools to Support Professional Learning



Planned Tools. In *Phase One* interviews participants did not allude to the use of any particular tools, protocols or materials when reflecting on their practice. As part of this study I had planned for the use of A/AV recordings along with accompanying transcripts (Alexander, 2018) and a viewing protocol (Appendix J) designed to support analysis (Bowe & Gore, 2017; Lefstein et al., 2020; Little, 2006).

The Viewing a Video Protocol. Provided to participants in PLCM1, the Viewing a Video Protocol (Appendix J) outlined how we would examine recordings (Little, 2006). It became unnecessary as participants became more familiar with the meeting structure (Timperley, 2015). Participants did not refer to it during their interviews.

Audio/Audio-Visual Recordings. A/AV recordings of classroom practice are widely accepted as valuable tools in teacher PL (Little, 2006). Accepted from the outset as not “the most natural of settings” (Rachel, I2) all participants acknowledged the significance of their recordings in stimulating individual as well as group reflection: “I just don't know how you would have come out of the lesson and analysed it without an actual recording of something” (Brid, I2). For Helen, Brid and Laura they acted as an aide memoire, capturing elements of engagements that can be difficult to verbalise in contexts that because of one's engagement, could be difficult to assess.

For Yvonne seeing herself was more valuable than observing someone else. She had to accept what she saw as fact: “I would have been OK! Well that's somebody else” (I2). Laura reported: “I don't think I've ever in my whole career recorded anything I've done and watched it back and you see things that you don't remember doing” (Laura, I2). Ann, whose previous recordings of children focused on what they did, like Laura, was now required to examine her own actions. They ‘spark[ed] conversation’ (Niamh, I2) that broadened to include other issues such as school culture and philosophy.

Analysis of *Phase Three* interviews revealed the A/AV recording process may have left some participants feeling judged either by me or by their peers. Rachel described how she hoped I would see in her recordings what she did and was disappointed when my comments did not mirror hers. Ann talked about what she did as being ‘wrong’. She wanted to do a ‘good’ recording because others would be listening to it. The possibility that my role as MKO may have impacted participants in this way was defended by Laura.

I suppose even though you say you don't have the answers like you do know more than us. Maybe if it was me and X sitting down together, that would be evaluative, like what we were doing in the classroom, because we would see each other as equals in terms of our knowledge about oral language. But when you're sitting down with somebody doing their dissertation on it, like we're well aware that you know more so there is an imbalance, isn't there? (Laura, I2)

The A/AV recordings provided content that was highly relatable for participants. They supported AL and teacher reflection in terms of discussion and analysis. The cyclical nature of the PL model made it possible for participants to see changes in their practice and their children's engagement. However, despite these benefits, most participants reported

not looking at their recordings independent of the PRMs and PLCMs and were unlikely to record for this purpose in the future.

Audio/Audio-Visual Recording Transcripts. The transcripts accompanying each children-teacher recording were also planned, with the intention that they would support participants' analysis of recordings (Alexander, 2018). For example, they were used to assist in identifying if the OL being used suggested joint attention. Participants first examined them at the PRM and again at the PLCM. In *Phase Three* Ann, Laura, Ellen and Niamh noted how these transcripts contributed to their A/AV analysis. In PLCM2 Niamh commented on how while she thought her children were engaging dialogically by looking at the transcript, she could see the 'to and fro' was missing. In PRM6 I highlighted to Ann her tendency to repeat what the children said. She began to track this behaviour in the transcript and later reported attempting to address it.

Tools Developed in Response to Professional Learning Community Needs. The perceived value of the remaining tools listed in Figure 24 appeared linked to how participants viewed their origins. Though designed by me, participants believed their content originated in their PLC discussions and in this way, they supported their reflection and planning. Their significance in terms of supporting PL might be inferred from the unsolicited and positive manner in which they were each referenced during *Phase Three*.

Glance Cards. Evident on classroom walls during the *Phase Three* interviews, seven participants referred to the glance cards repeatedly naming them by colour. I designed and distributed them (Appendix P) aiming to summarise key concepts discussed during the PLCMs. For Laura "they came off the back of something we'd seen" in an A/AV recording (I2). According to Bríd

I felt like we'd have a meeting and then you'd come back with one of those coloured sheets and you'd be like this is what yee were looking at ... I don't know if we knew what we wanted but you were able to get it (laughter) and give us these cue cards (Bríd, I2).

Also termed 'hint sheets' (Laura, I2) and 'shortcut cards' (Bríd, I2) participants reported how the cards provided a checklist of actions they could take and language they could use during their children-teacher engagements. They were 'practical' (Helen, I2) and 'handy' (Ellen, I2) and supported planning and reflection. Participants described how they continued to use them and wondered if it would be useful to distribute them to other staff members.

The third glance card focused on elements of dialogue. Ann queried whether distributing this card earlier in the PL process might have clarified dialogic engagement for participants. I raised this issue in two further interviews. It appeared timing the distribution of the cards and ensuring the concepts underpinning them had already been explored, contributed to their effectiveness. Participants believed prematurely introducing them could have resulted in attempts at practicing skills they did not fully understand. Laura “would have been trying to do everything” (I2). The cards were reportedly more than a set of what Timperley (2015) refers to as ‘helpful hints’. Providing easy access to key information, their relevance was ensured by the fact that they were born out of PLC discussions.

Academic Articles. During Cycle 4 of the PL process I began providing articles participants could read that related to topics raised at the PLCM (Table 5). The participants in PLCA received three articles while interrupted attendance and staggered arrival times at some meetings meant PLCB received two. I shared them electronically but when it became apparent participants had not read them, I distributed hard copies, sections of which I had highlighted and referenced at the PLCMs. Two of the articles were visually appealing in so far as they were short and included illustrated content. The third article, while more academic in presentation, used accessible language. The fact that participants needed encouragement to read the articles suggested they might not have done so without my intervention (Appendix T). Three participants referred to these readings. Helen viewed them as a starting point. Bríd described implementing what had been suggested in one article and encouraging her colleague to do likewise. Only Rachel chose to read around a topic explored at a PLCM.

The Curriculum as a Tool. The participants in this study reported using the PLC/CTB (NCCA, 2019) to varying degrees prior to engaging in the PL process. Chapter Four documented how all participants had an increased understanding of its *oral language and communication* strand following the PL process. In PLCM3 participants identified language types that matched the verbs used in Learning Outcome 11 and Learning Outcome 12 (Appendix X). Deconstructing the outcomes extended participants’ CK and PCK while at the same time making them ‘less daunting’ (Laura, I2). This exercise increased understanding which subsequently altered practices and left participants feeling more confident in their use of the document (Darling-Hammond et al., 2017). The participants and I referenced and annotated our photocopies of these Learning Outcomes during several PLCMs. In time participants adopted the terminology used in the learning

outcomes (Nelson et al., 2012). Bríd was no longer ‘scared’ of the learning outcomes that had been too big to assess. Ellen and others described focusing on important elements that they had previously overlooked.

As significant, however, was the contribution made by the PLC/CTB (NCCA, 2019) in terms of supporting broader discussions around OL&C and dialogue (Nelson et al., 2012). Niamh disliked ‘pick[ing] apart the curriculum’ (I2) – her description of what had occurred when she was first introduced to it. This findings suggested that difficulties associated with implementing a new curriculum were effectively addressed as part of a discursive PL experience. The PLC/CTB (NCCA, 2019), while requiring interpretation, supported the development of CK, PCK and a provided a context for discussion around bigger issues including the time for OL&C on a busy day, standardised testing and priorities in education.

Summary: Tools. In commenting on their PL experiences some participants noted the value of the transcript while others referred to the contribution made by the glance cards. A small number noted the academic reading. It may be that different tools appealed to different participants.

The absence of printed documentation at the PLCMs, born out of my focus on encouraging participants’ oral engagement, may have reduced the amount of information that was presented to participants. However, what was presented was firmly rooted in the discussions within the PLCs. This was evident in the way in which participants used their glance cards, for example, in subsequent recordings. Having an opportunity to discuss in detail what was presented in print was important to me in terms of ensuring relevance for the participants.

Van Lare and Brazer (2013) query how teachers learn within collaborative settings. Based on the findings presented here, all of the participants’ CK and PCK to support the development of dialogue, was impacted by all of the eight elements characteristic of effective PL. However, the degree to which they were impacted differed resulting in the unique learning experiences referenced earlier. Below is a summary of how participants were impacted by each of the elements.

Table 15*A Summary of Participants' Experiences of the Professional Learning Process*

Element	Participants' Experiences
Content	Using teacher-generated data as content was new to participants. Interpreting and then applying new learning to their context was new to participants. The PL process supported the uniqueness of learning journeys. The Curriculum (PLC/CTB, NCCA, 2019) became a tool for PL.
Collaboration	Participants needed to feel supported within the PLC. Feeling comfortable took precedence over participants challenging each other. Engagement within the PLC was different to typical school engagement.
Active Learning	AL based on teacher experience was new to participants. AL based on teacher experience was difficult. AL did not provide answers, and this contributed to participants' difficulties with the process. AL based on teacher experience deepened understanding. Discussion that featured challenging perspectives was difficult to achieve and may have been influenced by the PLC's culture.
Reflection	Participants continued to value shared reflection. Participants believed increased PCK supported their reflection. Having evidence in the form of recordings supported their reflection.
Agency	Participants showed agency in how they addressed their children's needs. Some participants displayed agency in matters beyond their classroom. Participants' agency within the PLC was reliant on their increased knowledge.
Facilitation	Effective PL required a balancing of facilitation and direction. Facilitation that promoted self-determination was difficult for some participants. Facilitation was supported by consistency in relationships.
Duration	The sustained duration supported a staged engagement that included a period of becoming comfortable in the PLC. The sustained duration provided the time required for changes in practice to occur thus supporting participants' engagements and enabling them to observe changes in their children's behaviours. The opportunity it provided to review practices contributed to participants PL.
Tools	The A/AV recordings while difficult to organise provided content that was central to AL. Changes in practices were due in part to participants being able to 'see' their behaviours. The A/AV transcripts supported A/AV analysis. Glance cards were deemed useful because of their relatedness to PLC discussions. They supported changes in practice, analysis and planning. Participants did not access recommended reading without support. An easily accessed section of the PLC/CTB (NCCA, 2019) ensured it was regularly referenced.

A Revised Concept of Professional Learning

In Chapter Three I presented a conceptual framework that positioned a PLC as an egg in an eggcup providing a space for teachers' reflection and analysis, and ultimately their PL (Figure 3). My analysis of the data revealed that this overly-simplistic cause and effect model (Cohen et al., 2018) of PL overlooked the potential for synergy amongst widely accepted elements of effective PL. Instead, the success of participants' engagements

was underpinned by the interconnectedness of multiple elements (Cohen et al., 2018; King et al., 2022). For example, the use of classroom-generated content provided opportunities for collaboration, increased the impact of AL, supported reflection, provided members with agency in terms of the direction of their PL, and focused my facilitation. The eight endogenous variables first identified in the literature (Table 15) impacted participants' PL along with exogenous variables such as school and classroom cultures, professional and personal experiences, relationships, the particular group of children being recorded, time and learning styles. The result was a unique PL experience for each PLC member (Appendix Z). The exogenous variables, while acknowledged within the study, were not explored in depth.

A deeper analysis of the findings (Appendix Y) revealed that participants were not inclined to ask why their children's OL&C behaviours were as they were. Their apparent inexperience in acting as 'change agents' (A. Kennedy, 2014) and considering their own classroom data as the basis for PL, may have impeded their capacity to develop an inquiry stance around their work (Kennedy & Beck, 2018; Nelson et al., 2012).

Participants were similarly hesitant in adopting Merriam's (2017) model of self-directed learning. On one occasion in one PLC a participant suggested children's dialogue might be advanced through 'wondering'. I returned to the next PLCM with an article by Gregory and Cahill (2010), that described ways of supporting 'wondering' in young children. Without my input it is unlikely the participants would have attempted to implement their colleague's suggestion, believing speculation to be too advanced for their children.

Classroom-generated data was interpreted by some as an opportunity to be judged. While some were not very comfortable about discussing their classroom practices publicly, others eagerly awaited my thoughts on whether their A/AV recordings were 'successful' despite my describing how they acted as valuable stimuli for improving analysis and initiating discussion. These views may also have had implications for how participants reflected on the recordings of colleagues, and their reluctance to comment on them.

Being able to directly link a change in a practice such as the adoption of a phrase like 'I agree/ disagree with _ because', with a child's use of the same phrase when engaging with their peers, was motivating for participants (Guskey, 2002). Similarly, the visible increase in involvement by more reluctant children, made possible by the sustained

and cyclical nature of the PL process, reportedly encouraged participants to continue their efforts.

Participants' querying why children engaged in a particular manner described earlier, required the adoption of an inquiry stance (Cochran-Smith & Lytle, 2009). This may not have occurred without facilitation. The fact that it more readily happened within the PRM suggests that teacher reflection that brings about a change in practice requires more support than that available in a PLC.

Finally, this study provided participants with opportunities to examine curriculum expectations in detail (Darling-Hammond et al., 2017; Holmlund et al., 2012; Little, 2006), thereby cultivating engagement, deepening understanding, and developing their confidence around implementation. In addition, curriculum exploration facilitated broader professional conversations around for example, the meaning of learning and the purpose of language (Desimone, 2011).

Conclusion

This chapter presented the findings in response to my second research question:

In what way is teachers' knowledge and practice regarding the development of dialogue in children aged 4-8 years impacted by participation in a Professional Learning Community?

The study revealed:

- The effective use of classroom-generated PL content was reliant on participants' capacity to critique their own work.
- While participants experienced the collaborative environment of the PLC, they were not inclined to challenge each other and feared judgement.
- Active learning that provided opportunities for adapting practices was a new PL experience for participants.
- Reflection that occurred, where participants shared experiences, required public expressions of vulnerability.
- In order to experience agency, participants required increased CK and PCK.

- In facilitating the PLC it was necessary for me to be mindful of the degree to which I directed participants' learning. One-to-one coaching appeared to be more conducive to developing an inquiry stance in participants.
- The sustained nature of the PL experience provided opportunities for participants to view the impact of their altered practices, which in turn motivated them to continue to engage.
- The A/AV recordings were effective catalysts for discussions that brought about PL. However, participants responded differently to their usage. Some felt judged while others sought judgement and recognition.

I began by presenting a summary (Table 13) of the practices adopted by participants over the course of the PL process. I examined the participants' experiences of a PLC with regard to eight elements of effective PL identified earlier in Chapter Three. Finally, I revisited my original conceptual framework and made the necessary alterations.

In the next and final chapter, I draw conclusions from this study in relation to (a) teachers supporting the development of dialogue in young children, and (b) the provision of PL opportunities for teachers. I outline the study's limitations and make recommendations.

Chapter 7

Conclusions and Recommendations

In this final chapter, I summarise the findings and present them under each of the following research questions:

Research Question One:

What do teachers know about supporting the development of dialogue in children aged 4-8 years?

Research Question Two:

In what way is teachers' knowledge and practice regarding the development of dialogue in children aged 4-8 years impacted by participation in a Professional Learning Community?

To avoid duplication, I combine my conclusions with the implications for teachers' practices and professional learning (PL). I consider the study's limitations and present my recommendations for policy, practice and further research. I conclude with the contributions I believe this study has made to knowledge in the areas of children's dialogue and teacher PL.

This study took place over three phases (i.e. before, during and following participation in a professional learning community (PLC)). Using qualitative research methods, I gathered the perceptions of nine teachers over the course of one academic year to create a single case study. I adopted three approaches to data analysis: Braun and Clarke's (2006) six-step approach to inductive thematic analysis, deductive thematic analysis (Kalpokas & Hecker, 2023), and template analysis (King & Brooks, 2017).

Research Question One: Teachers' Knowledge of Supporting the Development of Dialogue in Children aged 4-8 years

Placing dialogue at the centre of OL&C development is challenging (Alexander, 2018; Michaels & O'Connor, 2015; Michaels et al., 2008). While providing teachers with strategies to support it may not be sufficient to ensure its occurrence (Michaels & O'Connor, 2015), having them deepen their understanding of how dialogue contributes to learning may help them to position it as intrinsic to knowledge building (Mercer, 2008).

At the beginning of this study, participants agreed that oral language and communication (OL&C) was central to children's social and cognitive development, and their engagement with school curricula. However, they were unsure how to develop and

assess it beyond the extension of vocabulary. These uncertainties were evidenced in classroom practices that featured opportunities for children to talk but lacked purposeful support by teachers in extending language use beyond labelling, recalling and describing. Once participants became aware of other language uses including justification and reflection, they re-envisioned the purpose of OL&C as inclusive of developing thinking, brought about by dialogic engagement.

In *Phase One* prior to the PL process, I observed participants achieving joint attention with their children (i.e. participants had gained their children's attention, and their children were responding), but the resulting engagements did not seem fully supportive of dialogue. For this to occur participants needed to purposefully move between transmitting information and facilitating its development. This represented a cultural change for some who prior to *Phase Two* perceived their role and the purpose of children-teacher engagement as one of the teacher conveying information to the child. It also brought about a shift in control from the teacher to the child evident in *Phase Three*. Participants sought children's opinions through authentic questioning and followed their lead through *uptake* and the adoption of talk moves. Their role became facilitatory. Implicit in these purposeful actions was participants' belief that children had novel ideas to contribute to oral engagements. This represented a significant move for some who previously felt their children were too young, had insufficient English or were too limited by their experiences, to engage dialogically.

Prior to engaging in the study participants had not intentionally sought to establish joint attention amongst their children. They now purposefully modelled newly acquired phrases such as '*I agree/disagree with _*' which had begun to help them address this issue. Children who observed their teachers use these phrases began using them also.

When participants adopted practices conducive to developing dialogue such as *uptake*, talk moves and authentic questioning, they became more discerning in terms of the classroom contexts and materials they believed supported its development. Current instances where children talked were not judged suitable. Instead, participants sought contexts where they could model behaviours, hear their children's contributions and purposefully advance the engagement by, for example, seeking justification and encouraging responses from others. Children's free play was deemed unsuitable as a context in which dialogue could be actively developed by teachers.

Practices synonymous with philosophising and speculation, new to the majority of participants, assisted them in developing dialogue with and amongst their children. They believed their new-found willingness to follow their children's lead, along with 'wondering', supported their children's engagement. However, they agreed this required their trust that children had something to contribute.

While previously participants believed they had listened to their children's contributions, without building on them this may not have been apparent to their children. Engaging authentically required them to carefully listen so that they could extend and sometimes challenge children's opinions. This brought about dialogic exchanges that were 'authentic' and that surprised the participants.

Participants' confidence in terms of supporting the development of dialogue was positively impacted by their increased pedagogical content knowledge (PCK), as was their use of the OL&C strand of the Primary Language Curriculum/Curaclam Teanga na Bunscoile (PLC/CTB) (NCCA, 2019).

Conclusions and Implications

The conclusions drawn from the analysis of the findings and their implications presented in response to Research Question One are arranged under five headings:

- An interpretation of OL&C that includes dialogue
- Professional learning that promotes authentic children-teacher engagement
- The need for explicit guidance around supporting the development of dialogue
- A revision of teachers' expectations
- The lessons learned from play.

An Interpretation of Oral Language and Communication that Includes Dialogue

The findings propose that teachers, when considering OL&C development, may not purposefully include the development of dialogue (Sybing, 2021). This gap in their content knowledge (CK) has implications for how they perceive their role and ultimately how their children develop thinking. Regardless of whether they value and provide opportunities for children to talk, if they do not recognise dialogic engagement as part of OL&C development they are unlikely to adopt classroom practices that are conducive to supporting "substantive and rigorous discussions" (Michaels & O'Connor, 2015, p. 338). In this way their limited CK may be impacting the degree to which they can recognise and therefore, address the gaps in their PCK.

Alternatively, the findings suggest teachers adopt practices such as authentic questioning, which support dialogic engagement. However, without a deeper understanding of their purpose, the result can be exchanges that do not, for example, represent empowerment for children (Alexander, 2018). This in turn may be problematic in terms of developing children's capacity to critically reflect. A third scenario evident in this study's data is that of teachers who while mindful of the significance of dialogue in facilitating thinking, may be limited in terms of the skills required to purposefully support its development (Michaels & O'Connor, 2015). Teachers' central role in facilitating advancement requires them to ably adopt a range of practices that will cultivate authentic engagements with and amongst children.

Implications. Teachers' incomplete understanding of OL&C that does not include the development of dialogue may not be surprising when one considers how in the past there appears to have been limited attention paid to how OL&C was supported in Irish primary schools. A 2013 report regarding the Primary School English Curriculum (NCCA, 1999) described the facilitation of oral language as 'satisfactory', with its only recommendation in terms of OL&C being the "explicit teaching of a structured oral language programme" (DES, 2013, p. 45). More recent whole-school curriculum inspections refer to children-teacher engagements but only in general terms, despite the Department of Education (DE) requiring that children "be provided with consistent opportunities to build on their language learning, and to develop their skills and enjoyment in using language effectively" (DE, 2022a, p.114).

The benefits of dialogic engagement in classrooms are internationally accepted (French & Lake, 2022; Mercer, 2004). The Inspectorate's membership of Atlantic Rim Collaboratory – a 'movement' that celebrates equity and democracy in education (Atlantic Rim Collaboratory, 2025) highlights their commitment to such skills. However, national policy documents to improve literacy and numeracy among young children in Ireland (DE, 2023; DES, 2017; 2011) do not appear to provide any explicit direction in terms of developing OL&C. It's difficult to imagine, therefore, how the DE might achieve their aim of having children apply "knowledge creatively, to work collaboratively to solve problems, to think critically, to communicate effectively, to adapt flexibly, and to make healthy and informed choices" (DE, 2022a, p. 313). Actively supporting the development of dialogue in classrooms may be a useful place to begin.

The exploration of text is at the centre of much of the research into OL&C development in schools (Alexander, 2018; Paatsch et al., 2019; Soter et al., 2008), thus

validating the case for embedding OL&C in literacy instruction. The Primary Mathematics Curriculum (PMC) (NCCA, 2023) is also intent on developing children's capacities to orally engage with concepts in a way that cultivates curiosity and creativity. Therefore, with OL&C identified as central to learning within new curricula, it would be advisable for Oide, responsible for the effective implementation of these curricula, to consider how they might advance classroom dialogue.

Professional Learning that Promotes Authentic Children-Teacher Engagement

Most participants in this study expressed increased confidence in their dialogic practices following their PL experience. With enhanced PCK, they observed their children taking the lead. However, despite their increased CK and PCK some continued to struggle with supporting the development of dialogue. What may have been absent in such instances may have been the facilitation of classroom conversations that were underpinned by an intention to engage in 'genuine' or authentic communication (Maine & Hofmann, 2016; Siraj-Blatchford & Manni, 2010). Rather than having teachers simply implement dialogue-promoting classroom practices, it may be necessary to first instil in them a desire to hear and engage with whatever children have to say.

Implications. Cross-curricular recommendations for the prioritisation of classroom talk (NCCA, 2023; 2019) presuppose existing teacher knowledge in terms of dialogic engagement, a position contested in this study. Providing opportunities for children to talk does not equate to dialogic engagement that demonstrates increased child participation, and a democratisation of education (Einarsdottir, 2010). Evidently, teachers who seek to engage dialogically with their children in a way that supports thinking, require PL opportunities that first establish OL&C as a tool for thinking and then present the means by which this can be achieved.

A recent report by the DE recommended that those working in early years education make greater use of "open-ended questioning and sustained conversations" (DE, 2022a, p. 93) thus highlighting the need for educators to consider authentic engagement. Similarly an early year's education-focused inspection (EYEI) (DES, 2018) had previously called for PL in implementing pedagogies that support language development. To ensure the occurrence of dialogue it would appear necessary to explicitly state how teachers can achieve authentic engagement, and the potential impact on children's higher-order thinking (Vrikki et al., 2019).

The Need for Explicit Guidance around Supporting the Development of Dialogue

The findings suggest that despite receiving professional input around the PLC/CTB (NCCA, 2019) there may be gaps in teachers' CK and PCK in terms of supporting the development of dialogue. With a similar emphasis on oral engagement in the PMC (NCCA, 2023), and the fact that it is currently being introduced to schools, it is timely to consider how teachers might be supported to achieve this type of engagement.

Following PL, the participants reported growth in their PCK and changes in their practices, highlighting the benefit of explicit guidance (Shiel et al., 2012), and the “intentional teaching” of OL (Kennedy et al., 2023, p. 120) that includes dialogic engagement. The practice that appealed most to participants was ‘speculation’. Adopting a philosophical stance (D. Kennedy, 2022), and the use of a single phrase, ‘I wonder’, created a non-judgemental dialogic space that welcomed multiple responses to single questions. Speculation also appealed to the children who participated in this study, as they readily became curious within this dialogic context.

Implications. Speculation requires courage on the part of teachers who may feel pressured by curriculum (Theobald & Klutti, 2012). The fact that OL&C and dialogue are difficult to assess (APPG, 2020), and that “what gets assessed often has a powerful impact on what schools ... teach” (DE, 2022a, p. 313), adds to the challenge of justifying time spent facilitating speculating. While the Irish education system is committed to establishing curricula with communication at their centres (Primary Curriculum Framework (PCF), 2023), their continued measuring of success in terms of reading and mathematics makes arguing the place for dialogic engagement difficult.

The act of having children jointly attend to their peers' contributions as well as those of their teachers, also received attention during this study. French and McKenna (2022) claim skilful child-teacher engagement is not intuitive. While some positive results were observed, and while maturation may have been a factor, the fact that participants were initially unaware of its significance and that they experienced difficulties despite conscious efforts at facilitation, suggest the need for greater guidance in all aspects of dialogic engagement (Vrikki et al., 2019).

A Revision of Teachers' Expectations

Teachers' expectations of their children can determine the type of engagement children experience at school (Alexander, 2018; Bond & Wasik, 2009; Boyd et al., 2019). Those who believe children are capable of having opinions and who value such

contributions will create opportunities for them to be expressed (French, 2014), engaging authentically in a way that also challenges children (Patterson, 2018). Such endeavours are founded on listening which requires time.

A primary curriculum review carried out twenty years ago reported that more than 40% of infant teachers – the cohort at the centre of this study – ‘hardly ever or never’ facilitated children’s arguing a point or persuading others (NCCA, 2005). While the term ‘persuade’ featured in the oral language strand for First and Second class (Additional Support Material, n.d.), the review concluded that ‘arguing’ was the focus of senior classes (i.e. Third to Sixth class). The PLC/CTB (NCCA, 2019) and its learning outcomes propose that children in lower primary classes may be capable of moving beyond recalling information for example. It expects from this cohort, a number of high-level interactions including being able to explain and justify their position and predict and reflect on the actions of others.

Implications. The surprise expressed by participants as to how their children engaged once supported, suggests that teachers’ expectations may not be in line with those of the PLC/CTB (NCCA, 2019). In the same 2005 Primary Curriculum Review children spoke about wanting to talk more about ‘real things’ (NCCA, 2005, p. 49). In a 2019 review of curriculum the need to teach children “critical skills to negotiate knowledge and not be simply consumers of society” (NCCA, 2019, p. 7) was reported as a priority for primary education. It would seem imperative, therefore, that we explore what we believe children can achieve through dialogue.

The Lessons Learned from Play

This study found that free play, while replete in opportunities for children to engage in OL&C, did not provide a context in which teachers could purposefully engage with children so as to advance their dialogue (Aistear/Siolta, 2024). Misinterpreting play-based learning and playful learning as an ‘Aistear hour’ (DE, 2022a; NCCA, 2019) may also result in teacher engagement that impedes children’s free play. The DE’s replacement of the *Aistear* framework (NCCA, 2024) in infant classrooms with the PCF (NCCA, 2023) may prevent teachers confusing the functions of children’s free-play and playful-learning within the context of OL&C. However, as teachers in infant classrooms transition they appear to need support in their interpretation of playful learning as something that is broader than a timetabled occurrence (NCCA, 2023), and capable of supporting the development of dialogue.

Implications. What occurred in this study in terms of play in the infant classroom serves as a warning as to what can happen when initiatives in education are introduced without the necessary investment in teacher PL that makes them effective. The *Aistear* framework (NCCA, 2009), presented to teachers in infant classes in primary schools in the absence of an implementation plan, and the necessary supports to ensure its effective implementation (French, 2013), resulted in an incomplete understanding on the part of teachers as to the functions of play and their role in supporting it. The learning for PL bodies, therefore, may be that all teachers do not readily create the playful learning opportunities currently being recommended as part of curriculum implementation (Oide, 2025), and may therefore, benefit from support in this area.

Research Question Two: The Impact of a Professional Learning Community on Teachers' Knowledge and Practice with regard to the Development of Dialogue in Children aged 4-8 Years

Participation in a PLC represented a new type of PL experience for the participants in this study. While they fully engaged with the process and reported positively on their experiences, it challenged them. The following findings illustrate this.

The teacher-generated content on which participants reflected as part of their PL experience represented a significant departure in how they were asked to interpret PL. The apparent absence of information that could be transmitted and judged 'correct' was unsettling, and there was uncertainty as to how new knowledge could be derived from reflection on practice.

The collaborative setting within which the PLC operated took time to establish despite the members being colleagues. It reassured members around their practices – something some felt was absent from their work. However, the supportive nature of the setting may also have inhibited discussions and learning as participants, rather than critically reflecting on their colleagues A/AV recordings, complemented them. It may also be the case that participants reflected on their colleagues' practices internally rather than commenting out loud.

Active engagement during PLC meetings (PLCMs) while welcomed by participants did not automatically result in reflection on practice. Reflection was more likely to occur at post-recording meetings (PRMs) where it was facilitated. In the one-to-one setting participants readily spoke about what could and would not work in terms of supporting dialogic engagement. It appeared that PLC discussions were reliant on the PRMs that were

referred to as coaching sessions, and it was at these coaching sessions that participants' practices were explored more fully.

The PCK gained during the PL process, which took the form of classroom practices (Table 13), contributed to participants' ability to reflect on whether they were being dialogic and what they needed to address. It also increased participants' confidence in contributing during PLCM discussions.

Professional learning community membership, while supporting changes in practice did not result in participant-directed learning. While there was some evidence of individuals suggesting solutions, their advancement, and the identification of areas in need of attention, was reliant on my facilitation as MKO.

Opportunities to revisit PLCM content over a sustained period resulted in a deeper understanding of practice. Trialling and reflecting on actions over several cycles led participants to improve their skills and develop confidence. This process facilitated changes in practice. It allowed the resulting impact on children to become visible which, according to participants, contributed to their PL.

The A/AV recordings and their transcripts assisted participants in identifying what it was about their practice that supported and inhibited dialogue with and amongst their children. However, most participants found the recording process stressful and reported that they were unlikely to repeat it.

Glance cards were reminders of what was discussed at the PLCMs and supported changes in practice. Their worth was increased by the fact that their content reflected what had been discussed at the meeting and participants received them following these PLCM discussions.

Participants, when provided with professional readings (both hard and soft copies), were not inclined to read them. Following reminders and signposting using highlighted sections, some accessed them and applied their content to their practice.

Curriculum (PLC/CTB, 2019) usage was increased by opportunities to discuss, and have explained, the document's concepts and terminology. Previously participants had not addressed Learning Outcomes they did not understand.

Conclusions and Implications

Interventions to support OL&C can incur costs in terms of time, finances and personnel (Jay et al., 2018; Vrikki et al., 2019). The establishment of a PLC on the other hand, relies on its members' willingness to engage (Topping & Trickey, 2014) making it a cost-effective PL model. The contributions of participants in this study suggested that the impact differed for individuals and may not have been equally beneficial to all members (Table 15). Asking whether the PLC was an effective PL model may, therefore, be an oversimplification of what occurred. It may be more useful to explore how it succeeded and how it could have been enhanced.

Professional learning communities effectively incorporate critical thinking, individual and collective reflection, active participation, purposeful collaboration and innovation in teacher PL (The Teaching Council, 2016). Circular 0056/2022 (DE, 2022b) describes how the process of school self-evaluation introduced to Irish schools in 2012, is reliant on teachers collaboratively reviewing practice with a view to improving children's learning. *Looking at Our School 2022* (DE, 2024) with its statements of *effective* and *highly effective practice*, describes itself as a tool for teacher reflection. My synthesis of the findings and their implications presented in response to Research Question Two are arranged under six headings:

- A difficulty with asking why
- A difficulty with seeking solutions
- Interpreting questioning as judgement
- The significance of witnessing visible change
- The role of an 'expert'
- Curriculum implementation.

A Difficulty with Asking Why. While fully engaged in the PL process, participants appeared to struggle with independently adopting an inquiry stance (Nelson et al., 2012) and asking why children experienced difficulties in developing dialogic engagement (Hayes & Matusov, 2005).

Implications. Suggesting that a PLC might readily support teachers' reflections on their own practice may underestimate what is required to bring this about. Despite their enhanced CK and PCK as part of the PL process, most participants were reluctant to critically reflect on their experiences or those of fellow participants (Beauchamp, 2015; Bowe & Gore, 2017; Brown et al., 2021; Nelson et al., 2012). Without my intervention,

PLC conversations around recorded children-teacher engagements would have remained descriptive with participants disinclined to ask why children responded or behaved in a particular way.

The difficulties experienced by participants in terms of self-reflection were somewhat alleviated by the additional ‘coaching’ they received from me during the PRM. As outlined in Chapter Six, it was a safe space in which participants were more inclined to reflect critically on their practice. As such it may have been a necessary addition to the PLC in terms of ensuring PL and advancement.

A Difficulty with Seeking Solutions. It is understandable that prior to observing themselves engaging with their children, participants may have been unaware of some of their own behaviours and those of their children. However, once they recognised the difficulties their children were experiencing with for example, listening to their peers and building on what they said, it might be presumed that questioning would have followed in terms of identifying solutions. Instead, participants appeared satisfied with explanations that positioned the difficulties within the children or their environment. The depth of their reflection may have been insufficient to allow them to consider how they might influence the dialogue (Brown et al., 2021), thereby continuing to accept what Cochran-Smith describes as ‘assumptions of common practice’ (Fiorentini & Crecci, 2015).

Implications. My necessary facilitation during PRMs and PLCMs encouraged flexible responses that suggested there were no right answers and what was important was participants’ understanding of authentic classroom engagement. This approach provided an alternative to transmission-type PL models where adopting a particular practice could take precedence over understanding and then judiciously applying it (Boyd et al., 2019). This required a deeper understanding of what we do as teachers and a willingness to seek solutions. It would appear that successful PLCs require members to adopt an empowered stance that seeks to advance evidence-based practice (Brown et al., 2021). Facilitation needs to be considered insofar as it encourages teachers’ reflective engagement rather than their unquestioned acceptance of what is being presented.

Interpreting Questioning as Judgement. The feeling of being judged, referenced directly and indirectly, appeared to be linked with participants being questioned around their practice. It was not always viewed negatively as comments suggested participants sought positive feedback around their work – something they believed was absent in the experiences of teachers working alone in classrooms.

Implications. The issue may be whether teachers believe they can learn from critically reflecting on their practices and if they believe their mistakes are valuable in terms of PL. In establishing PLCs it may be advisable for members to first examine the benefits of reflection on practice in advance of introducing classroom-generated data for discussion. Once the value of this has been agreed members may feel less like they are being judged. If not, and members remain disinclined to question what they see within the classroom-generated data, then the result could be the perpetuation of poor classroom practices. Similarly, ineffective practices could be commended making it difficult to imagine where the PL might occur.

The Significance of Witnessing Visible Change. While what was asked of participants in this study was new, difficult and took time to evolve, having the opportunity to attempt strategies, make errors, question and try again was central to the process. The PLC model, with its cycles of meetings, provided the time and opportunity for questioning and clarification. In addition, it made available what participants' repeatedly referred to as visible changes within and outside their recordings.

Implications. Ensuring PL experiences include opportunities for participants to identify the impact of changes on their practice may be beneficial in embedding more difficult classroom practices (Guskey, 2002). This approach suggests a long-term commitment to PL models that would allow teachers to interact with new information, critique theories, and recount their experiences to colleagues for the purpose of refinement and reassurance.

The Role of an 'Expert'. Some participants reported a change in how they viewed children-teacher engagement suggesting they underwent an epistemological shift (Schoenfeld, 2002). Some began adopting an 'inquiry stance' (Cochran-Smith & Lytle, 2009) with reflection becoming evident in their actions. However, Cochran-Smith and Lytle's community of inquiry that identified and critiqued its own "experiences, assumptions and beliefs" (2009, p. 142), remained an aspiration.

Implications. While PLCs are identified as a means of supporting PL, the findings suggest due consideration should be paid to their facilitation. The difficulty with moving teachers beyond 'sharing stories' (Nelson et al., 2012) to an inquiry stage, and how this may impact advances in professional thinking, requires attention. Without facilitation it is unlikely the participants would have doubted their practice, thereby reducing the opportunity for PL (Michaels & O'Connor, 2015; Šarić & Šteh, 2019). Taking care to

balance facilitation and the suggestion of possible solutions, I questioned participants in a manner that their peers appeared to find difficult, thereby upholding Servant-Miklos and Noordegraaf-Eelens's (2021) claim that teachers are unlikely to initiate self-directed learning. The significance of the PRMs also brought into question the limitations of PLCs and how coaching might be used to support them.

Curriculum Implementation. The PLC/CTB (NCCA, 2019) provided learning opportunities at a number of levels. Within the OL&C strand it identified elements of dialogic engagement, thereby adding to participants' CK and PCK. It also provided a stimulus for professional debate.

Implications. At the time of writing this thesis, curriculum revisions were ongoing, and Oide had responsibility for their presentation to schools. Oide appear to apply two models of delivery in terms of new curricula: generic sessions where information is transmitted with some workshopping of concepts, followed by bespoke *sustained school support* visits where teachers are encouraged to suggest their own concerns which then becomes the PL content (Oide, 2025). This combination of transmission and facilitation is in line with current thinking in terms of PL. However, curricula, rather than being viewed as objects to be explained and their content to be transmitted, might also be considered as stimuli for advancing teachers' understanding of teaching and learning. In this way, they become a means to PL rather than an end in themselves.

Limitations

Despite attempts to present a "fair and accurate account" (Cohen et al., 2018) of what occurred, this study was limited in terms of its sample, the time frame, its scope, the trustworthiness of its findings, researcher effect and my biases as presented here.

Sample

This study's use of *purposive sampling* meant that by representing itself only, the transferability of its findings was limited (Cohen et al., 2018). While nine female teachers working in two suburban schools was not representative of the teaching profession, a larger sample would have been difficult to effectively facilitate, thereby impacting the study's outcomes. Providing 'thick descriptions' of all engagements, while sometimes difficult in terms of protecting the identities of such a small number of participants, ensured an insightful representation of participants' behaviours (Cohen et al., 2018).

Timeframe

I limited data collection to one school year (i.e. September 2023 – June 2024), believing that as a novice researcher working alone this was what I could manage. The PL process while longer than what participants had previously experienced, may not have been long enough to address their uncertainty regarding their role, and to embed changes in practice.

Scope

The scope was narrow in terms of exploring the impact of participants' dialogic behaviours on their children. It did not extend to supporting particular groups of children differently. Neither did I consider the differing language codes of home and school (Mac Ruairc, 2011). However, many of the children participating in the study may have been too young to have been aware of these differences, thereby mitigating this issue.

My review of extant research in the areas of dialogic engagement and PL had extended my own knowledge base which I wished to share with participants. Whether the PL experience featured sufficient or too much information is unclear.

Trustworthiness

The trustworthiness of the findings is supported by my faithful representation of my intentions in Chapter One, detailed descriptions of the data collection and analysis process in Chapter Four, and the findings in Chapter's Five and Six (Cohen et al., 2018; Lareau, 2021). While participants spoke subjectively about their practices during all three phases (before, during and following the PL process), classroom observations and their intended learning outcomes, and A/AV recordings allowed me to triangulate the data (Cohen et al., 2018). The role of naturalistic inquiry is not to identify absolute truths. Rather than testing participants' contributions I sought to understand them.

Researcher Effect

Being aware of the impact of my presence on data collection and analysis (Lareau, 2021) and considering the "human-as-instrument" (Maykut & Morehouse, 1994, p. 46), I maintained reflexivity throughout the process thereby ensuring the trustworthiness of my findings. I included reflections when transcribing and analysing my semi-structured interviews (Lincoln & Guba, 1985), an example being my limited probing of participants' explanations around their use of the PLC/CTB (NCCA, 2019). The observation schedule (Appendix B) helped me maintain consistency across participants' classrooms in *Phases*

One and *Three*. However, as an inexperienced note-taker the pictures I created may have been incomplete.

In my attempt to secure participant attendance I was not inclined to seek justifications for participants' views during early PLCMs and PRMs and found it difficult to remain silent when they appeared reluctant to engage. My skills and confidence improved over the study's six cycles resulting in less facilitator talk and greater participant talk.

Researcher Bias

This study was not value-neutral (Cohen et al., 2018). In embarking on it I intended to cause no harm and hoped participants would gain from their involvement. I was hugely appreciative of their efforts and wished to represent them fairly. There was, therefore, a risk of bias at all stages. I had existing professional relationships with the participants in School A, insider knowledge of that school's culture, and knew some of the children being recorded. As a visitor in School B I could only infer from participants' contributions as to the culture that existed there.

My explorative approach to PL resulted in engagements that may at times have been at odds with participants' expectations. Helen for example, sought correct information while Rachel, Ann and Eimear regularly requested direction. Prolonged engagement in the field and faithful representation of participants' contributions increased the probability that what I presented was accurate and credible (King & Brooks, 2017).

Recommendations for Policy, Practice and Further Research

In this study I ask two questions. In terms of the first research question and how teachers can support the development of dialogue in children aged 4-8 years I make my recommendations below.

Policy

I recommend that Oide, in considering the central role played by OL&C in revised curricula, examine how they can support teachers in engaging dialogically with their children, and in doing so address the seven key competencies of the PCF (NCCA, 2023).

As the DE re-envisages its models of inspection (DE, 2022a), it may be possible for it to consider reframing OL&C within a dialogic context, thereby examining how it is being developed by teachers in a way that reflects the key competencies of the PCF (NCCA,

2023). This could be accommodated as part of its commitment to publishing ‘thematic reports’ (DE, 2022).

The recommendation that teachers in infant classrooms adopt a playful approach to learning (PCF, 2023) marks, for some, a change from the *Aistear* framework (NCCA, 2024) previously in use. I recommend that the NCCA consider how teachers will be supported during this transition.

Practice

Oide, as part of its implementation of curricula, needs to support teachers in developing dialogic engagement in their classrooms, by providing them with the necessary skills for authentic engagement. It may be useful to feature these skills in its workshops arranged as part of curriculum implementation.

The Inspectorate’s use of a ‘Quality Continuum’ which ensures consistency in reporting (DE, 2022a), could include within its descriptors, a reference to children-teacher engagement and for example evidence of *uptake* (Nystrand et al., 2003), thus, directing teachers’ attention to their role in supporting its development. Such a move could promote professional debate around balancing the development of critical reflection and reasoning through dialogic engagement, with measures of attainment determined by reading and mathematics scores.

Since teachers in junior classes appear to struggle with developing classroom dialogue it would seem important that as part of their move away from the *Aistear* framework (NCCA, 2016), infant teachers be provided with guidance from the NCCA on how to establish playful learning opportunities that cultivate OL&C and dialogue.

Research

This study’s results suggest the need for a broader examination of how teachers envisage the development of OL&C and dialogue in lower primary as it pertains to children’s cognitive development. Such an examination should pay particular attention to teachers’ skills in this regard.

Comments by the Inspectorate in relation to OL&C generally appear as part of its subject reviews. Alternatively it might be beneficial for the Inspectorate to explore further how they might identify indicators of dialogic engagement across curricular areas, thus reflecting the PCF’s seven key competencies (NCCA, 2023). Teachers might

then, in a cross-curricular manner, be inspected in for example how they facilitate children becoming communicators or active citizens.

If playful learning is to become the means by which much of the curriculum in lower primary is to be implemented (DE, 2022a), I recommend that further research be carried out to examine teachers' interpretations of the approach, and how they might be supported in its enactment.

In terms of the second research question, and how teachers' knowledge and practice with regard to the development of dialogue in children aged 4-8 years can be impacted by participation in a PLC, I make the following recommendations:

Policy

Included in a range of models of PL recommended by the Teaching Council (2016) are PLCs. I recommend that where professional bodies promote their establishment, they carefully consider their complexity and how they might be facilitated. While the informality often associated with PLCs can be appealing, the findings from this study suggest they require careful facilitation if they are to result in changes to practice.

Practice

A within-school capacity-building approach could be adopted by the Teaching Council to develop guidelines for the effective management of PLCs that would bring about purposeful professional engagement. Similar to the model used to create the professional support team as part of Droichead (an induction programme for newly qualified teachers), facilitators would be identified and provided with the necessary skills to facilitate meetings where the focus is reflection on practice. With school cultures playing a significant role in determining the effectiveness of PL opportunities, presenting an informed approach could assist in reducing the potential for teacher-vulnerability while at the same time strengthening supports within schools.

Similarly, I recommend efforts be made to formally establish coaching in schools, with training available to those willing to support their colleagues as part of within-school PL. Differentiating between coaching and mentoring should form part of this training, thereby confirming the importance of ongoing PL for all teachers.

Oide's provision of *Sustained School Support* as part of curriculum implementation, reflects the DE's recommendation that PL match the needs of individual schools (DE, 2022a). Oide is therefore, suitably positioned to establish a conceptual framework for PL within schools, that mirrors current theoretical perspectives on teacher-generated content, active learning, coherence and collective participation. Based on the findings, the framework might also include opportunities for teachers to recognise and identify the impact of their PL on their practices. I recommend that Oide includes in this framework approaches to developing authentic engagement amongst teachers, which in turn could support shared critical reflection. The potential for this type of engagement to continue beyond an agreed period of sustained school support could be strengthened by the existence of such a framework.

The PLC/CTB (NCCA, 2019) became a valuable resource in terms of stimulating professional debate within the PLCs. I recommend that Oide, in its work in terms of curricula implementation in schools, adopts a similar approach as a way of informally familiarising teachers with key principles.

Research

The obvious benefits of coaching, and how it fits alongside the establishment of PLCs, is worthy of further investigation, particularly in an Irish context where the establishment of Droichead has been successful in its in-school approach to PL.

The school self-evaluation process and the quality framework *Looking at Our School* 2022 position schools as capable of bringing about school improvements based on reflective analysis. In its intention to revisit this process (DE, 2022a), it may be possible for the DE, in line with the findings, to consider the capacity of schools to reflect on practice, the time available to engage in this process, and the potential for the process to cultivate an inquiry stance in teachers.

Oide's principles reference (www.oide.ie) partnership, responsivity and capacity-building within school communities. Alongside their commitment to collaborating with schools and providing 'expert' support, I recommend that they consider the difficulties teachers appear to experience with identifying issues with their practice. Surveying schools could help to establish whether they would benefit from guidance in identifying their needs. As the capacity to identify gaps in one's practice is dependent on increased

knowledge, it may be useful to provide schools with materials to support their efforts in identifying their needs.

The small-scale nature of this study meant that while its findings suggested a potential gap between teachers' CK and PCK, I was unable to confirm whether this originated in initial teacher education and its treatment of OL&C and dialogue. For those working in initial teacher education and teacher PL, it may be beneficial to examine provisions for the development of teachers' dialogic behaviours across curricula, thus, ensuring teachers are better positioned to interpret their role as facilitators of learning. Without this perspective, teachers may continue to consider themselves as transmitters of information – a position at odds with ongoing curricular changes.

Contribution to Knowledge

Research into the development of dialogue in lower primary classrooms is limited (Education Endowment Foundation, <https://educationendowmentfoundation.org.uk>; French & Lake, 2022). This study, however, provides valuable insight into how teachers working in these classes in Ireland perceive dialogic engagement with and amongst children. It provides knowledge pertaining to the *nature* of dialogic engagement in lower primary, knowledge relating to teacher awareness of dialogic engagement, knowledge of how teachers perceive their role in its development, and knowledge of the extent of teachers' skills in supporting it. These four areas are discussed below.

In arguing the complexity of teacher PL, the study recognises the need for one-to-one coaching to support teachers in becoming reflective practitioners. It identifies as superior, the role of the coach in terms of developing an inquiry stance in teachers, when compared with facilitation available through PLC membership. The study also identifies what might be considered barriers to teacher criticality. These are developed below.

Supporting the Development of Dialogic Engagement in Classrooms

It appears from this study that children-teacher engagement is not typically dialogic. More significantly perhaps, teachers can be unaware of the absence of dialogue in their engagements with children. They may not consider dialogue as part of the development of OL&C. They may not associate the practice of engaging in dialogue with children with developing children's thinking.

The study identified as an inhibitor to classroom dialogue, teachers' perceptions that children in lower primary may be too young to engage in this way. They can experience significant difficulty when attempting to engage dialogically with their children. Teachers also appear to be limited in the skills required to support the development of dialogue. However, dialogic engagement with and amongst children is possible through the adoption of particular practices. Therefore, in order to establish dialogic engagement, teachers need to adopt practices that represent newly acquired knowledge. Adoption of these practices may also signify an epistemological shift for some in so far as their role becomes about facilitation rather than transmission.

Dialogic engagement is founded on a desire to engage authentically with others. It requires careful listening and time. The findings suggest that by teachers adopting a philosophical stance they can support the development of authentic dialogic engagement in classrooms. When they present themselves as speculators, and encourage their children to behave similarly, teachers' positions as repositories of information change.

With this change in positionality the classroom becomes a more democratic space where opinions are sought and challenged. In such instances more than one response is welcomed. Children learn not to anticipate judgement, are more likely to offer suggestions, and may occasionally pose questions. Child-teacher engagement is no longer about validation for the child, but rather the development of ideas. Children become aware of the offerings of peers as they are directed to respond to them. The nature of knowledge changes, becoming something that is generated with and amongst the children.

Dialogic engagement is not curriculum specific. However, the teachers in this study found specific instigating moves helpful. They referred to the 'I wonder' phrase as 'opening the door' (Ellen, PLCM7) or 'providing the perfect box' (Brid, I2) for dialogue. By instructing children on how to use the phrase and by modelling its usage along with other terms such as 'maybe', participants observed children at all stages beginning to speculate.

Joint attention amongst children as part of dialogic engagement, was more difficult to achieve. However, when teachers modelled key phrases children also used them, began to refer to the contributions of their peers and to build on them. Supporting the development of dialogic engagement requires an awareness by teachers that it is fundamental to thinking, that they are central to its occurrence in the classroom, and that it requires a conscious effort on their part to adopt specific practices.

Teacher Experiences of Professional Learning

In terms of PL this study found that bringing about change to teachers' practices requires a significant level of support and facilitation. PLC membership has benefits in terms of the validation it offers teachers who may not otherwise feel supported. However, the extent to which its supportive setting can facilitate advancements in teachers' thinking is questionable. Membership in the short term (i.e. up to one academic year) may not result in changes to practice without additional supports such as one-to-one coaching. In-depth reflection on practice necessary for PL seems dependent on such coaching experiences. Therefore, to ensure PLC membership offers more than collegial support and assurance, it may be necessary to consider how one-to-one coaching might be included.

The participants accepted the importance of reflection on practice, but it was unlikely that changes resulting from this reflection would have occurred without facilitation. Participants could identify when their children were experiencing difficulties with aspects of OL&C development but were inclined to attribute these difficulties to within-child factors. They struggled with becoming objective about their practice which meant independently, they were unlikely to identify their actions as reasons for what they observed.

Teachers as part of their PL require the capacity to analyse their practice and make changes based on their analysis. This study suggests that teachers may need a significant amount of support in this endeavour. Coaching may in fact be preferable to PLC membership in terms of supporting reflection on practice that results in action.

Teachers may be unfamiliar with models of PL that require their active engagement. Their experience with transmission models of PL may make their transition to more agentic approaches difficult and even uncomfortable. What appears to contribute to this unease is the expectation that they engage with content in a critical manner so that they can adapt it to their own context. Transitioning to this kind of PL will take time providing teachers with opportunities to explore their uncertainties. While the value of teacher-generated PL content is undisputed, teachers may require support in presenting their data in a manner that can stimulate professional conversations. Experienced facilitators appear to be a necessary part of this process.

The study therefore suggests:

- Teachers' limited awareness of the role of dialogue may be impacting children's learning.

- Teachers' expectations regarding classroom dialogue may be limiting children's experiences.
- Teachers require a particular skill set to advance dialogue in their classrooms.
- Effective PLC participation may be reliant on skilled facilitation.
- Coaching may provide a suitable context in which to develop teachers' criticality.

Closing Comments

This study was about how we engage with each other and the value of this engagement. It featured my learning as much as it was about the learning of its participants. However, despite adopting an approach to PL that sought to recognise the contributions of the group, I remained for the participants a 'more knowledgeable other'. The participants as teachers were similarly positioned by their children. The act of engaging in dialogue became about addressing this imbalance as the participants, their children and I listened to, speculated with and challenged each other in what might be termed authentic engagement. Without this desire to hear the views of others, we would not have learned about each other or ourselves. Without teachers like 'Niamh' who were genuinely interested in their children's interpretations of events, and who by their probing displayed this interest to their children, we might never have known if the ducks heard.

Niamh:	Oh, I wonder how does a duck hear?
Child 1:	I think it doesn't like hear, but it just sees because every time I go to the park, they just see all the food.
Niamh:	Okay. They just see things. They don't hear?
Child 2:	They do hear.
Niamh:	I wonder now how would a duck hear?
Child 1:	Well, how do they listen to the quack noise when different ducks are talking to them?

(Source: Niamh, A/AV4)

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Appendices

Appendix A

Semi-Structured Interview Schedule (Phase Three additions in Red)

Part 1: Language and Communication Development (and **dialogue**)

Roughly how many years have you been teaching? Less than 5; between 5 and 10; more than 10
The research says that children require the support of a more knowledgeable person to develop their language skills. We as teachers take on that role. Tell me about an opportunity you provided in your classroom for children to develop their language and communication? Prompt: Context, How was it organised, Your role, The child's role, Other children's role? Could you describe any of the interactions that happen in your classroom? Prompt: How they evolve, What makes them happen. In Interview 1 you said... Describe your role now. Has it changed? Examples, Beliefs. Describe the children's role. Has it changed? Examples, Beliefs.
What knowledge do you think teachers need, to develop pupils' language and communication? Prompt: In terms of how it develops, the curriculum, classroom practices What do you know about language development? Prompt: Do you feel you know enough to develop children's language? What do teachers need to know? What do you feel you need to know?
What skills do you think teachers need, to develop pupils' language? Prompt: In terms of curriculum, classroom practice, beliefs, values, ideals Do you feel you practice these skills/have enough skills in this area?
Dialogue is viewed as a means of developing language and communication. What is dialogue? Tell me about the dialogue that happens in your classroom. Prompt: The context, organisation, preparation, outcomes Describe the questioning/answering?...yours / theirs...give examples In Interview 1 you said ... Can you comment on children-teacher dialogue now? Prompt: How it happens, where it happens, why?
Does assessment have a role in developing language and communication? Prompt: Give an example... how it looks in OL&C, how you use it, when you carry it out, What information do you look for? In/ outside child If no... could you use it?, Are there difficulties with it? In Interview 1 you said... Can you talk about assessment now? Prompt: Your capacity to analyse, what you are looking for, learning outcomes.
Are there difficulties associated with developing children's language & communication? Prompt: Examples, In terms of the curriculum, Classroom practice, Your beliefs In Interview 1 you said ... can you talk about the space for dialogue? Prompt: Has it changed? Examples.

Part 2: Professional Learning

Can we talk about some of your experiences of PL to date? Prompt: In-service, Summer courses, Training; Curriculum support, On-line learning Tell me about one you found helpful. Prompt: Focus, Organisation, Presentation, Discussion, Group, Duration, Facilitation, Location. In Interview 1 you said your preference was ...can we talk about PLCs as models of PL. Prompt: The purpose, content, location, group, cyclical model, reservations
"...teachers are often regarded as recipients of PL rather than active participants..." Tell me about your participation. Prompt: The content, How it was delivered. About participation, in Interview 1 you said ... how has participation in the PLC been? Prompt: easy, difficult, pace, direction, examples

<p>Tell me what you feel is the purpose of professional learning? Prompt: For children, For teachers, For curriculum, More? An example. <i>In Interview 1 you said... have there been benefits in relation to the PLC? Examples.</i> Additional Question: The PLC model is supposed to feature shared control and agency with teachers. Can you consider whether you felt that? Prompt: Does it differ to other models?, Examples, My Role</p>
<p>Reflection is believed to be necessary for PL but it is considered a difficult exercise Describe reflection ... give an example Prompt: What do you use?, How have you found it?, What do you do with your reflections? Prompt: In a curriculum area, classroom practices, beliefs, your work... children's work ... colleagues' work..., difficult/ easy/ useful/ time consuming. <i>In Interview 1 you said can you describe your reflection in terms of this PLC?</i> Prompt: Examples, Beliefs, Knowledge, Implications, Sufficient opportunities</p>
<p><i>Professional Learning Communities are an approach to PL where teachers gather in a group or community to examine educational issues.</i> Are you a member of a PLC? If yes... Tell me about it? If no... have you heard about the model? Prompt: How does it /might it feel to be a member?, What is intrinsic to it?, How is it organised?, Reservations?, Expectations?</p>
<p><i>PD happens when we critique our own experiences, assumptions and beliefs. contest something someone says ... (Cochran-Smith & Lytle, 2009)</i> This may be part of the PLC we will establish here in the school. How would you feel? Prompt: Challenging your thinking, others' thinking, how it might look. Prompt: Implications for the group, the individual, the school, the culture. <i>In Interview 1 you said Did critiquing exist as part of this PLC?</i> Prompt: Examples, disagreement, challenge</p>
<p>Additional Question: The Role of the A/AV recordings.</p>

Part 3: Primary Language Curriculum (Provide a copy for the participant's reference)

<p>Tell me about how you plan for the teaching of language and communication. Tell me about your experiences of the Primary Language Curriculum to date... in terms of developing oral language and communication in your classroom. What are the implications for language and communication teaching Prompt: The integrated framework, learning outcomes, progression continua What aspects do you find useful? Are there aspects that are new for you? Are there aspects that are difficult to access? Does it cultivate dialogue? <i>In Interview 1 you said ... Can you comment on it now?</i></p>
<p>Has the Primary Language Curriculum impacted your: Knowledge, planning, approaches to teaching, assessment/ analysis of language and communication, beliefs around how language and communication are developed Prompt: Components of language: identify, describe, recall, narrate, explain, predict, imagine, infer, construct, communicate, critical thinking. Curriculum outcomes: attend, engage, be motivated, show understanding, question, categorise, retell, elaborate, inform, explain, justify, describe, predict, reflect, evaluate <i>In PLC3 I asked you to plan your dialogue using the LOs. Could you comment on that?</i></p>
<p>Have you any other comments you would like to make about any of the areas we discussed? Have you any questions/comments in relation to the study at this point? Are their curricular areas/ activities/contexts within which you might be interested in exploring language & communication?</p>

Appendix B

Observation Schedule

(Adapted from Alexander, 2018; Dockrell et al., 2012; Law et al., 2019; Mercer, 2005; Soter et al., 2008, Sybing, 2021)

Name of Teacher: _____ Class Level: _____ Date: _____

Classroom Organisation/ Language Learning Environment: Present (P) Used (U)		
Open spaces	Learning Areas	Noise management
Accessible resources		
Labels/ Symbols/ Pictures	Children's displays	Classroom displays

Lesson/ Language Learning Opportunity:	
Attempts to actively include all children in activities	
Whole class directed by teacher	Small group facilitated by teacher
Structured conversations with teacher	Structured conversations with peers

Language Learning Interactions (evidence of dialogue): – What the teacher does:	
Uses children's names/ Adult lowers to child level	Gestures, signing, symbols, pictures, props used to support communication, reinforce language Scaffold language
Pacing/ Pauses expectantly during interactions/ active participation Scaffolds language	Confirming: Responds to child's communicative bids/ utterances Assessment
Imitates and repeats what child says, Confirming what child has said (not ignoring attempts) Scaffolding language	Comments on what is happening/ child is doing Scaffolds thoughts
Extending: Repeats what child says and adds syntactic or semantic information Scaffolds thoughts	Provides labels for unfamiliar actions, objects etc Scaffolds language
Encourages use of new words in child's talking Scaffolds language	Open questioning to extend thinking (what, where, when, how, why) Challenging Views, Linking ideas deeper views
Provides a routine for representing an activity (First, then) Scaffolds language & thought	Provides choices Scaffolds language, Provides subject matter
Models language that children are not yet producing Scaffolds language	Encourages turn-taking Scaffolds language
Praises listening skills Assessment	Non-verbal communication praised Assessment

Appendix C

Ethics Board Approval

Ollscoil Chathair Bhaile Átha Cliath
Dublin City University



Deirdre Walshe
School of Language Literacy and Early Childhood Education

Dr. Aisling Ní Dhiorbháin
School of Language Literacy and Early Childhood Education

25th May 2022

REC Reference: DCUREC/2022/094

Proposal Title: The role of professional learning communities in developing primary school teachers' knowledge of oral language and communication development.

Applicant(s): Deirdre Walshe, Dr. Aisling Ní Dhiorbháin, Dr. Eithne Kennedy

Dear Colleagues,

Thank you for your application to DCU Research Ethics Committee (REC). Further to full committee review, DCU REC is pleased to issue approval for this research proposal. This approval is conditional on the DCU Data Protection Unit (DPU) approving the project and any related documentation, such as a data protection impact assessment (DPIA). Research should not begin until this is in place.

DCU REC's consideration of all ethics applications is dependent upon the information supplied by the researcher. This information is expected to be truthful and accurate. Researchers are responsible for ensuring that their research is carried out in accordance with the information provided in their ethics application.

Materials used to recruit participants should note that ethical approval for this project has been obtained from the Dublin City University Research Ethics Committee. As part of DCU REC's ongoing monitoring process, during your research you may be asked to provide DCU REC with a progress report. Should substantial modifications to the research protocol be required at a later stage, a further amendment submission should be made to the REC.

Yours sincerely,

Chairperson
DCU Research Ethics Committee



Taighde & Nuálaíocht Tacaíocht
Ollscoil Chathair Bhaile Átha Cliath,
Baile Átha Cliath, Éire

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Appendix D

Three Phases of Data Collection and the Relevant Data Sources

Phase	Data Collection Method	Data Source	Duration/ Frequency per Teacher
Phase One (Before the PL Process)	Semi-Structured Interviews	Audio Recordings Transcribed Interviews Field Notes	One hour-long Interview
	Classroom Observations	Observation Schedules Learning Outcomes/Targets Field Notes	One thirty minute Classroom Observation
Phase Two (During the PL Process)	Introductory Professional Learning Community Meeting with Exploratory Conversation	Audio Recordings Transcribed Meetings Field Notes	One hour-long Meeting
	Children-Teacher Dialogue	A/AV Recordings Transcribed Recordings	Up to Six 5-8 minute Recordings
	Collaborative Analysis of Children-Teacher Dialogue in Post-recording Meetings	Audio Recordings Transcribed Meetings Field Notes	Up to six thirty minute Meetings
	Professional Learning Community Meetings	Audio Recordings Transcribed Meetings Field Notes	Seven hour-long Meetings
Phase Three (Following the PL Process)	Semi-Structured Interviews	Audio Recordings Transcribed Interviews Field Notes	One hour-long Interview
	Classroom Observations	Observation Schedules Learning Outcomes/Targets Field Notes	One thirty minute Classroom Observation

Appendix E

Board of Management Permission Letter

The Chairperson

XXX

30.05.2022

Dear Mr Chairperson,

My name is Deirdre Walshe, and I am currently working as a member of the Special Education Team here in _____. I have begun a course of study with the School of Language, Literacy and Early Childhood Education at the Institute of Education in Dublin City University (DCU). For the award of the degree of PhD I am required to complete a piece of research. To this end, and as sole researcher, I request your permission to embark on this study here in Presentation.

The study hopes to examine teacher knowledge of language development in children aged 4-8 years (i.e. Junior Infants – Second Class). Participation will be voluntary. Teachers who choose to engage will be interviewed pre and post study. These interviews will take place in the school building and out of school time. They will be audio recorded and should last about one hour.

Teachers will be asked to make monthly audio-visual recordings of their dialogue with groups of children (i.e. 5-8 minute audio visual recordings). These recordings will be analysed by them and with me and will be used at professional development meetings to discuss and further classroom practice. These meetings will last about one hour and take place on the school premises after school. They will be audio recorded only. All recordings will be stored in compliance with DCU data protection guidelines on the DCU Google Drive and will not be available to anyone outside the school other than my two supervisors. Other data sources will include relevant lesson notes.

This is considered a small-scale study and as such it can be difficult to ensure anonymity. However, every effort will be made to maintain confidentiality throughout the process. All references to data within the report will be anonymised and participants will be assigned pseudonyms. All data sources will be destroyed within three years of the study's completion. The data will be used to complete this research and may be published in educational journals in the future. I foresee that some parents/ guardians will choose not to allow their children to be recorded as part of the study. This will be managed by teachers who will work with groups of children who have provided consent.

If you are happy for this research to take place, I will request the principal as gatekeeper, to request permission/ consent from parents/ guardians of children in relevant classes. This process will begin in September 2022 and will be in line with the ethical guidelines prescribed by DCU and will respect all GDPR and Children First Protocols.

I would like to thank you for your support and acknowledge the privilege it will be should I be granted permission to conduct this research here in _____. I hope it will be of benefit to both the children and staff in terms of the teaching and development of language and communication, and in terms of teachers' professional development.

Should you have any further questions about any part of this study please feel free to contact me.

My email address is _____. My telephone number is _____.

My supervisors are also available should you wish to contact them:

Dr. xxxxxx

Dr. xxxxxx

Your cooperation and support of this research would be gratefully appreciated.

Yours sincerely,

Deirdre Walshe

Appendix F:

Permission Letter for the Principal

The Principal,

XXX

30.05.2022

Dear _____,

I have begun a course of study with the School of Language, Literacy and Early Childhood Education at the Institute of Education in Dublin City University (DCU). For the award of the degree of Ph.D. I am required to complete a piece of research. To this end, and as sole researcher, I request your permission to embark on this study here in _____.

The study hopes to examine teacher knowledge of language development in children aged 4-8 years (i.e. Junior Infants – Second Class). Participation will be voluntary. Teachers who choose to engage will be interviewed pre and post study. These interviews will take place in the school building and outside school time. They will be audio recorded and should last about one hour.

Teachers will be asked to make monthly audio-visual recordings of their dialogue with groups of children (i.e. 5-8 minute audio visual recordings). These recordings will be analysed by them and with me and will be used at professional development meetings to discuss and further classroom practice. These meetings will last about one hour and take place on the school premises after school. They will be audio recorded only. All recordings will be stored in compliance with DCU data protection guidelines on the DCU Google Drive and will not be available to anyone outside the school other than my two supervisors. Other data sources will include relevant lesson notes.

This is considered a small-scale study and as such it can be difficult to ensure anonymity. However, every effort will be made to maintain confidentiality throughout the process. All references to data within the report will be anonymised and participants will be assigned pseudonyms. All data sources will be destroyed within three years of the study's completion. The data will be used to complete this research and may be published in educational journals in the future. Where parents/ guardians choose not to allow their children to be recorded as part of the study class teachers will work with groups of consenting children.

If you and the Board of Management are happy for this research to take place, I would be grateful if you, as gatekeeper, could request consent from parents/ guardians of children in relevant classes. This process will begin in September 2022 and will be in line with the ethical guidelines prescribed by DCU and will respect all GDPR and Children First Protocols.

I would like to sincerely thank you for your support and acknowledge the privilege it will be should I be granted permission to conduct this research here in _____. I hope it will be of benefit to both the children and staff in terms of the teaching and development of language and communication, and teachers' professional development.

Should you have any further questions about any part of this study please feel free to contact me.

My email address is _____. My telephone number is _____.

My supervisors are also available should you wish to contact them:

Dr. xxxxxx

Dr. xxxxxx

Your cooperation and support of this research would be gratefully appreciated.

Yours sincerely,

Deirdre Walshe

Appendix G

Plain Language Statement (Teachers)

What is this study about?

This study is titled *An Exploration of What Teachers Know about Language and Communication Development in Children aged 4-8 years*. It is being carried out by me, Deirdre Walshe, with the support of the School of Language, Literacy and Early Childhood Education at the Institute of Education, Dublin City University (DCU).

What are the possible benefits of participating in this study?

Language is often referred to as a 'tool' for sharing experience and organising thinking. Teachers play a very important role in its development. This research hopes to identify what teachers know about the development of language and communication in students. It will explore how you view your role in this development. It hopes to assist you in examining your students' language and communication in depth. You and your colleagues will be asked to come together as a professional learning community (PLC) to discuss your experiences and share insights around developing language. In this way you may be able to encourage and support each other in becoming agents in your own professional development.

You can contact me at any stage before, during and after the research process at the following: deirdre.walshe7@mail.dcu.ie

You are also free to contact my supervisors:

Dr.

Dr.

What will your involvement look like?

You are being invited to engage in a study that will span one school year beginning at the end of September 2022 and ending in June 2023. During this time you will be asked to participate in the following ways with information being gathered at each stage:

Information Collection	Purpose
Interviews (1 hr x 2) (after school)	To gather teacher insights and experiences
Classroom Observations (½ hr x 2) (in school)	To learn about classroom practices
Audio-visual recordings of children-teacher discourse (5-8 mins x 7) (in school)	To record practice in student-teacher discourse and provide data for analysis and reflection develop student-teacher dialogue
One-to-one support meetings (½ hr x 7) (after school)	To support teacher engagement and assist in developing analysing skills
Audio recordings of teacher PLC meetings (1hour x8) (after school)	To analyse and develop a model of professional development
Reflection Journal (optional) and graph	To examine teacher satisfaction with the process and support reflection on the process

How will your information be stored?

All AV and audio recordings will be held securely on the DCU Google Drive for up to three years. Other information including transcripts will be anonymised and shared on a password-protected DCU Google Drive. All paper documents will be stored in a locked filing cabinet in the researcher's school. As participants in the study you have the right to access the data that relates to you. Transcribed interviews and observations will be available to read and make changes. Transcribed recordings will be shared for the purpose of analysis. You can review the study's findings by contacting me at any stage in the process. All data will be used for the purpose of completing this study and will be destroyed within three years of the study's completion. The data may also be shared at educational conferences and in journal form.

Data Privacy Notice

The Data Controller is DCU. The DCU Data Protection Officer, Mr. Martin Ward can be contacted at data.protection@dcu.ie Ph.: 7005118 / 7008257. Personal data collected in this research includes informed consent forms, assent forms, audio recorded interviews and meetings, and audiovisual recordings of classes. All data will be stored on DCU Google Drive and deleted after three years. Raw data (audiovisual and audio recordings) will be shared with the teachers participating in the research and the supervisors of the research only. It will not be shared with any other party. Participants can withdraw from the research at any time by contacting the researcher. Anonymised findings from the research may be published in academic journals or conferences. Participants have the right to make a complaint with the [Irish Data Protection Commission](#) at any stage during the process.

Confidentiality

The small size of the study means that anonymity cannot be guaranteed. However, pseudonyms will be used, and I will do everything possible to ensure the information collected is kept secure and your identity is protected.

"Confidentiality of information can only be protected within the limitations of the law - i.e., it is possible for data to be subject to subpoena, freedom of information claim or mandated reporting by some professions".

As you will be aware all engagement with students during this research is subject to the protocols outlined in *Children First*. If at any stage during the research, you are concerned about a child you should contact your school's Designated Liaison Officer.

Thank you for your support and I look forward to working with you.

(Deirdre Walshe)

**If participants have concerns about this study and wish to contact an independent person, please contact:
The Secretary, DCU Research Ethics Committee, Dublin City University, Dublin 9**

Appendix H

Observation Information Sample

Helen (Transcribed from field notes, comments in red added later as part of initial analysis, Learning Outcomes (LO) from PLC/CTB (NCCA, 2019)).

Learning Opportunities	
Observation 1 (LO:6, LO:7, LO:10, LO:12)	Observation 2 (LO:7, LO:11)
<p>Whole class & pair work & individual engagement. Clear instruction: low knees/ high knees to organise seating Big Book: We're Going on a Bear Hunt:</p> <p>Activity 1: Book Introduction (Day 2) T: (Examining book cover for clues) Teacher gestures – guesses (Hand to head). She picked up that a child said 'questions'. Teacher responded 'you might have questions' – but didn't extend to other children. T: Who are the characters in the story? (closed) C: "The bear" "In the river" "maybe a mum" "a mum and dad" "a man" "a girl" T: "Did we miss a character?".....(Can the children build on each other's answers, would a different question allow for the build 'Tell me about the front cover'. Could you use 'who agrees with ...')</p> <p>.....</p> <p>Activity 2 – Pair work: Teacher refers children to pictures on the window of different places. Child interrupted but teacher moved on with prediction exercise.... Should we be attending to the interruption? T: Turn to the person beside you – "I think - Teacher calls children back to the group and refers to a child for a response C: "I already told her" – evidence of engagement C: "Nobody was talking to me" (XX) C: "I've that story at home". (ego/self – how do we manage this) T: Did you recognise the characters? (closed)</p> <p>Activity 3 – Reading Title T: What is a hunt?" (Test) C: Finding stuff T: Great explanation. Would anyone else know? (T.C.T & IRE, could this have been extended to include others. Could the discussion about hunting be kept for another day so that it could be developed) T: Would anyone else know? (teacher in control) T: Did we go on a hunt before? (test) C: To find colours</p>	<p>Whole class seated in front of big book: The Royal Dinner by B. Parkes (Teacher established that some had seen the book last week in another classroom)</p> <p>Activity 1: Book Introduction, cover, title etc. T: Show me the first word, teacher read title She provided a reminder to the children about wondering, visualising, making connections and justifying, using posters of hand signs. T: So I'm not going to show you the front cover. You can see the back of the book and the title. I want you to begin to wonder yourself. I will give you a few seconds. Then turn to the girl beside you. (teacher moves around room) I overheard children say without prompts: I wonder ... I think it's going to be about ... I wonder why ...</p> <p>(SNA asks What do you think... ? – is that a different question to I wonder...? Will the outcome be different, is the levels of speculation the same)</p> <p>Teacher records five wonderings on the whiteboard: C: I wonder what the food will be? C: I wonder what is happening in the book? T: Could you add in more details (child didn't) C: I wonder if the food is going to be a pizza? T: What does pizza begin with? C: I wonder what's going to be in the pot?</p> <p>T: What do you mean by that? Child points to picture T: What do we call this? C: A serving dish T: Does anyone have another word? C: A serving plate C: I'm wondering if they are going to have chicken</p>

<p>T: Yes (repeats answer – recasts) T: <i>There was one other time. We went to find some..... (Test)</i> T: <i>And another one?</i> C: I went to find a house (XX) C: Another child references a number hunt T: <i>One other hunt? (teacher leading, no uptake)</i> C: A room hunt. T: <i>Yes to find some people</i> (There is quite a bit of information here on which to build and explore the notion of hunting – lot's of experiences to draw on and for children to listen to each other, record perhaps) Activity 4- Front Cover/ Author/Illustration. T: <i>Clues from the front cover? (test)</i> C: The blurb... T: <i>You think we should check the blurb?</i> C: There's a hunt at Easter T: <i>Yes what do we hunt for? (Uptake; fear of losing others??)</i> A child interrupts (XX) – managing the child who has a lot to say? Activity 5- Inside cover T: <i>What do you think this might be? (test)</i> C: In the Winter in the North Pole... T: <i>I can't really see any snow (uptake) (challenging).....</i> (Could this have been developed for dialogue?) Activity 6- Page One Print T: <i>What would you bring if you were going on a hunt? (open)</i> C: Strawberries T: <i>Why would you put in some strawberries? (uptake, teacher listening, why does it not evolve)</i> C: Crisps T: <i>What else?</i> C: Lots of things (some uptake here but always coming back to the teacher for feedback – is that how we train children) T: What else would you bring C: A torch T: Why? (uptake but could anyone else have been brought in here) T: What else would you bring? C: A sword T: <i>Why? (listening, hoping to build?)</i> C: If it's mean T: What else would you bring? C: Some bear ham and mac and cheese T: Why? C: Bear T: What else? C: A rope in the water</p>	<p>Activity 2: Teacher displays front cover. Children sit on the floor. T: <i>What does the royal dinner mean? Could I make a connection? Can you make a connection with the royal dinner?</i> C: Royal dinner they have in palaces T: <i>Can anyone add to that? (joint attention)</i> C: I wonder why the chef is wearing that on his head? C: I wonder if the child is allowed to stay up late? T: <i>I wonder why you think it's late (no one comes back with that – not sure of the dialogue across the group, it may happen later, children showing evidence of wanting their thoughts heard as referenced by Helen during PLCMs)</i> T: <i>S thinks it might be late?</i> C: I wonder why they have dresses on them? T: <i>Who can give a maybe? (talk move)</i> T: <i>Maybe it's because- (modelling)</i> T: <i>Why do they wear dresses? (teacher listening)</i> C: It (unclear) T: How do you know it's a princess? (challenge) C: Cos (unclear) T: <i>Does anyone know what they are wearing on their heads?</i> C: They all have crowns on their heads C: ... how Teacher brings it back to crown conversation C: I agree with ... T: <i>Do you agree that ... princess? Tell me more.</i> C: She is ... (teacher following child's lead) T: <i>Why? (listening)</i> C: Sometimes queens have different crowns to princes C: I agree with both of them because... even though... C: That's a princess. C: I think she is a queen. T: <i>What do you think about what XX said? (Joint attention)</i> C: ... a prince.. C: Maybe she got it from her school. C: I disagree with XX and YY. T: <i>Go on. (talk move)</i> C: Princesses don't go to school. T: <i>What do they do? (Uptake)</i> C: Home school. T: <i>What's that? (teacher listening)</i> C: It's school and ... at home T: <i>Who's the teacher? (Extending)</i> C: Your mam or you dad</p>
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T: Why?
 C: So if I was there mum, my dad, a river, he
 lassoed the rope
 T: (Whole class) Show me the action for lassoing
 the rope.

Another opportunity to develop discussion across
 the class in responses to children's suggestions –
 what are the key phrases teachers might use to
 support this type of engagement, what cognitive
 development might occur as a result of such a
 conversation

.....
 Activity 7- Prediction
 T: Can you predict what we are going to see next?
 C: A bear (child or teacher repeats, not sure)
 C: Some mud
 T: Well done for looking up at the pictures on the
 window (closed test question)
 T: Reference to feelings
 C: ...nervous...
 Teacher asks for others to show being scared
 T: Can you think of a time when you felt scared?
 C: When it was bleeding.

.....
 Activity 8- Reading
 Deep cold water, actions, splash splosh (reference
 to print conventions)

.....
 Activity 9- Individual Bear Task – Prepositions/
 Following instruction
 Teacher directs and models on the chair, bear
 under the chair
 C: That kind of rhymes
 Teacher cannot use all child engagements to
 develop language, how does she choose one?
 C: Where can we put it?
 T: That's a good question'
 T: Can your show XX how we put it over the chair
 Again this may not be the time to develop
 language. This is instruction with a concept
 outcome.

T: Can you put the bear through the chair
 T: Have a look. Let' see what people are doing
 C: Through the chair (voluntarily)
 T: What does going through mean?
 C; It's like you walk through something
 T: What does that mean?
 C: It's like you walk under something
 (discussion with one child - Would it be possible
 for others to join in in the explanation?)

T: What do you think about that? (*Joint
 attention*)
 C: I disagree... royal school where only royal
 people go
 T: ... you are not going to school. Why?
 Would be happy with that? (*Challenge*)
 (thumps up down sideways)
 T: Tell me more. (pause – not very long,
 rushed in to name a child) XX what would you
 think?
 C: Good... have to ask one person...
 teacher... dress up... sit down
 C: ... home school if you don't have parents
 T: Tell me more. (*Extending, talk move*)
 C: Home school... parents can 't mind us
 C: ...on a show that I watched
 T: You are making a connection.
 C: ... parents ...
 C: ... friend really sick... home school ...
 Scotland... before we left... till next year
 T: How does she feel? (*Uptake*)
 C: ... but I would like it ... spend time with
 my cat.
 T: I'd disagree with that.
 C: I wonder why she has a chicken on her
 head (referring to book cover)
 T: Does she have a chicken on her head.
 Show me (Child indicates front cover)
 T: I think it might be her hair. (Teacher refers
 to author and illustrator)
 C: My aunty is called Brenda.
 T: Good connection

.....
 Teacher reads

 T: Who's this? [Chorus answer] teacher not
 evaluating answers..... si she talking
 too much is it necessary to support this age
 group, is she working towards the agenda fo
 reading a piece
 C: No it's not a chef
 C: It's a waiter
 T: What do you think it is? (*inviting in a quiet
 child*)
 C:
 T: I notice lots of speech marks – teacher
 reads; the dilemma of getting the reading task
 done

 T: So this is a cook. What does he want for his
 dinner (recall following reading). What does
 he say? What does it mean?
 C: He's going to take off his head
 T: -
 C: What I meant was he's going to chop of
 his head

	<p>T: <i>XX you are wondering?</i> (<i>noticing wiggle finger</i>)</p> <p>C: I wonder why there is a mouse in the ...</p> <p>T: <i>Is that an okay thing to say?</i></p> <p>C: It's not nice</p> <p>T: <i>Tell me why?</i> (<i>Challenge</i>)</p> <p>C: ...</p> <p>C: If he wants ham he just should say can I have ham?</p> <p>C: Do you mean like a saw?</p> <p>C: yeah</p> <p>C: I wonder if it's that person's house?</p> <p>T: <i>Is it a house?</i> (<i>uptake/ challenge -did it go anywhere</i>)</p> <p>C: Why is that guy in the castle?</p> <p>T: <i>Mmm (revoiced) (talk move)</i>– child tried to add her own wonder, teacher brought it back</p> <p>C: Maybe because he makes the food and serves it to them?</p> <p>Teacher refers to Aistear and restaurant theme.</p>
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Learning Interactions

Observation 1	Observation 2
<p>Children's names used, moving down to their level, some wait time, repeated what was said, Whole class – teacher directed</p> <p>Pair work – teacher modelling</p> <p>Individual task – listening and responding with action to show understanding of the concept, some use of terms.</p> <p>The <i>exploring and using</i> element featured in her plan but was not exploited - was this the time to do it? So does the dialogic piece only happen as part of the exploring and using element?</p>	<p>Teacher attempts <i>wait time</i>, but rate is fast – could be me, not inclined to wait for responses across the room, would she loose them if she did?</p> <p>Inclined to repeat what they said, some speak very quietly but then it becomes a habit</p> <p>Pair work – first time appears successful</p> <p>Time given to children to think before they answer</p>

Teacher Talk

Observation 1	Observation 2
<p>Teacher led engagement throughout, dominated by teacher talk. There was more teacher than student talk but they engaged with hands raised. Children responded to teacher's questions and not to each other. Opportunities to develop dialogue and uptake were as part of the hunt discussion and what you would bring. Neither opportunity was used. Is this evidence of the transmission model in terms of epistemology or is it lack of awareness? Teacher was in control of the lesson throughout – is this important. What does control look like in these instances? Language was used by students as modelled by teacher. Sentence structure was modelled. Children did not initiate. Questions generally closed, information seeking, test. Some requesting expressions. Receptive language – following instruction</p> <p>Q. Is this how we introduce the management procedures in early formal schooling? Do children</p>	<p>Still a lot of teacher talk but not quite T/C/T/C. Some evidence of children building on each other. Could this be out down to maturity? (now one year in formal schooling)</p> <p>Explicit teaching of terms by teacher</p> <p>Modelling by teacher</p> <p>Some revoicing</p> <p>Uptake particularly around home schooling</p> <p>Teacher went with the topic being discussed on some occasions</p> <p>There might have been some child control around home schooling.</p> <p>Open questions generally.</p> <p>Closed questions following reading to recall information. One chorus response.</p> <p>Teacher may not have been in control based on conversation that arose. Could she have gone further?</p>

<p>learn these behaviours first or if they learn these do they ever return to dialogue when teacher is involved? Is the conversation and dialogic features different at lunch time compared with class time and teacher-child interaction? Could there have been dialogue today?</p> <p>So was this a reading and comprehension lesson or a language lesson?</p>	<p>So was this a reading and comprehension lesson or a language lesson?</p>
Child talk	
Observation 1	Observation 2
<p>I don't know if other children are listening to the responses of peers. They are not being required to and build on what each other has said.</p>	<p>They are being required to listen to each other and some are but are they building on each other and to what degree?</p> <p>Some children were doing all of the talking The children continue to move beyond their own agenda as is evident in the wondering. Some small bits of uptake by children of children. Teacher attempts to make it happen showing her awareness.</p>
Alternatively...	
Observation 1	Observation 2
<p>It was the beginning of the year and the teacher was trying to establish routines – was this the case according to her lesson plan?</p> <p>The children were not capable of the extending, expanding, justifying etc – junior infants</p> <p>There were interruptions where teacher was trying to manage very verbal children. She was also attempting to include a non-verbal child and a child with EAL.</p>	<p>It was the end of the year and children would have talked at this level anyway.</p> <p>Teacher benefitted from a framework within which to develop dialogue</p> <p>It really doesn't matter how I evaluate as long as teacher recognises a shift. The contrary would make no difference in the long term.</p>

Appendix I Monthly Time Frame

	Week 1	Week 2	Week 3	Week 4
September 2022	M: -	M: Pilot Obs.	M: Rachel – Obs.	M: Ellen – Obs.1
	T: Principal Meeting (SA)	T: -	T:	T: Helen-Int.1/ Brid – Int.1
	W: Intro. Meeting (SA)	W: -	W:	W: Intro. Meeting (SB)
	TH: -	TH: Rachel – Int.1	TH: Ellen – Int.11	TH:
	F: Principal Meeting (SB)	F: -	F:	F:
October 2022	M: -	M: Eimear – Int.1	M: Eimear – Obs.1	M: Ann–Obs.1/Yvonne–Obs.1
	T: Helen – Obs.1/ Brid – Obs.1	T: Ann – Int.1	T: Niamh–Obs.1/Yvonne – Int.1	T: Laura – Obs.1
	W: Niamh – Int.1	W: -	W: Laura – Int.1	W: Intro. PLC Meeting (SB)
	TH: -	TH: -	TH: SA - Assent Meetings	TH: Intro. PLC Meeting (SA)
	F: -	F: -	F: SB – Assent Meetings	F: -
November 2022	Mid -Term Break	M: -	M: PLC Meeting 1 (SA)	M: Post-Rec Meeting (SB)
		T: PLC Meeting 1 (SB)	T: -	T: Post-Rec Meeting (SB)
		W:	W: -	W: Post-Rec Meeting (SB)
		TH:	TH: Rec.1 Submission (SB)	TH: Rec.1 Submission (SA)
		F:	F: -	F:
December 2022	M: Post-Rec Meeting (SA)	M: -	M: PLC Meeting 2 (SA)	M:
	T: Post-Rec Meeting (SA)	T: PLC Meeting 2 (SB)	T:	T: Rec.2 Submission (SA)
	W: Post-Rec Meeting (SA)	W:	W:	Christmas Holidays
	TH:	TH:	TH: Rec.2 Submission (SB)	
	F:	F:	F:	
January 2023	Christmas Holidays	M:	M: Post-Rec Meeting (SA)	M: PLC Meeting 3 (SB)
		T: Post-Rec Meeting (SB)	T: Post-Rec Meeting (SB)	T: PLC Meeting 3 (SA)
		W:	W: Post-Rec Meeting (SA)	W:
		TH:	TH:	TH:
		F:	F:	F:

Study Phases

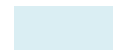
Phase 1



Phase 2



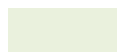
Phase 3



	Week 1	Week 2	Week 3	Week 4
February 2023	M:	M: -	M: Post-Rec Meeting (SA)	M: PLC Meeting 4 (SB)
	T:	T: Post-Rec Meeting (SB)	T: PLC Meeting 4 (SA)	T:
	W:	W: Post-Rec Meeting (SA)	W:	W:
	TH: Rec.3 Submission (SB)	TH: Post-Rec Meeting (SA)	TH:	TH:
	F: Rec.3 Submission (SA)	F: Post-Rec Meeting (SB)	F:	F: Rec.4 Submission (SA)
March 2023	M: Post-Rec Meeting (SA)	M: Post-Rec Meeting (SB)	M:	M: Post-Rec Meeting (SA)
	T:	T: PLC Meeting 5 (SA)	T: PLC Meeting 5 (SB)	T: Post-Rec Meeting (SA)
	W:	W:	W:	W:
	TH:	TH:	TH:	TH:
	F:	F:	F: Rec.5 Submission (SA)	F: Rec.5 Submission (SB)
April 2023	Easter Holidays	Easter Holidays	M: Post-Rec Meeting (SB)	M:
			T: Post-Rec Meeting (SB)	T: PLC Meeting 6 (SA)
			W:	W: PLC Meeting 6 (SB)
			TH:	TH:
			F:	F:
May 2023	M:	M:	M: Post-Rec Meeting (SA)	M:
	T:	T:	T: Post-Rec Meeting (SB)	T: PLC Meeting 7 (SA)
	W:	W: Rec.6 Submission (SA)	W: Post-Rec Meeting (SB)	W: PLC Meeting 7 (SB)
	TH:	TH: Rec.6 Submission (SB)	TH: Post-Rec Meeting (SA)	TH:
	F:	F:	F:	F:
June 2023	M:	M:	M: Ellen - Int.2 & Obs.2	M: Helen - Int.2 & Obs.2
	T: Joanne – Int.2 & Obs.2	T:	T: Brid - Int.2 & Obs.2	T:
	W:	W: Ann – Int.2 & Obs.2	W: Rachel - Int.2 & Obs.2	W:
	TH:	TH: Yvonne – Int.2 & Obs.2	TH: Eimear – Int.2 & Obs.2	TH:
	F:	F:	F: Laura - Int.2 & Obs.2	F:

Study Phases

Phase 1



Phase 2



Phase 3



Appendix J

Viewing a Video Protocol

Viewing a Video

Context

The sample was recorded in Term Two last year and features five children from 1st Class in learning support. It was a diverse group. One child had dyspraxia. Another child's attendance was poor. English was an additional language for one. The learning outcome was to demonstrate joint attention and actively listen.



Purpose

To identify what the teacher is doing to develop language and communication skills.

To become familiar with the process of language analysis.



Observe

- Q. What are the children doing and saying?
- Q. What is the teacher doing and saying?
- Q. Can you see dialogue happening?



Reflect Analyse

What is happening?
Find patterns in the children's talk and the teacher's talk.

T	Can we do it?	
C	How will we?	
C	I know.	
T	Tell us.	

What next?

- Q. What do I need to focus on next?



Appendix K

Extract from Language Sample used at Introductory PLC Meeting

	Dialogue	Analysis
C1	Wait where did you get all of these?	Uptake (Child)
T	I wonder what are they before they are tadpoles?	Test Question
C2	Eggs	Other
T	Oh good girl. Another word for them would be the frogspawn.	Connect
C3	The little black stuff are them inside	Disputational
C2	How many are there?	Uptake (Child)
C4	There's loads of them	Cumulative
C3	If you touch it I think it's gonna be all gooey.	Cumulative
T	If you touched it, it would be gooey. Do you think it would be a good idea to touch it?	Authentic Question
	Group: No (C3: It would be gross)	
T	Well?	Other
C2	There's so many... there... there... there... over there. They're hiding on top of each other.	Disputational
C3	I saw tadlings when I was walking	Disputational
T	You saw tadpoles before?	Uptake
C1	Me too.	Cumulative
C3	When I was hiking with my cousins I saw (Talking over)	Uptake (Child)
T	Hang on C3. What are you saying?	Uptake
C3	So I was in the mountains and when we were going down getting back to the car we saw some tad... poles and they were all so small. That was my first time seeing them.	Uptake (Child)
T	Where was that?	Uptake/ managing
C3	In a forest. We were going down.	Connect
C2	We didn't get to take the flowers in the house (reference planting activity)	Disputational
T	We will take those maybe today – Is that ok?	Other
C4	Eh eh ..(getting louder) When I was in the mountain, like 30 years old the house was,.....(unclear) we went up the hill, it's the first time seeing it	Cumulative
T	Was it the Hellfire Club?	Authentic Q
C4	Yeah I think it was	Connect
T	An old house on top of a hill?	Authentic Q
C4	There's a little lake and it said 'tadpoles'	Cumulative
T	I think I've seen that one yeah.	Uptake
C4	And there's loads of little tadpoles in it	Cumulative
T	Do you think it's ok to have them here? I wasn't really sure what to do about them. (See P1's raised hand)	Authentic Q
C1	Once when I was going hiking with my cousins and I found a tiny pond and there were baby eggs everywhere (fades off)	Disputational
T	That sounds like the same place that C4 might have been?	Authentic Q
C1	They were like ... in a puddle	Cumulative
C4	Yeah. It's a little gate and it has a frog sign	Uptake Develops idea
C1	It didn't have a frog sign. It was a mountain I was hiking up (T: Interrupts) And I was running up and I spotted and my dad told me what they are and I was like are those like see-through rocks	Challenge Exploratory
C2	There are four places where the eggs are... there....there...there and a little corner over there	Disputational
T	Do you think it's ok for me to have them here?	Authentic Q
	General: no	
C3	Oh no. When they grow up they will all be bouncing around the classroom	Children talking on the same topic but not building on each other's comments

Appendix L Context for Observations/Recordings of Children-Teacher Dialogue

	Observation 1	A/AV 1	A/AV 2	A/AV 3	A/AV 4	A/AV 5	A/AV 6	Observation 2
Helen	We're Going on a Bear Hunt by H. Oxenbury	Doctor's Surgery (play preparation)	Ice Melting Experiment	Whatever Next by J. Murphy (Front Cover)	Whatever Next by J. Murphy (SBR)	Found Item: Keys	P4C Which would you rather be?	The Royal Dinner by B. Parkes (SBR)
Niamh	Humpty Dumpty Illustration	Jumping Raisins Experiment	3D Shape (no sound)	Incy Wincy Spider Illustration	'Same and Different' Photos (<i>Explorify</i> website)	'What could it be?' Picture Reveal (<i>Explorify</i> website)	'What could it be?' Picture Reveal (<i>Explorify</i> website)	Caterpillar Eggs on a Leaf (Video)
Brid	Walking through the Jungle by J. Lacombe (SBR)	Socio-dramatic Play (Aistear)	Houses and Homes (Aistear)	'Pig with Piglets' Photograph	This is the Bear by S. Hayes (SBR)	The Enormous Turnip (Front Cover)	The Magic Moment by N. Breslin	The Royal Dinner by B. Parkes (Front Cover)
Yvonne	Room on a Broom by J. Donaldson (SBR)	-	'Winter' Illustration	'Clothes' Illustration	'Airport' Illustration (no sound)	'Spring' Illustration	You Choose by Nick Sharratt	The Cautious Caterpillar (Video)
Rachel	Language Games and Picture Absurdities	Animal Homes (SESE)	Designing a Playground (SESE)	Amazing Grace by M. Hoffman (SESE)	Growing and Changing: Responsibilities (SPHE)	Would you rather? (P4C)	Do we need Teachers? (P4C)	Coat of Many Colours by D. Parton (song)
Ann	Our News	Summer and Winter Clothes: Classification	Construction (Aistear)	Garden Implements (play preparation)	The Slug Bottle Dilemma	'The Farm' Illustration	'Playground' Photograph	Going on Holidays (Front Cover)
Ellen	Sandy gets a New Lead (PM L6)	-	'Fish Tank' Photograph	'Washing Line' Photograph	'Children at a Rubbish Dump' Photograph	'At the Beach' Sepia Photograph	An Elephant as a Pet? Sticky Question	What if you could fly to school?
Eimear	Halloween Phonics	Rainbow Skittles Experiment	The Snowman by R. Briggs (video)	-	Favourite Food	Charlie and the Chocolate Factory by Roald Dahl	Charlie and the Chocolate Factory by Roald Dahl	Letter Writing Preparation
Laura	Flying Machines (based on Room on a Broom by J. Donaldson)	Piggybook by A. Browne (SBR)	Gorilla by A. Browne (SBR)	Smeds and Smoos by J. Donaldson (SBR)	The Scarecrow's Wedding by J. Donaldson (Reginald Rake dilemma)	Animal Conservation (based on There's a Rang-tan in my bedroom by J. Selleck)	Which is better – Big or Small? (photographs)	Would a Giraffe be a good pet? (based on How to Take Care of Your Dragon by A. Forsberg)

Appendix M

Participation Data Consent/Assent Details for Both Schools

Teacher	Class Size/ Group Size	Parent Consent/ Guardian Consent	Child Assent	Recording Group
Teacher 1	24	17	6	6 girls
Teacher 2	27	22	6 (5)	6 girls (1 child with EAL)
Teacher 3	29	26	25	6 girls (1 child with EAL and 1 child with SLD)
Teacher 4	*7	6	6 (5)	5 girls (1 child with SLD)
Teacher 5	*6	6	**6	6 girls (2 children with SLD)
Teacher 6	24	6	6	5 girls and 1 boy (2 children with EAL)
Teacher 7	25	6	4	3 girls and 1 boy (3 children with EAL)
Teacher 8	27	12	6	4 girls and 2 boys (1 child with EAL)
Teacher 9	24	12	6 (5)	3 girls and 3 boys (1 boy left the school)

* Support Teacher

** One child's parents agreed to audio recordings only

Appendix N

A Record of Attendance at PLC Meetings

School A							
	PLC M1	PLC M2	PLC M3	PLC M4	PLC M5	PLC M6	PLC M7
Teacher 1	Δ	Δ	Δ	Δ	Δ	Δ	Δ
Teacher 2	Δ	Δ	Δ	Δ	Δ	Δ	Δ
Teacher 3	Δ	Δ	Δ	Δ	Δ	Δ	Δ
Teacher 4	Δ	Δ	Δ	Δ	Δ	Δ	Δ
Teacher 5	Δ	Δ	Δ	Δ	Δ	Δ	Δ

School B							
	PLC M1	PLC M2	PLC M3	PLC M4	PLC M5	PLC M6	PLC M7
Teacher 1	Δ	Δ	-	Δ	Δ	Δ	Δ
Teacher 2	Δ	Δ	Δ	Δ	Δ	Δ	Δ
Teacher 3	-	Δ	Δ	Δ	*	Δ	Δ
Teacher 4	-	Δ	Δ	Δ	*	-	-

*A separate meeting was held to accommodate two participants.

A Record of Uploaded A/AV Recordings and their Duration in Minutes

School A						
	A/AV 1	A/AV 2	A/AV 3	A/AV 4	A/AV 5	A/AV 6
Teacher 1	6	7	8	7	11	7
Teacher 2	9	10	5	7	7	7
Teacher 3	14	10	9	10	9	14
Teacher 4	-	13	8	12	7	9
Teacher 5	5	5	4	6	5	8

School B						
	A/AV 1	A/AV 2	A/AV 3	A/AV 4	A/AV 5	A/AV 6
Teacher 1	3	12	9	6	8	7
Teacher 2	-	18	7	9	4	14
Teacher 3	10	5	4	6	6	5
Teacher 4	8	22	-	7	9	13

Appendix O

Brid's Trajectory: Practices, Observations, Reflections and Contributions (A/AV recordings, Post-Recording Meetings and PLC Meetings)

Time to talk		Wait time		Uptake		Teacher Role		Joint Attention	
Dialogic talk		Talk Moves		Differentiation		Questioning		Assessment	

Cycles	PLC Meetings (Topics Explored)	Observed Behaviours (A/AV Recordings)	Post AV-Recording Meeting Reflections	Follow up PLC Meeting Contributions by SAT2
Cycle 1 PLC 1 14.11.22 AV Rec: Sample	Identified by Participants following Sample/ Participant AV recording: Balancing Teacher and Child Talk Teachers hold back allowing children to talk. Child talk requires wait time and space Children require confidence to talk. Children do not ask each other questions. When children connect dialogue begins. Children can surprise us with what they have to say. Child-led talk (SAT2) Raised by Researcher:	A/ AV Recording: Socio-dramatic Play: Doctor's Surgery (Aistear) Teacher-Child-teacher pattern that changed to reflect greater child involvement and peer interaction This led to less teacher control Wait time dictated by children and their interruptions Child-led storyline that teacher followed Closed questions (teacher in role) Vocabulary support for pupils Communication and gesture as a support for children with EAL and cognitive difficulties. Teacher practices uptake. Teacher engages and storyline is extended (e.g. an operation). Occasional cumulative talk as teacher supports story line development. No opportunity to build across the group – very busy. The children were working out their own storyline, checking in with each other on occasion. One pair working together and others following on occasion.	The participant reported: Some children were in role and developed a storyline Some children engaged in imaginary dialogue Surprise at how well one reluctant child engaged A weaker child only communicated with teacher. Childrens gained understanding of how a surgery works. There was dialogue between two at the end. Satisfied three achieved the LO1 – joint attention Some engaged when teacher asked a question Surprise with the storyline/ emergency. Children who are reserved and those who are loud Consciously holding back not wishing to disturb the play Teacher tried to play rather than teach Fearful of becoming the teacher and monitoring/ testing Teacher is necessary for communication with those who others overlook and those less verbal. Children might not connect with each other if teacher isn't there. Attempting not to interrupt. Developing dialogue with more able. Aistear provides an imaginary context and allows for storylines to develop. She will use it but not role play. (R suggests small world). It provides more opportunities for less engaged children. She is fearful the group will break up in small world and the more verbal will move away. The Researcher suggested:	At PLC 2 the participant reported: "Trying" not to interrupt children's thoughts and ideas. <i>And that's kind of the big thing - like how to - where's the line? Because you want to direct them, but you also don't want to overpower the play and their language from it.</i> Gestures were required to support some engagement (one child pointed) The importance of teacher putting language on a child's gesture One child only communicated with teacher. Without teacher some children would not be included Teacher tried handing 'the power' to the children and did not input on storyline. Role play is good because the teacher isn't teacher in it. Teacher believed her role was modelling correct language. Teacher believed there was dialogue and children were talking to each other. They weren't passive.

	<p>The importance of context for OL&C development.</p> <p>OL&C can be child-led.</p> <p>Joint attention is a necessary element of OL&C</p> <p>In pursuit of dialogue, are the pupils listening to each other?</p> <p>The benefits of pupils justifying their statements</p> <p>Teachers can overtly impact OL&C through their behaviours.</p> <p>Talk Types (Mercer): Disputational and Cumulative Talk.</p>	<p>Did SAT2 bring something to this narrative, or would it have evolved without her? She suggested operating which didn't develop. She labelled a child's action as x-rayed, but this didn't evolve either.</p> <p>If the children engage with teacher are they doing so at the expense of developing a story with a peer?</p>	<p>Identifying test and open questions</p> <p>Children not generally building on others' conversations</p> <p>Talk types named and located</p> <p>Challenge the pupils with a question – the exploratory</p> <p>The aim is to have pupils talking and listening to each other and building on each other.</p> <p>Gesturing as communication – communicative intent</p> <p>Teachers have different roles with different children</p> <p>The teacher acknowledges communication by pupil who others don't see</p> <p>Do weaker children see dialogue modelled in this context?</p> <p>The role of the MKO for less able children – a dilemma – when others only need you to facilitate but end up deferring to you</p> <p>The dialogic role of teacher in a play scenario</p> <p>Are we getting in the way of the story by teaching vocabulary?</p> <p>Adding a justification to the answer</p>	<p>Teacher believed Aistear is where you will get the back and forth. She is not convinced it will happen anywhere else. Their age means they are not interested in others' views.</p> <p>Children don't listen to each other. They want teacher to hear them. Teacher unsure if she can extend talk.</p>
<p>Cycle 2</p> <p>PLC 2 05.12.22</p> <p>AV Rec: SAT2 SAT5</p> <p>H/O: Three Talk Types, Connect Episodes, Reasoning words</p>	<p>Identified by Participants:</p> <p>Trs facilitate OL&C in play (SAT2)</p> <p>Trs talk too much (SAT3, SAT5)</p> <p>Children talk when teachers stop talking.</p> <p>The impact of how the seating is arranged</p> <p>Talk moves might help children connect and cultivate listening (SAT5)</p> <p>Attending (SAT1, SAT2)</p> <p>Thinking in different ways (SAT4)</p> <p>Ground Rules (SAT3)</p> <p>Dialogue can happen between two children (SAT5)</p> <p>Dialogue is not natural (SAT5)</p> <p>Supporting Dialogue (SAT1)</p> <p>Dialogue is something other than GR lessons (SAT5)</p> <p>Teacher's role in supporting particular pupils (SAT2)</p>	<p>A/ AV Recording:</p> <p>Small World: Houses and homes</p> <p>Teacher-Child-Teacher generally, Some instances of Teacher-child - child - teacher</p> <p>Sufficient wait time as in A/AV 1</p> <p>Some small pieces of uptake by children of each other</p> <p>Very little evidence of listening</p> <p>Teacher does not call for engagement across the group</p> <p>Dialogue with one pupil at a time</p> <p>Teacher asks closed questions</p> <p>Teacher follows child lead with story lines</p> <p>Teacher practices uptake</p> <p>Supporting children who appear less confident</p> <p>Language remains descriptive and about the toys they are handling (LO was recorded as describing)</p>	<p>The participant reported:</p> <p>Children generally not engaging with each other and not much dialogue between children.</p> <p>Children need to be comfortable in order to contribute</p> <p>In play they are new to each other</p> <p>Relationships not formed yet.</p> <p>Going in their own direction, thus the need for a shared focus, around a table. Then focus can then be on the language rather than inviting all in.</p> <p>Connections are easier when there is a focal point.</p> <p>In role play they played but in small world she had to manage the children more.</p> <p>Wanting the children to describe but she accepts her aim was very broad.</p> <p>Her engagement was questioning and teachery – testing. She had hoped to ask 'what could we build?'. An open ended question came after she finished recording – 'would they (fish) be able to sleep anywhere else?'. Another child commented 'they would die'</p> <p>Uptake (not the term) and dialogue after the recording.</p> <p>Children who gesture rather than vocalise</p>	<p>At PLC 3 the participant reported:</p> <p>Allowing children direct conversation or dialogue – where it goes if they don't decide the topic at the outset (response to motivation LO)</p> <p>Pre-taught vocab gives some children an 'in'.</p> <p>Teacher role as sustaining' conversation (post video viewing)</p> <p>Demonstration lesson in class: (Photograph of Polar Bears and people). The feedback bellow was provided during the midway interview which happened directly following the demonstration.</p> <p>SAT2 recalls:</p> <p>In play they are too focused on what they want to do.</p>

	<p>Engaging quieter children in Breakout groups</p> <p>The impact of recording on children's OL&C (SAT4)</p> <p>Raised by Researcher:</p> <p>Impact of setting on OL&C</p> <p>Teaching content versus facilitating skill development (SAT3)</p> <p>When teachers are not teaching</p> <p>Knowing when to step in (SAT2)</p> <p>Knowing when not to step in</p> <p>Teachers extending (SAT2)</p> <p>Teachers modelling uptake</p> <p>Teachers responses: I'm not sure</p> <p>Modelling 'reasoning words'/ Talk Moves (H/O)</p> <p>When is dialogue happening?</p> <p>Connect episodes and children listening to each other.</p> <p>Recognising a connect episode – making connections.</p> <p>Teachers passing control to children</p> <p>Managing reluctant language users</p> <p>Focus for next AV recording: Reduced interruptions by teacher to develop dialogue.</p> <p>Identifying a common focus for the next AV recording became difficult as participants priorities differed.</p>		<p>Children who answer yes/ no to closed questions but otherwise won't answer.</p> <p>Using other children to ask questions was unsuccessful.</p> <p>Next time (polar bear blubber experiment) she will give some information, step back and observe what they say, their ideas.</p> <p>The Researcher suggested:</p> <p>The teacher provided necessary language & vocabulary.</p> <p>The difficulty with engaging with all in the group when one needs your support.</p> <p>Pupils who don't engage despite teacher efforts.</p> <p>The suitability of Aistear (Did I plant this seed? – was this me as the MKO, SAT2 readily agreed and came back with an example from Sample Video) – children sharing objects but creating narratives on their own.</p> <p>The focus may be moving children into parallel play.</p> <p>Is it a social/ play-related target at this point?</p> <p>Can they initiate, sustain, and engage in conversation in this context? (PLC/CTB)</p> <p>Suggestions on the back of teacher's reference to a shared focal point: picture, found object, big book illustration</p> <p>Informal listening to see if teacher recognises dialogue and if pupils piggyback on each other – connect episodes.</p> <p>First we notice it and then we extend it.</p> <p>Identifying dialogue is difficult in real time.</p>	<p>The teacher is finding that having a focus where all can join in will develop dialogue between the group in infants.</p> <p>Having a shared focus in dialogue leads to more 'authentic dialogue'.</p>
<p>Midway Review Meeting</p> <p>(in place of Reflective Journaling)</p>	<p>This review happened just after the Researcher's demonstration lesson with the polar bear photograph.</p> <p>The participant reported:</p> <p>The video recording process is difficult in infants because of other distractions.</p> <p>Meeting a person to talk about the video is useful for an NQT because they can ask questions. Otherwise, she would look at the video, know dialogue was missing but not have the 'tools' to dissect like a more experienced teacher.</p> <p>PLC meeting offers similar experiences to post-recording meeting but more experienced teachers offer ideas. SAT2 feels she may know something is good but not know why.</p> <p>Being able to 'see a massive difference' in the groups. In the demonstration lesson Researcher was doing very little, inviting others in, asking what they thought, proposing and planting ideas.</p> <p>She always knew her role was to facilitate but may now understand facilitation differently.</p> <p>Facilitation is now more 'stepped back'/ 'stripped back': looking at other children, repeating things, asking 'what do you think?', passing an ideas from one child to another.</p>			

	<p>Children see each other as having ideas and not the teacher.</p> <p>Having vocab in advance helped as a hook: something they know and for the weaker ones to have something to offer</p> <p>Group size was important and the members' personalities.</p> <p>If she's interrupting, if she's too on top of the pupils they are less likely to have their own ideas or thoughts. They're less likely to share them.</p> <p>Now with big books SAT2 describes letting pupils comment. She doesn't jump in and require pupils to listen to her. She pauses and gives time and is a bit more 'stepped back'.</p> <p>She notices this difference in her teaching. Asking too many questions defeats the purpose.</p> <p>The researcher suggested:</p> <p>The researcher made no suggestions at this point.</p>			
<p>Cycle 3</p> <p>PLC 3 25.01.23</p> <p>AV Rec: SAT4</p> <p>H/O: GC1</p> <p>H/O: PLC/CTB</p> <p>Task: Rosie's Walk</p> <p>Reflection task planned – see notes – pushed forward to next meeting... was this in line with suggestion by supervisors</p>	<p>Identified by Participants:</p> <p>The benefits of having GC1</p> <p>Waiting is difficult.</p> <p>Modelling listening is difficult because pupils want to talk to tr</p> <p>Joint attention is important (SAT1)</p> <p>Aspects of LOs that are hard</p> <p>A focus on sentence structure can stop dialogue (SAT1)</p> <p>Having vocabulary in advance is crucial in getting dialogue going. (SAT1)</p> <p>Having vocabulary can give some pupils an 'in' (SAT2)</p> <p>We are seeking opinions (SAT1)</p> <p>There is a place for content knowledge in assessment (SAT3).</p> <p>There is insufficient time for OL&C skills development (SAT3)</p> <p>The difficulty managing OL&C in the day (SAT1)</p> <p>Teaching talk moves is not 'organic' (SAT1)</p> <p>The benefits of an 'I wonder cloud' (SAT4)</p> <p>A philosophical approach (SAT5)</p> <p>A speculative approach requires teaching (SAT1)</p> <p>The difference between recall and being a critical thinker (SAT4) and what is valued in education (SAT1)</p>	<p>AV Recording:</p> <p>Photograph of a mother pig with her piglets in front of a wooden fence.</p> <p>Teacher-pupil-teacher talk pattern</p> <p>Teacher often repeats pupils' answers before posing the next question</p> <p>Some uptake between teacher and pupils</p> <p>Some uptake between pupils around 'milk'</p> <p>Greater wait time than in previous recordings</p> <p>Following pupil lead in terms of content</p> <p>Teacher shows she doesn't know by asking can milk come from pigs</p> <p>Open-ended questions: continues to just use 'what do you think'</p> <p>Teacher revoices and pupil offers justification once</p> <p>Teacher revoices so as to invite others in</p> <p>Teacher models talking across the group – 'what do you think about what x said?'</p> <p>Teacher uses 'maybe'</p> <p>Teacher tries to use 'I wonder why' – minimal uptake from one pupil – too late perhaps</p>	<p>The participant reported:</p> <p>Pupils were generally distracted by Aistear around them.</p> <p>The picture was easier in terms of managing attending.</p> <p>The picture provided a shared focus.</p> <p>Aimed to discuss why animals are on a farm</p> <p>Using talk moves from the GC: wonder, maybe – but it didn't feel natural</p> <p>Needing to say 'I wonder' rather than what she thinks.</p> <p>Setting ground rules of good listening.</p> <p>The pupils listened to teacher but not to each other.</p> <p>Infants need more time to get into the discussion</p> <p>An example of uptake/ connect she facilitated between two pupils</p> <p>Not listening to what pupils were saying because she was focusing on getting them to attend</p> <p>'butting' in as she tried to insure others were listening</p> <p>Towards the end she let pupils speak a bit more, didn't 'but' in as much and settled into the activity herself</p> <p>Her planned questions did not achieve what she wanted.</p> <p>Her questions were too broad</p> <p>Feeling she had improved.</p> <p>Feeling clearer about her role but it would take time to get there. She needs to become comfortable. (in the new role?)</p> <p>The questions she asked looked for descriptions.</p> <p>Knowing when it was time to finish</p> <p>Introducing a dilemma is like creating a problem</p> <p>The need for questions that will bring it somewhere</p>	<p>At PLC 4 the participant reported:</p> <p>A 'great' discussion in her classroom – based on the big book 'This is the Bear' by Sarah Hayes, and wishing she could have recorded it</p> <p>Later in the meeting and following on from earlier content, the big book and hot seating in drama: <i>they were asking all the right questions. Like why did you push the bear in the bin? What was it like in there? And then to the boy – why did you not see him? Why did you go after the bear? Like all the questions were why and like before I'd done... I maybe didn't, I hadn't noticed it.</i></p> <p>Being more clued in</p> <p>Looking out for opportunities</p> <p>SPHE can only really be assessed through OL and dialogue.</p> <p>SAT5's link activity: SAT2 was concerned with pupil maturity and how young her pupils were. The article presented later appealed to her for this reason and she later suggested it to her colleague as their next step.</p>

– see Sat1's interview?	<p>The need for a toolbox (GC1) (SAT1)</p> <p>The incorrect view that LO 11 & 12 are for senior classes (SAT4)</p> <p>Raised by Researcher:</p> <p>OL&C Analysis</p> <p>Increased awareness of what pupils are doing as they speak (e.g. justifying etc)</p> <p>The PLC/CTB as evidence of why we need to introduce speculation and the related talk moves</p> <p>The PLC/CTB supports the argument for giving time to OL&C</p> <p>OL&C across the curriculum</p> <p>Talk moves that include speculation and wondering.</p> <p>Pupils asking each other questions is an advance</p> <p>Socratic Questions cultivate the organic aspect of dialogue</p> <p>Trs modelling talk moves</p> <p>Wondering as part of classroom practice</p> <p>How formal schooling might remove opportunities to wonder.</p> <p>Transmission model as a problem</p> <p>Speculation and cognitive development</p> <p>Task: Composing speculative questions and using talk moves</p> <p>Advancing pupils from describing to justifying</p> <p>What happens when teachers hear what pupils are saying?</p>		<p>The Researcher suggested:</p> <p>Agreed that teachers need to model the connecting</p> <p>Opening questions that might offer some initial steering in an attempt to avoid a longer warm-up.</p> <p>Getting pupils to justify and explain, using the 'tell me more'</p> <p>Teacher is extending.</p> <p>Avoiding use of child's name in the question</p> <p>Examples of questions that are open-ended and extend.</p> <p>Using talk move agree/ disagree and because, beginning with teacher modelling</p> <p>Pupils are at different stages, some describing and some justifying by using the term 'because'</p> <p>Identifying opportunities for teacher supporting extending/ building on/ challenging</p> <p>Critical thinking and introducing a dilemma.</p> <p>By using 'if' you move pupils into reasoning</p>	
<p>Cycle 4</p> <p>14.02.23</p> <p>AV rec:</p>	<p>Identified by Participants:</p>	<p>A/AV recording:</p> <p>Big Book: This is the Bear by Sarah Hayes</p> <p>Teacher-child-Teacher talk pattern</p>	<p>The participant reported:</p> <p>Pupils thinking critically.</p>	<p>At PLC 5 the participant reported:</p> <p>Task: LRRH and LO 11 & 12</p>

<p>SAT3</p> <p>H/O: Review</p> <p>Task: Questions & LOs</p> <p>*Article ** Shared Drive</p>	<p>Three participants identified examples of good dialogue in their classrooms!</p> <p>Pupils need to expand, justify and question (SAT3)</p> <p>OL is the means for assessing understanding (SAT2)</p> <p>Questions that challenge pupils (SAT4)</p> <p>Contexts that don't work and why. The PLC group on a journey in terms of their reflection on OL&C development and participants' own questions (SAT3)</p> <p>Reflecting on practice (SAT4)</p> <p>The impact of 'I don't know. You tell me' (SAT1)</p> <p>Teachers' feel they need to know the answer (SAT1)</p> <p>Raised by the Researcher:</p> <p>The questions we ask are important.</p> <p>OL&C as central to assessment of understanding (see task)</p> <p>The LOs can help teachers plan, identify questions and assess</p> <p>LOs 11 and 12 are where we can assess understanding.</p> <p>Challenging pupils with the 'why' and seeking justifications.</p> <p>Authentic questions</p> <p>Time given to open-questioning is justified as it may be the only way of assessing some areas of learning.</p> <p>Big broad questions provide more opportunities for dialogue.</p>	<p>Teacher repeats child's answers before posing the next question. Teacher invites dialogue across the group by asking 'does anyone agree/ disagree'</p> <p>Open-ended questions – also continues to ask: what do you think</p> <p>Similar wait time to A/AV 3</p> <p>Teacher adopted agree, disagree in her questions – it may not have made complete sense in the context it was used</p> <p>A pupil used agree</p> <p>Teacher adopted 'I wonder' and pupils replied with 'maybe'</p> <p>Teacher follows children's lead (even though the pattern is teacher-child-teacher, this pattern looks like it's part of teacher control)</p> <p>Teacher doesn't feel the need to answer – asks what do you think</p> <p>Teacher modelled 'because'</p> <p>One instance of dialogue with a pupil challenging the teacher – generally the Teacher-pupil-teach pattern appears to be an obstacle to the dialogue developing</p>	<p>She is using 'why' more often.</p> <p>She knew a particular closed question wouldn't give her what she wanted (metacognition after the fact?)</p> <p>Being more conscious of the language when asking questions</p> <p>She is necessary to facilitate the conversation and it wouldn't happen without her</p> <p>The pupils are not looking at each other while talking but there is some uptake so some are listening</p> <p>Before she would have asked a question and moved on. She would have felt she had to give the answer. Now she is letting them ask questions without having one true answer</p> <p>Conversation is child-led</p> <p>Recognising the difference between useful and futile wondering (following adoption of article suggestions)</p> <p>Pupils who are not yet asking questions are listening to others doing it (speculating)</p> <p>It is important that pupils hear teacher saying 'I don't know'/'maybe/ what do you think?'</p> <p>A previously non-contributing pupil, speaking possibly because she is more comfortable</p> <p>Her aim was to have pupils explain and justify (LO)</p> <p>The most difficult thing is to hear what they are doing and build on it. It is not automatic. (She felt she did it once and gave the example)</p> <p>Having to concentrate on what she is saying because the classroom is so loud.</p> <p>'I wonder' is a less formal way of having them ask a question and therefore less intimidating (not SAT2's words).</p> <p>'I wonder' suggests there might not be an answer. The pupils have to push themselves harder than in the post-Aistear activity here they ask 'how did you make it?' or 'who is it for?'</p> <p>The wiggly finger needs some differentiation between wondering and thinking something.</p> <p>Feeling more confident facilitating OL with the focus on critical thinking.</p> <p>Connecting the philosophical stance and what is happening here with what she learned in College</p>	<p>Teachers ask pupils to reflect and justify</p> <p>SAT2 participated in each of the activities but did not make any contributions to the general discussion.</p> <p>.....</p> <p>Task: Analysis of OL&C samples</p> <p>In the smaller group analysis with two colleagues:</p> <p>SAT2 did not contributed to discussion around SAT5's transcript. She was engaged but unsure (she said so). When discussing her transcript she read it for the group and contributed more.</p> <p>She explained missing an uptake opportunity.</p> <p>SAT2 reports the phrase 'I wonder' gets pupils halfway through asking a question.</p> <p>SAT2 comments on a pupil question that reflects generalising (in SAT1's) She uses GC2 to provide the label 'clarify'.</p> <p>.....</p> <p>General discussion:</p> <p>SAT2 suggests extending hand actions to include 'because', viewing it as the next step.</p> <p>SAT2 noticed good questioning in other lessons</p>
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	<p>Task: Constructing questions with the support of curriculum Objectives and Outcomes</p> <p>Demonstration (SAT5): Practicing uptake and supporting weaker pupils</p> <p>The importance of waiting.</p>		<p>In Aistear/ play the space belongs to the pupils. In a book context teacher can examine the ideas with them</p> <p>Confident now in doing just talking!</p> <p>The Researcher suggested:</p> <p>Teacher has a role and she needs to know what it is</p> <p>Reference to an additional audio recording – the pupil questioning; teacher scaffolding the questioning through the talk move I wonder.</p> <p>Speculation that moves beyond the picture – generalising – is it possible with the age group?</p> <p>Identifying the opportunity in the dialogue that pushes pupils out of the immediate</p>	
<p>Cycle 5</p> <p>PLC 5</p> <p>07.03.23</p> <p>AV rec: SAT1</p> <p>H/O: GC2</p> <p>***Article</p> <p>****Article</p> <p>Task: LRRH and LOs 11& 12</p>	<p>Identified by participants:</p> <p>Wondering as presented in Article*.</p> <p>Wondering is presented as a question (SAT1)</p> <p>Wondering has brought about them listening to each other and building (SAT1)</p> <p>The value of a visual on the wall to match the gesture (SAT1)</p> <p>How wondering and the gesture supports less verbal pupils</p> <p>Having an end goal assists in helping steer the engagement (SAT5)</p> <p>The difficulty when pupils move off topic (SAT3)</p> <p>Questioning has to develop each of the six skills rather than just the describing.</p> <p>Raised by the researcher:</p> <p>Getting pupils to extend their wondering.</p> <p>Responding and reasoning with maybe/ because.</p> <p>The value of ‘tell me more’.</p> <p>Analysis using Form, Content, Use and how we are now focusing on the using.</p>	<p>A/AV recording:</p> <p>Big Book: The Enormous Turnip</p> <p>Teacher-pupil-teacher talk pattern</p> <p>A lot of wait time which enabled a reluctant pupil to contribute (SAT2 reported she paused??)</p> <p>Continues to ask ‘what do you think’ – not sure it’s necessary now? Interrupted on occasion</p> <p>Repeating what pupils answer.</p> <p>Pupils using maybe, I think, because, I would</p> <p>Teacher probing for pupils to justify - could they do so independently?</p> <p>Occasionally takes pupils’ lead.</p> <p>But teacher has key concepts she wants established (does this impact the children’s dialogue?)</p> <p>No time allowed for pupils to build on each other (see talk pattern)</p> <p>Evidence of pupils listening - they built on each other</p> <p>Teacher invited comments from across the group</p> <p>Teacher using I wonder.</p> <p>Teacher not using agree/ disagree</p> <p>Teacher revoicing</p>	<p>The Participant reported:</p> <p>Her aim was LO: justifying and reflecting</p> <p>Teaching a gesture for ‘maybe because’ rather than ‘because’ as part of justifying – it is less dependent on a right answer than ‘because’ alone.</p> <p>The pupils applied the information to their own life showing reflection (when asked by teacher).</p> <p>Planning questions but has some difficulty asking them</p> <p>Pupils disagreed (there was no evidence of this)</p> <p>Pupils showed listening to each other – they were responding to what each other said.</p> <p>One reluctant pupil contributed</p> <p>Teacher herself was more confident and the most comfortable she has felt.</p> <p>Being most positive in this recording.</p> <p>She felt she was calmer and didn’t rush</p> <p>She didn’t use pupils names</p> <p>OL is not as vague as it was at the start of the year</p> <p>She felt she assessed in the moment and was aware of what the pupils were saying.</p> <p>She sees herself in the child who continues not to talk</p> <p>Wondering was used in SESE</p> <p>Previously felt pupils needed to know grammar and sentence structure before higher order stuff but now believes differently</p> <p>Across the curriculum (religion, gaeilge) she hears opportunities for asking why in place of giving answers and pupils are wondering</p>	<p>At PLC 6 the participant reported:</p> <p>In discussion about resources to support a philosophical stance SAT2 offers the ‘Would you rather’ book as a suggestion</p> <p>Transcript analysis in small groups:</p> <p>Identifies a child listening</p> <p>Accepts that not all of hers are justifying</p> <p>Wonders how to reel in the non-contributor and believes the recording is putting her off</p> <p>The non-contributor talks in Aistear and will answer closed questions</p> <p>The non-contributor doesn’t like people looking at her</p> <p>In her own recording she felt she was revoicing (is this why I looked at revoicing and uptake levels in PLC 7, as it seems to be her revoicing is getting in the way sometimes)</p> <p>Now her focus is to get pupils to be brave</p>

	<p>Analysis of OL&C using LOs 11 and 12</p> <p>Differentiating between the lower and higher order skills within LOs 11 & 12.</p> <p>Moving beyond talk which is describing to reflection which is new learning.</p> <p>Analysis is difficult.</p> <p>Connections occur when people build on what another says. This is when chat becomes dialogue.</p> <p><u>Shared Drive Information:</u></p> <p>The philosophical stance – it frames the wondering.</p> <p>The impact of teacher responses – reflected in SAT1's discussions</p>	<p>Teacher scaffolded inclusion for weaker pupil</p> <p>(Following review of audio files SAT2 does not appear to model agree/ disagree and children don't use it. They are using 'maybe' as per her instruction and hand signs).</p>	<p>The Researcher suggested:</p> <p>Could children at this age justify as part of their response without being asked why</p> <p>Modelling agree and agreeing with a justification</p> <p>Being a member of the group may be enough for the reluctant pupil</p> <p>Giving the reluctant pupil forewarning about the topic</p> <p>The colleague next door also in the PLC – is that helpful?</p> <p>SAT 2 references deciding something with her colleague next door. She reports not trying stuff on her own. But also knows she is new in her career and happy to try anything. She instigated the wiggling finger.</p>	
<p>Cycle 6</p> <p>PLC 6</p> <p>25.04.23</p> <p>AV rec:</p> <p>SAT5</p> <p>A rec:</p> <p>SAT3</p> <p>H/O:</p> <p>GC3</p> <p>***Article</p> <p>****Article</p> <p>Resources on the Shared Drive</p> <p>Task: Transcript analysis</p>	<p>Identified by participants:</p> <p>Supporting pupils who usually don't contribute to classroom discussions.</p> <p>Noticing gestures as an attempt by weaker pupils to engage in dialogue.</p> <p>The significance of motivation</p> <p>Non-engagement is not solely about confidence.</p> <p>How visuals support engagement that is relevant.</p> <p>Letting pupils talk</p> <p>OL behaviours that require pupils to conform in their thinking.</p> <p>Revoicing</p> <p>Facilitation</p> <p>Teachers have a very powerful role (SAT3's poem)</p> <p>We should not underestimate what pupils can do.</p>	<p>A/AV Recording:</p> <p>Picture Book: The Magic Moment by Niall Breslin</p> <p>Teacher-Pupil-Teacher pattern</p> <p>Wait time was sufficiently long but it wasn't productive because questions were difficult and pupils lost interest</p> <p>Topic meant it was largely teacher led. Teacher sought examples rather than wanting to hear more (a very abstract topic)</p> <p>Attempted to have pupils extend</p> <p>Teacher repeats a lot</p> <p>While the questions are open they feel closed</p> <p>Minimal listening by pupils to each other</p> <p>Teacher may have interrupted a connect episode across the group</p> <p>One instance of hearing other viewpoints</p>	<p>The participant reported:</p> <p>(This session was more worthwhile than the A/AV recording in terms of showing participant learning).</p> <p>Preparing one child who did speak – for the first time.</p> <p>Not developing the pupils ideas.</p> <p>Not allowing them build on ideas.</p> <p>There wasn't the room to use 'tell me more'.</p> <p>Balancing her agenda with theirs – you can have an agenda like justifying and they can still have control.</p> <p>Her plans need to include her agenda and an idea of where to go when pupils offer something different.</p> <p>Teacher believes having an agenda is important and found this worked in A/AV recording 5. (I'm not sure)</p> <p>Not planning her questions well.</p> <p>Some children did not engage perhaps because of the story.</p> <p>The pupils were listening.</p> <p>There was no room for disagreement so they couldn't listen to other viewpoints.</p> <p>Didn't say tell me more and allow them to develop viewpoints</p> <p>Bad planning as didn't ask 'why' and therefore justifying couldn't happen</p>	<p>At PLC 7 the participant reported:</p> <p>(SAT2 came in immediately in this session)</p> <p>Listening as being respectful / not messing, and hearing other viewpoints as the next level/ acknowledging what others said</p> <p>(I invited her in later as she had not contributed since the initial piece)</p> <p>Younger pupils cannot sustain conversations that are abstract – would you rather – for as long as older pupils.</p> <p>A book works in an infant classroom but not this book. A more imaginative book is preferable.</p> <p>Her questions were wrong.</p> <p>She attempted to extend but the pupils wouldn't have been able.</p> <p>She wouldn't have realised this in September if it had happened. Now she could feel it wasn't working as she asked the questions.</p>

	<p>Controlling the dialogue in classrooms is difficult.</p> <p>Pupils can engage with each other in dialogue without the teacher.</p> <p>The value of a question that has no right or wrong answer.</p> <p>Hand raising is as much about alerting teacher that they have something to say and therefore perhaps it has its place.</p> <p>Providing information in advance can support engagement.</p> <p>Raised by the researcher:</p> <p>The deviant response (Article **)</p> <p>Why Think Pair Share might not work for some pupils</p> <p>Pupils who might be perceived as having difficulties can surprise us.</p> <p>A philosophical stance that challenges other theories including Piaget</p> <p>Recognising dialogue (Alexander, REF)</p>	<p>One instance of pupil building on each other</p> <p>No justifying</p>	<p>Not convinced there was dialogue between them even though there might have been some reflecting.</p> <p>The questions she asked were hard for pupils to answer – how to be brave – a question she found difficult to answer</p> <p>There wasn't room for 'I wonder'</p> <p>A more imaginative narrative works better for the OL skills. It's loose.</p> <p>Answering questions is not enough in OL (as she previously thought)</p> <p>Teacher provided an in-depth analysis of the recording.</p> <p>The researcher suggested:</p> <p>The nature of the lesson – SPHE focus</p> <p>SAT2 was repeating instead of revoicing.</p> <p>The questions were problematic.</p>	<p>The quiet child contributing was the one positive from the recording.</p> <p>OL is about being able to challenge someone/ agree/ disagree – learning the technical side here in school</p>
<p>PLC 7</p> <p>23.05.23</p> <p>AV rec: SAT4</p> <p>Task: Three Levels of Uptake</p>	<p>Identified by Participants:</p> <p>The difference between listening to and hearing other viewpoints.</p> <p>The range of reasons why children who previously didn't speak, begin engaging.</p> <p>Infants need more support because they are not as interested in their peers.</p> <p>The engagements are shorter with infants.</p> <p>The older pupils ask questions and challenge each other.</p> <p>At this stage tr is a facilitator rather than an instructor and affirming.</p> <p>When children know there isn't a right answer they will engage.</p> <p>The children used the talk moves taught to them.</p> <p>The children are quite advanced in terms of the progression continua.</p> <p>Children in First class challenged each other.</p> <p>Opportunities you miss.</p> <p>Dialogue and OL&C for the purpose of:</p> <ul style="list-style-type: none"> life skill and engaging with others, in order to be able to challenge, making it okay to question, to question to gain information 			

	<ul style="list-style-type: none"> it's a different skill/ intelligence that if not exploited won't be developed be able to explain, justify and debate learning from others a skill of figuring things out as they talk (SAT5) <p>Meaningful engagement with children that is more than platitudes.</p> <p>Maximising on opportunities for engagement</p> <p>Highlighting for teachers the part OL&C plays in cognitive development (WSP) (SAT3)</p> <p>Raised by Researcher:</p> <p>Is the open ended question managed differently by different age groups and does the amount of teacher support change?</p> <p>Examining teacher support through the lens of uptake.</p> <p>Three levels of uptake and their role</p> <p>The limited research in junior classes</p> <p>Is there a difference between extending and challenging?</p> <p>Uptake leads to more conversation.</p> <p>Teachers become aware of the uptake and what it does.</p> <p>The role of dialogue and OL&C</p> <p>The link with 'wondering'.</p>
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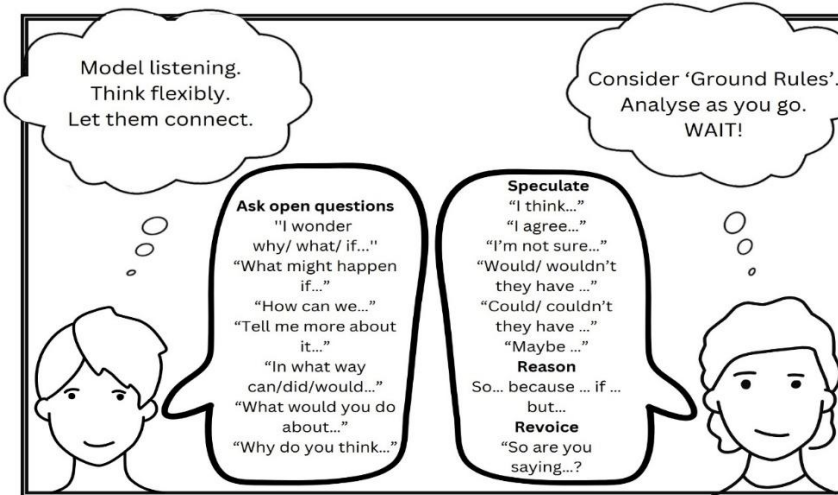
Brid: Summary

Comment	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
Description	Child/Teacher Talk	Wait Time	Talk Moves	Listening/Joint Attention	Teacher Role that Includes Facilitation	Accountable Talk (justify etc.) Use of LOs (PLC/CTB)	Questioning & Speculation (Philosophical Stance)	Uptake as a part of Dialogue	Differentiated Support	Assessment & analysis
Cycle 1	OE	OE	-	NE	SE	NE	-	SE	-	-
Cycle 2	SE	OE	NE	KNE	SE	NE	-	SE	OE	-
Cycle 3	SE	OE	SE	SE	OE	KNE	SE	SE	OE	-
Cycle 4	SE	OE	SE	SE	OE	SE	OE	SE	OE	KNE
Cycle 5	SE	SE	KNE	SE	SE	SE	SE	SE	OE	KNE
Cycle 6	KNE	OE	NE	KNE	KNE	KNE	KNE	SE	OE	SE

Appendix P

Glance Cards

Glance Card 1 (Talk Moves)



Glance Card 3 (Signs of Dialogue)

Is this dialogue?

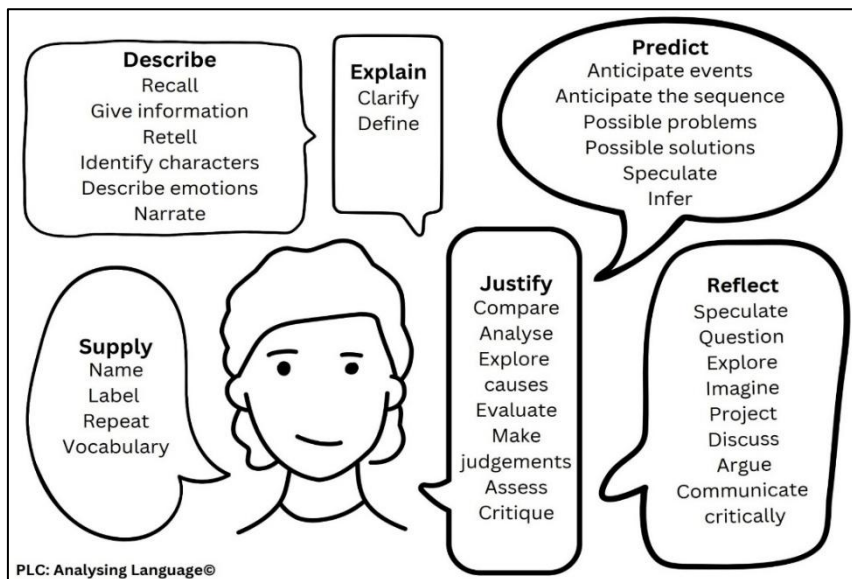
Are we ...

- ... talking about the same thing?
- ... listening to each other?
- ... hearing other viewpoints?
- ... speaking freely without judgement?
- ... building on each other's ideas?
- ... reaching our learning goal?

(adapted from Alexander, 2018)



Glance Card 2 (Learning Outcomes)



Appendix Q

Engagement Graph

PLC Meetings 2022/23: Reflection

	Nov	Dec	Jan	Feb	Mar	Apr	May
Positive Experience							
Neutral							
Negative Experience							
What I have learned...							

(Adapted from Kolb, 1984; Schön, 1991)

Appendix R

Letter of Consent (Teachers)

An Exploration of What Teachers Know about Language and Communication Development in Children aged 4-8 yrs

The study is being carried out by Deirdre Walshe, a primary school teacher, with the support of the School of Language, Literacy and Early Childhood Education at the Institute of Education, Dublin City University (DCU).

Participants in this study will be asked to spend approximately 14 hours engaging with this study over the course of one school year. This engagement will happen in the school building after the teaching day.

Each participant will:	
1. Attend two hour-long face-to-face interviews in their respective schools (pre- and post-PLC meetings).	2 hours
2. Teach during two 30-minute language lesson observations (pre- and post-PLC meetings).	Within school day
3. Provide a lesson plan for each observed lesson.	-
4. Attend two post-observation analysis and feedback sessions.	1 hour
5. Audio-visually (AV) record seven 5–8-minute student-teacher interactions over seven months.	Within school day
6. Forward all AV recordings to the researcher.	-
7. Attend seven 30-minute face-to-face feedback meetings with the researcher to analyse AV recordings.	3 ½ hours
8. Attend eight hour-long audio recorded PLC meetings in their respective schools after school.	8 hours
9. Record their satisfaction levels with PLC meetings using a graph.	-

Please circle yes or no for the following statements:

I have read the Plain Language Statement provided by Deirdre Walshe.	Yes / No
I understand the information provided.	Yes / No
I understand the information provided in relation to data protection.	Yes / No
I have had an opportunity to ask questions and discuss the study.	Yes / No
I have received satisfactory answers to all my questions.	Yes / No
I am aware of the time I will need to commit to this study.	Yes / No
I am aware that my interviews will be audio recorded.	Yes / No
I am aware that my class work will be audio – visually recorded.	Yes / No
I am aware that these classroom recordings may be shared with my colleagues as part of professional development.	Yes / No
I am aware that meetings with colleagues as part of professional development will be audio recorded.	Yes / No
I agree not to share AV recordings with anyone other than the researcher.	Yes / No
I have read the protocol for recording, uploading and deleting AV files that is in compliance with GDPR and understand the processes	Yes / No
I am aware that I may withdraw from this study at any time.	Yes / No
I am aware that it is not possible for the researcher to guarantee anonymity to those familiar with the setting but every effort will be made to anonymise the data at the reporting stage.	Yes / No

I understand that the data gathered as part of this research will be stored securely on DCU Google Drive and it will only be shared with colleagues in my school as part of the professional development process.
 I understand it will be disposed of safely and within three years of the study's completion.
 I have read and understood the information in this form. My questions and concerns have been answered by Deirdre Walshe, and I have a copy of this consent form. Therefore, I consent to take part in this research project.

Participants Signature: _____
Name in Block Capitals: _____
Witness: _____
Date: _____

Appendix S

Informed Assent Form for Children aged 4 – 8 Years (Part 1)

An Exploration of What Teachers Know about Language and Communication Development in Children aged 4-8 yrs

Deirdre Walshe School of Language, Literacy and Early Childhood Education, Institute of Education, Dublin City University	Part 1: Information Sheet about the study Part 2: Certificate of Assent
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Part 1: Information Sheet (To be read to the class, group or individual)

Deirdre Walshe is a teacher. She is doing a project about teachers and how they talk to the children in their class. Teachers need to look at **films** and talk about how they teach. **You** can teach the teachers by showing us in the **film** what is happening in the classroom.

So ... can you remember what this project is about? 😊

Deirdre has sent a letter to your parents/ guardians, and they know that she is doing this project. She is asking all the girls/ boys in your class to help. She would like to **film** your class when you are talking to your teacher. Then she will look at the **film** with your teacher and learn from it. She will do this a few times.

So... can you remember what Deirdre is asking for? 😊 😊

If you do not want to be **filmed**, you can say 'no thank you'.... even if your parents say 'yes.' You can talk to your mum/ dad and check with them before you say 'yes' or 'no'. They can also say 'yes' or 'no'. You can stop being in the **film** at any time by saying 'please stop **filming** me'.

So ... what can you say if you do not want to be part of this project? 😊 😊

So ... what can you say or do if you do not want to be **filmed**? 😊

Maybe you don't understand something that has been said about the project. You can ask your teacher a question about it at any time. Or you can ask your mum/dad or anyone else. 😊 😊

Who can you ask if you are not sure about something? 😊 😊

Do you have any questions so far?

I have checked with the child and they understand that participation is voluntary. ____ (initials)

If you decide to be part of the project and are happy to be in the **films** this is what will happen:

1. Deirdre will visit your classroom and watch your class working, and she will write some notes.
2. Your teacher will **film** your group or the whole class.
3. Your teacher and Deirdre will look at the **film** and see if anything needs to change in the classroom.

So ... can you remember what will happen? 😊 😊

Do you have any questions?

I have checked with the child and they understand the procedures. ____ (initials)

Confidentiality: Is everybody going to know about this?

When your teacher has finished **filming** you and your class, Deirdre will write down what she learned. But she will not write down your name or show the **film** to anyone else. This is called keeping it confidential. When she has finished writing the project all the **films** will be destroyed.

So.. Do you understand that the information will be confidential? 😊 😊

Do you have any questions?

Sharing the Findings: Will you tell me the results?

This project is for teachers. They will learn about how to talk with the girls and boys in their classes. They will not see you in the **films** and they will not read your name in the project.

Right to Refuse or Withdraw: Can I choose not to be in the research? Can I change my mind?

Remember you can tell your teacher or any other adult if you don't want to be in the project or if you change your mind at any time. Your mum/ dad and your teacher have my e-mail address and they can email me and tell me.

So ... Do you know that you can stop being in the **films** at any time? 😊 😊

Would you like to ask me any more questions about any part of the project?








(Source: World Health Organisation)

Certificate of Assent for Children (Part 2)

Where the child in question is unable to read the questions or write their response an adult will read and explain for them, record their response, initial it and sign the assent.

I am in (School Name). I am in (Class Level). A teacher called Deirdre Walshe is doing a project about how teachers talk to the children in their class.

Please tick Yes or No. Ask a question if you are not sure. Thank you.

I understand what this project is about.		Yes	No
I have been able to ask questions and have them answered.		Yes	No
I understand that films will be made of my group or class.		Yes	No
I would be happy to talk to another person if I have any concerns.		Yes	No
I know I can ask more questions later.		Yes	No
I can stop being involved at any time in this project.		Yes	No
I agree to take part in this project.		Yes	No

Only if child assents:

Print name of child: _____

Signature of child: _____

Date: _____

Appendix T

Extracts from Transcript of PLC Meeting 6

Context: Ann, Yvonne and the Researcher (R) are joined by Niamh as they discuss Ann's recording.

Turquoise: Oral language, communication and dialogue

Green: Professional learning

Grey: Facilitation required to move from 'proving' to 'improving'

Ann	I think so because they were kind of responding to each other as well as me. Like they are not going off on their own little conversation themselves. They are kind of answering back.
R	Yeah. I think you were saying as well G3 there, her reference to the drain was quite different.
Ann	But she is also like, her language is, she's EAL. Her parents are Polish. So to have that kind of language, to even think of that word!
R	Is it fair to say you would have worried, before at the beginning, you had a concern about vocabulary and really you could see there she has a lot of concepts even if she doesn't have the vocabulary?
Ann	But I wouldn't have taught the word drain. That wouldn't have been on the plan. We were working on the farm. You wouldn't think about the word drain
R	So what does that tell us then?
Ann	She has a good command of language.
R	And she has conceptual knowledge that isn't maybe in her vocabulary as well, yeah. Yvonne have you any words of wisdom?
Yvonne	Well just one thing. I found mine very much like that where I was talking loads like at times. But remember in the last one I did loads of teacher -wait time and like it was so awkward like similar [Ann: yeah] but they actually came in. I remember. I think I nearly left, I'd say I left 30 seconds at least. But they came back with this full other conversation
Ann	Okay yeah
Yvonne	And I was like you being like Ok they haven't answered like. Okay next question. You expect something.
Ann	You are nearly afraid to leave the wait time In case nothing happens.
Yvonne	And then when you're like it is awkward sitting there. Do I say something here? But they did so like -
R	It's a bit of a leap of faith.
Yvonne	Yeah. Yeah very much so.

... later...

Ann	I think I did improve on that. I did listen to what they were saying.
Yvonne	Yeah. It's so hard though
R	What makes it hard Yvonne?
Yvonne	Just like if you have in your mind okay I'm trying to tick this box of like them justifying or I want this to come up and then you're concentrating on that one and then you are like no put that out of your head, what are they saying? It's just a balance
Ann	And then also you make plans and it goes off topic so then you don't plan for that and
Yvonne	And then you're like wait, come back to that, what am I -
Ann	I know. Trying, you have 25 do you (addressing Yvonne) [Yvonne: yeah] you couldn't do it.
R	Yeah, but the question is, is it possible to do it in small groups? Research aside, would you see yourself carrying any of this forward?
Yvonne	When I was reading a book today just like when they were eating their lunch with our predicting we did again the 'I wonder' that I did last week. And some of them were

	coming back today with well maybe - so I suppose once you get yourself into the routine of it as well yeah. It is something new for us to take on so it is like once you are in a routine I suppose you would carry those bits like as well
Ann	I do find I'm using 'I wonder' an awful lot now [Yvonne: Yeah] but then they're not really doing maybe. They haven't kind of got that.
Yvonne	So I haven't done it in the group. But I've been doing whole class.
Ann	(unclear) what happens next, I wonder what we're going to do. You can use it in <i>Aistear</i> .
Yvonne	Cos I did it with the flower up there (referring to diagram of flower parts on her wall that I had gestured to at the PRM session) I wonder why the flower needs roots? So that went on for ages with the maybe but it will be interesting to see if in the group [Ann: will they keep it up?] will it be the same.

Niamh arrives late to the meeting and analysis of the recording begins using terms from the curriculum to analyse Yvonne's transcript (NCCA, 2019).

Ann	And even like they looked confused then, when I kind of acted confused they were like (Ann tilts her head quizzically).
R	She doesn't have the answer which is really key [Ann: yeah] Because if they think you have the answer why would they bother giving it to you?
Niamh	Yeah they're not going to supply anything.
R	So really important to not know. Winter - <i>sometimes it can snow</i> .. It's a justification but he didn't give it automatically so this is the question, can they do that? I don't know. What do you think?
Ann	I don't know if they can kind of -
Niamh	One of them -
Yvonne	One or two might be able but not the whole class -
	<i>General agreement</i>
R	Is it fair to ask them?
Niamh	I think it is. I think it's fair to push them you know and just say why do you think and then they might give the word 'because'.
R	And ultimately you want them to say no, because [Ann: yeah]
Ann	Maybe at the end of infants
R	OK. Another Mmmm. <i>I'm not too sure coz - there's going to be dark clouds and sky then it's going to be snow coming down</i> . Really good justification, really lengthy, you know, but again it's not accurate. [Ann: no]. Do we correct it? (pause)
Yvonne	At this stage I would say probably no and let them just talk
Ann	Yeah, get the justification out of them [Yvonne: yeah] okay. Niamh you were thinking differently around that - correcting things.
Niamh	Yeah, I would. Yeah.
Yvonne	To me like in Winter it's dark clouds there

... later...

R You are setting them up to say 'I wonder' and then 'maybe'. So it becomes all speculation. And 'because' is an extension of the speculation. Did 'because' come up when you were doing your -
Yvonne	Em, One of the boys I find always uses because, [R: OK] so the child after him might just say it because he's just said it. But if he hadn't of said it I don't think they would. They are using 'maybe' when I start a question with, I wonder some of them are answering now with maybe
R	Isn't that brilliant
Yvonne	But like they wouldn't be like themselves 'I wonder'. They wouldn't come up with that but if I say like [Niamh: yeah.]

Yvonne	We were reading 'Growing frogs' or one of those books and I said I wonder what this book could be about. And they went into well maybe she's reading a book about frogs because there's frogs on that book and maybe this. They did use it
Niamh	And today a boy in my class, we were doing <i>The Bad-tempered Ladybird</i> and I stopped, or no he put his hand up and was like I wonder what the last, I wonder what the last animal will be or I wonder what the biggest animal will be which will be the last animal. And then I paused, and I was like let's answer XX's question. I wonder, you know, and only one or two of them said maybe but like I was like, Oh my God, you're saying I wonder. (expressing delight) [Yvonne: Look at you go!] And he was wondering!
R	Is that based on the back of the article that you were looking at? (silence) Did you look at the article?
Niamh	Just since I spoke to you the last day (at the PRM).
R	Did you read it?
Yvonne	Yeah. But you had said to me the last time we met 'you could say I wonder about the roots' and the next day I was like right while that was in my head and I'm doing it right here and now and so I think if that comes up I would use it. So it was more you saying it to me.
Niamh	I too. I've just been wondering myself. [Yvonne: Yeah, yeah]. You know wondering away. Wondering a lot.

... later...

Ann	I don't know where the drain came from cos it wasn't in the picture. It was just water. It was a pond with like water. And they were wondering how the water got into the pond.
Niamh	OH!
Ann	Yeah. very far-fetched thinking.
R	But great, as you see yourself making a connection. There's something there she knows about. Maybe she's seen it in C..... Park or I..... or wherever she goes to the park and sees the drain feeding into the pond or something like that. It's a pity she (Ann) didn't bring it anywhere. She didn't ask 'Can you tell me about the drain? Did you ask that?'
Ann	I think I asked her what would the drain do.
R	And she didn't come back with that at all?
Ann	No. I think she said 'it gave water' or somebody else said that. No that was her.

... later...

R	Can I ask about the article? Did anybody read the article?
Niamh	I skimmed it (laughter)
R	You skimmed it. Okay. Great stuff. That's fine. Can I ask you before we get into the article why you skimmed it and not read it? This is for me, just for the research
Yvonne	The reason I said before (Interview 1) I'd have to read it five times to properly [Ann: yeah] So I hate chunks of reading (unclear)
Ann	I liked the highlighted points, you know bullet points are more my kind
R	OK, OK Did you read it Niamh?
Niamh	I read it but like that I just skimmed it but it was just time for me. Like I would have and as I was skimming I was like I really need to go back over this [Yvonne: yeah] because I really liked the article ideas of making the shapes when they are doing you know
Yvonne	Connections
Niamh	Making the connection. Or that Velcro. Velcro was making connections. When they were seeing it, visualising it. Yeah. And I just, yeah, I think it would be nice if they had all those actions and they could do them as they were -
Ann	Reading along

R	So you recognised that the three actions could be appealing to them. This is something that we're asking children to do, which we wouldn't have asked children to do before. Speculating [Niamh: Yeah]. We would have thought that children at this age weren't able for it. But what this woman is saying, you know is obviously that they are able for it if we scaffold them. So Yvonne you did the wondering one. [Yvonne: Yeah]. Tell us how it went.
Yvonne	It took me a lot of time first, like. I had to keep repeating my I wonder for every child I went to because I was like I wonder, I wonder why a flower has roots? Maybe – (raised voice with emphasis) [Niamh: Yeah] and they would say, Oh maybe its this. So I was saying the maybe. Whereas today with the book I only had to say maybe the first time. I said I wonder what this book is about? Mmm maybe - . And then they all I only had to say it once -
Niamh	And they all gave maybes? [Yvonne: yeah]
R	OK so what's the next step? (pause) Just stick with the I wonder bit.
Yvonne	It would be great if like as Niamh's child did, they could do the I wonder bit themselves. [Ann: Yeah.] but I do think probably a lot of modelling and stuff for them to
R	The modelling has worked [Yvonne: yeah] Niamh you did it.
Niamh	Yeah I've just been, just been wondering, you know. I'm wondering out loud like at lots of things.
R	Are they -
Niamh	I've gone mad. Like I wonder how long it might take them to grow, you know or like I wonder how tall will that get. You know these kind of things (referring to planting activity).
R	And do you hear them building off each other? Does anybody kind of comment on the back of what somebody else is like our connect episodes we were talking about?
Yvonne	So like some of mine maybe were especially with the flower, I can't think exact ones now but some would be like so Niamh would be like Oh well, maybe it keeps them strong and the other one would be like no, maybe it does this because the stem keeps them strong.
R	Oh you got that Oh Wow!
Yvonne	Some of them are not arguing but debating nearly in a way like well no that's not what I mean so maybe it does this instead. So I did get that with the flower. That went on much longer than I expected because they, people were giving two or three maybes [Niamh: yeah]
R	So two things are working there. The context and the scaffolding.
Yvonne	And they are really interested in the flowers and stuff.
Ann	I suppose because they own them themselves as well.
Yvonne	It's something that they like so I suppose they are more concentrated on it
Niamh	It's a real good stimulus for them.
R	And then yours was the ladybird.
Niamh	That was just today. Yeah. You know, there was lots of, lots of, lots of answers. There was a few that had put maybe in front of their answer and then some of them might have said, oh, maybe it will be this. And then others would say oh but that's not as big, that's smaller than a rhino. The next one will have to be bigger than a rhino. So they were kind of thinking, [Yvonne: yeah] yeah.
R	So they were thinking off each other?
Niamh	Yeah Thinking off each other
R	Did you get a chance to look at it Ann?
Ann	No I'm planning it now for my next kind of theme starting with that I wonder, maybe.
R	Great. OK yeah yeah.
Yvonne	A great start for a theme, like a brainstorm. (General agreement)
Ann	Yeah. That's the plan. (unclear) playground
Niamh	I didn't write up any questions. You know like if they come up with the questions and then you answer them as you read (referencing article process). You know what she

	has done with her chart and go back to them. Ok look this might answer XX's question, you know.
R	We were wondering about that though. That could end up being a right, wrong situation, [Niamh: OK] Oh, you weren't right. Your wondering wasn't right there. I don't know?
Yvonne	I can see both sides (unclear)
Niamh	But are we not saying it's OK to be wrong? Well, no, I think that infants -
Ann	It depends on the child. Sometimes you are like, it's ok. It's fine. But the rest you're like Oh look I made a mistake there.
Niamh	I'll carry on.
Ann	They're the ones that find it hard to improve although some kids if they lose a thing or get something's wrong, things don't go their way - [Niamh: okay] It'd okay.
R	Are we feeding into that as well though? (pause) OK. So you're going to look at it Ann. Are you going to stick with it Niamh in terms of the I wonder?
Niamh	Oh yeah. I think it's really - I can see it working you know and I can see that their thinking and [R: speculating] Yes speculating themselves.
R	Would you be using any of the other strategies that she's recommended?
Niamh	Emm (thinking) I'd like to think this mind movie one that they might be able to see it in their mind, you know. I think the making Connections is a little bit hard for this age, you know but then some of them do.
Yvonne	It depends on the child.
Niamh	It depends on their experiences outside of school. Sometimes they don't have such a range you know.
R	But I suppose it's up to us to model it and see if we can bring it to that point [Niamh: yeah.]
Niamh	In terms of making connections they don't have you know the experiences I think, to draw on.

Appendix U

An Example of a Codebook with ‘Rules for Inclusion: To Support the Analysis of Responses in Interview 2

Context: Participant’s provide their perceptions regarding their Support of the Development of Dialogue in their Children. The text in red indicates how themes were collapsed.

Codebook Interview 2

Theme 1: Limited Teacher knowledge (LTK):

Teachers are aware of their limited knowledge in the area of OL&C development. This code includes;

- teachers’ references as to why they agreed to participate in the research,
- teachers’ references to their knowledge and understanding changing in some way
- teachers feeling better and more confident in the area because of what they now know
- teacher awareness in order for practice to change
- the impact of teacher knowledge on children’s development of OL&C
- when teachers model talk moves children are supported to develop OL&C and dialogue
- teachers can learn how to develop OL&C
- teacher expectation impacts the degree of development
- references to new concepts
- questioning that is authentic and open
- questioning that leads to speculation and reflection
- questioning that is not a judgement (test)
- reference to ‘wait time’, talk time, specific talk moves
- use of Glance Cards (e.g. for assessment and planning)
- curriculum content (i.e. skills)
- if teachers don’t know the skills as listed in the PLC/CTB they won’t know what to look for
- opportunities for OL&C alone are insufficient
- teachers’ reflective practice evolves
- a published Oral Language Programme

Theme 2: A Role that balances Teaching with Facilitation (BTF):

Teachers struggle with their role in developing OL&C. This code includes;

- teachers’ comfort levels with the role,
- their uncertainty with what this looks like,
- what it means to be a teacher,
- a move away from transmission,
- the particular needs of younger versus more mature children,
- teacher as listener,
- the degree to which they feel challenged by a role which differs from transmission,
- they impart information while at the same time listening and scaffolding interaction,
- they are in the middle providing some instruction while being careful not to provide too much.
- too much teacher support can prevent OL&C development
- managing tangents
- classroom control and potentially losing it
- teacher trusts children
- teacher confidence levels increase as the practice changes
-

Theme 3: OL&C Development is Complex (COL&C)

OL&C development is complex. It requires attention. All children regardless of age, first language or ability have the capacity to develop. This code includes;

- OL&C development is more complex than previously thought
- It is not just about being able to talk
- Some believe younger pupils cannot practice the skills
- changed view
- on the fence (... see data within Theme 1 regarding younger children?)
- Aistear as context for talk rather than OL&C development supported by an MKO
- Curriculum and learning outcomes that develop OL&C (especially 11, 12)

Theme 4: OL&C Development is more than OL&C (MOL&C): (Dialogue)

The significance with the emphasis in School B on vocabulary development (**address this in terms of studies that focus on vocab**). This code includes:

- Cognition evident through OL&C – reference to children thinking
- Extending/ challenging children's thinking
- Evidence of critical thinking
- Developing a curiosity
- Active listening
- How teachers respond is important
- How this impacts teacher planning and assessment
- How this impacts children's experiences
- How this impacts assessment
- Children asking questions

Theme 5: Child comfort is central to developing OL&C (PC): - moved to Theme 3

Teachers are responsible for insuring that children are comfortable when developing OL&C.

This code includes;

- teachers recognising children's comfort,
- teachers getting to know children
- confidence and security as part of the process
- OL&C is a bigger task for some

Theme 6: OL&C use verses OL&C development (UvDev): (moved to theme 1 or Theme 3; OL&C not just talk (Difficulty: there is overlap with LTK))

Teachers agree that they use OL across the curriculum and over the course of their day.

- The difference between using OL&C and developing it

Theme 7: The Expression of an epistemological shift (EpistOL&C) (Is this a theme?)

Teachers identify in themselves a shift in their thinking in the area of OL&C development that has caused a change in their practice

Theme 8: Dialogue is the game changer (came to this when rereading Niamh's Interview)

- Dialogue as a game changer
- Dialogue has features that support OL&C
- Participants references to dialogue that were unsolicited
- Dialogue as central to the process
- Understanding what dialogue means impacts the quality of engagement
- Dialogue supports LO development (this featured as a question in the context of the PLC/CTB)

Appendix V

A Rubric for the Purpose of Analysing Participants' Trajectories across Six Cycles of Professional Learning

Themes (Practices)	Not Evident: 0	Known but not Evident: 1	Sometimes Evident: 2	Often Evident: 3
1. OL&C development requires opportunities for pupils to talk more and teachers to talk less (Alexander, 2018; NCCA, 2012; Soter et al., 2008; Wilkinson, 2017).	<p>The participant controls the dialogic space using a Teacher-Child-Teacher talk pattern. Participant talks at length without expecting children to respond. The content is teacher-led.</p> <p>No recording available.</p>	<p>No evidence of the participant supporting children to build on each other's comments in a Teacher-Child-Child talk pattern but the need for pupils to lead the dialogue and the participant to follow this lead, is noted by the participant at the Post-Recording Meeting or at the following PLC Meeting.</p> <p>No recording available but the participant notes the need for children leading and teachers following this lead at the following PLC Meeting.</p>	<p>Evidence in the recording of the participant supporting children to take the lead in the dialogue on <u>more than one occasion</u> where it is possible to do so.</p>	<p>Evidence in the recording of the participant supporting children to take the lead in the dialogue on <u>more than half of the occasions</u> where it is possible to do so.</p>
2. Wait time contributes to a supportive environment necessary for children to develop thoughts (Ferris, 2014) and engage orally (Jay et al., 2017; Paatsch et al., 2019).	<p><u>No obvious pause</u> by the participant following her question, audible in the recording.</p> <p>No recording available and not noted by the participant at the following PLC Meeting.</p>	<p><u>No obvious pause</u> by the participant following her question, audible in the recording but noted by the participant at the Post-Recording Meeting or at the following PLC Meeting.</p> <p>No recording available but noted by the participant at the following PLC Meeting.</p>	<p><u>Obvious audible pause</u> by the participant following her question, audible in the recording, on <u>more than one occasion</u> where it would be possible to do so.</p>	<p><u>Obvious audible pause</u> by the participant following her question, audible in the recording, on <u>more than half of the occasions</u> where it would be possible to do so.</p>
3. Teacher behaviours can impact language learning (Alexander, 2018; Kucan, 2007; Michaels et al., 2012). Modelling reasoning words 'I agree with...' (Soter et al., 2008) and using talk moves such as ' <i>tell me more...</i> ' can support OL&C development (Alexander, 2018; Boyd et al., 2019; Maine & Hofmann, 2016; Mercer, 2000),	<p>Not yet introduced at the PLC Meeting. Not visible in the recording.</p> <p>No recording available and not noted by the participant at the following PLC Meeting.</p>	<p>Introduced at the PLC Meeting. Not evident in the recording but noted by the participant at the Post-Recording Meeting or the following PLC Meeting.</p> <p>No recording available but noted by the participant at the following PLC Meeting.</p>	<p>Evident in the recording on <u>more than one occasion</u> where it would be possible to use them.</p>	<p>Evident in the recording on <u>more than half of the occasions</u> where it would be possible to use them.</p>

Themes (Practices)	Not Evident: 0	Known but not Evident: 1	Sometimes Evident: 2	Often Evident: 3
4. Joint attention is necessary for communication (Bruner, 1983; NCCA, 2019; Shiel et al., 2012; Tomasello, 2008). With the listener-speaker relationship established between pupil and teacher (Shiel et al., 2012; McGough, 2016) the teacher facilitates co-construction of meaning across the group using phrases such as ‘did you hear what X said’ and ‘do you agree with y’ (Theobald & Kultti, 2012)	Not evident in the recording. No recording available and not noted by the participant at the following PLC Meeting. Hearing other viewpoints referenced in Glance Card 3	Not evident in the recording but noted by the participant at the Post-Recording Meeting or the following PLC Meeting. No recording available but noted by the participant at the following PLC Meeting.	Evident in the recording on <u>more than one</u> occasion where it would be possible to do so.	Evident in the recording on <u>more than half</u> of the occasions where it would be possible to do so.
5. The teacher has a clear understanding of her/ his role in developing OL&C (Little, 2002). S/he moves between teaching and facilitating (Goldenberg, 1992; Soter et al., 2008; Vygotsky, 1986).	Not evident in the recording. No recording available and not noted by the participant at the following PLC Meeting.	Not evident in the recording. Noted by the participant at the Post-Recording Meeting or at the following PLC Meeting. No recording available but noted by the participant at the following PLC Meeting.	Evident in the recording on <u>more than one occasion</u> where it would be appropriate to do so.	Evident in the recording on <u>more than half of the occasions</u> where it would be appropriate to do so.
6. The teacher develops dialogic talk (Alexander, 2018; Bond & Wasik, 2009; Paatsch et al., 2019; Soter et al., 2008; Topping & Trickey, 2014) with children reflecting, justifying their responses, offering opinions, and providing explanations	Not evident in the recording. No recording available and not noted by the participant at the following PLC Meeting.	Not evident in the recording but noted by the participant at the Post-Recording Meeting or at the following PLC Meeting. No recording available but noted by the participant at the following PLC Meeting.	Evident in the recording on <u>more than one occasion</u> where it would be possible to do so.	Evident in the recording on <u>more than half of the occasions</u> where it would be possible to do so.
7. More effective teachers ask open-ended questions (Alexander, 2018; Topping & Ferguson, 2005; Topping & Trickey, 2014) which can be developed using a philosophical lens (Michaels & O'Connor, 2018) and the ‘I wonder’ phrase (D.Kennedy, 2022).	Not yet introduced. Not evident in the recording. No recording available and not noted by the participant at the following PLC Meeting.	Introduced at the PLC Meeting. Not evident in the recording but noted by the participant at the Post-Recording Meeting or at the following PLC Meeting. No recording available but noted by the participant at the following PLC Meeting.	Evident in the recording on <u>more than one occasion</u> where it would be possible to do so.	Evident in the recording on <u>more than half of the occasions</u> where it would be possible to do so.

Themes (Practices)	Not Evident: 0	Known but not Evident: 1	Sometimes Evident: 2	Often Evident: 3
8. Uptake is the act of building on another's comment (Soter et al., 2008). Also described as a connect episode (Boyd et al., 2019), it can feature listening, elaboration, speculation, correction, and questioning.	Not evident in the recording. No recording available and not noted by the participant at the following PLC Meeting.	Not evident in the recording but noted by the participant at the Post-Recoding Meeting or at following PLC Meeting. No recording available but noted by the participant at the following PLC Meeting.	Evident in the recording on <u>more than one occasion</u> where it would be possible to do so.	Evident in the recording on <u>more than half of the occasions</u> where it would be possible to do so.
9. Children need the support of an MKO in order to develop OL&C (Vygotsky, 1986) and dialogue (Wood, 1998). This support requires differentiation.	Not yet introduced. Not evident in the recording. No recording available and not spoken about by the participant at the following PLC Meeting.	Introduced at the PLC Meeting. Not evident in the recording but noted by the participant at the Post-Recoding Meeting or the following PLC Meeting. No recording available but noted by the participant at the following PLC Meeting.	Evident in the recording <u>on more than one occasion</u> where it would be possible to do so.	Evident in the recording on <u>more than two occasions</u> where it would be possible to do so.
10. A dynamic approach to assessment focuses on what children do while engaging with an MKO (Vygotsky, 1986). It requires teacher knowledge and in-depth understanding of what children can do and what they need to be able to do to develop their OL&C (Little, 2002)	Not yet introduced. Not evident in the recording. No recording available and not noted by the participant at the following PLC Meeting.	Introduced at the PLC Meeting. Not evident in the recording but noted in general terms by the participant at the Post-Recoding Meeting or the following PLC Meeting. No recording available but noted in general terms by the participant at the following PLC Meeting.	At least <u>two specific examples</u> provided by the participant at the Post-Recoding Meeting or the following PLC Meeting.	<u>More than two specific examples</u> provided by the participant at the Post-Recoding Meeting or the following PLC Meeting.

Appendix W

Ellen's move to an Improving Stance during Post-Recording Meetings

Post-Recording Meeting following A/AV3

Ellen	It was also from their interpretation of the picture. They were explaining and justifying there. Why would it be or who would have put it there? That sort of thing
R	You said, there was a lot of over and back [Ellen: yeah from me]. From you. Look at the bubbles there for a minute (Orange Glance Card).
Ellen	I had looked at those. When I scribbled down me questions which I did have close at hand that day. Because I could see there was an awful lot of looking at the camera that day more than the first one, – an awful lot of looking at the camera and so I had, well I thought I had used questions from these two things (Glance Card).
R	I think you did. Were they listening to each other?
Ellen	They were listening with each other, but I just think, I think it was that they weren't that engaged with it. It didn't kind of capture them in the same way the same way that the previous one did. That's what I thought
R	Okay - that idea of thinking flexibly - so you're listening to them talking and you have a plan and you had your questions. Did you allow yourself to go off piste a bit?
Ellen	No, I didn't really. I kind of I kept to what I had
R	Did you notice anything in the talk? Brid was saying she was just too busy getting through the thing, so -
Ellen	I have to admit I would be a bit like that and I haven't even watched back (nervous laughter) this time. (laughter) yeah because I wanted to get it done and I know that that is kinda like your right I'm recording this, and because I know I'm recording it, I'm trying to get it where I think I want it to go. But you are conscious of that. It's like when the cigire is in the room
R	Like you said it happens with a guided reading group. You don't have it recorded but are you aware I suppose? Are you inclined to go with them? Ground rules then, are they kind of in operation at this stage?

Post-Recording Meeting following A/AV4

R	You were revoicing absolutely. Did you feel it achieved anything?
Ellen	Let me see where it is and then I'll -
R	I think the middle one G3, Is there something that could happen for her? I'm thinking forward now.
Ellen	Being at school.
R	Okay well in that group in the language what?
Ellen	Because if I ask her a question in GR I can have stunned silence. She has missed so much school she doesn't know whether she's coming or going. That's the truth.
R	But it's like that there's no expectation, not from you, but generally for her to justify her response. Ah, yeah, no, I agree – but there's nothing behind.
Ellen	She's giving nothing. Like today for example we had a story about twins, the birthday Present, and then I said does anybody here know any twins and G5 mentioned she knew two boys who were twins. And then your one came out with, she said my twin – and I said have you a twin? And then she said yeah a sister. Her sister is fourteen. So then they said but how could she be your twin? She's older than you. Does she have the same birthday as you? So this came up today but she sat and didn't know what to say.
R	She didn't have the word. She didn't know the vocabulary, the concept.
Ellen	And they were able to tell she'd have to be the same age as you. She'd have to have the same birthday as you. She couldn't be your twin.

Post-Recording Meeting following A/AV6

Ellen	Well they're talking about the same thing as in some – it doesn't matter who said it, one of the children made reference. She said because H said if they give you a shower so she's referring back to what somebody else had said so that shows that she was listening to what the other one had said. There were definitely listening to one another all the time because one was questioning what another had said so I thought there was a lot of engagement. They were definitely speaking freely because it was a hypothetical situation.
R	And as you said the girls who wouldn't normally be verbal were talking freely [they were] so that would suggest they were comfortable
Ellen	Well you see I questioned what made the difference. So there's 3 things; was it no video so they felt more, less inhibited. Was it the fact that the other child who tends to takeover and she's great but she wasn't here so it gave them a space to come in and did having a little trial event maybe help so that they may have left here the day before and had another wee think about it. They didn't know they were doing it again the next day but it may have gone around in their head a wee bit. And I had initiated that by pretending to them, the first day that they talked about it to a friend and there were a few children there and I was listening to them talking and they were talking about having a giraffe as a pet. And I said I had great crack listening to them, and I thought maybe I'll ask the girls something like that.
R	they have a bit of a context and there's a bit of intrigue with you as well. Building on each other's ideas – do you feel it happened?
Ellen	It did. I felt it did
R	Do you have any examples of it? did you see where it happened
Ellen	(referring to her notes). I have no example of that one.
R	That's okay. Based on the pink card then do you think it was dialogic?
Ellen	Oh most definitely. Probably my best one.
R	And do you think was it with each other as opposed to with you?
Ellen	Yeah, I felt I was much quieter. I did think so. Now I know at one stage I had to bring them back. <i>I said well we'll go back to the elephant now because if I let that go it would have gone.</i>
R	So you did have a role?
Ellen	I had a role but I tried to minimise it. It was, to focus it again. To bring it back to what the initial question was and then they came back

Appendix X Primary Language Curriculum/Curaclam Teanga na Bunscoile (NCCA, 2019)

Learning Outcomes for Oral Language (L1)					
Element	Number and label	Stage 1: Junior and senior infants	Stage 2: First and second classes	Stage 3: Third and fourth classes	Stage 4: Fifth and sixth classes
Communicating	1. Engagement, listening and attention	Through appropriately playful learning experiences, children should be able to Show interest in, demonstrate joint attention and actively listen and attend for enjoyment and for a particular purpose, and in other languages where appropriate. TF1, C1+2	Through appropriately engaging learning experiences, children should be able to	Through appropriately engaging learning experiences, children should be able to Recognise themselves as listeners and speakers, engaging purposefully and empathetically with others. Express their individuality through their knowledge and use of various languages. Actively listen and extract meaning and enjoyment from conversations and texts in a range of genres and where possible, in various languages. TF1, C3+4	Through appropriately engaging learning experiences, children should be able to Actively listen and attend for extended periods of time, to include other languages where appropriate, listening for more detail and nuanced meanings. Evaluate how the purpose, situation and audience/listener influence the speaker's register, dialect and accent.
	2. Motivation and choice	Choose, listen to, respond to and create texts in a range of genres, and in other languages where appropriate, across the curriculum for pleasure and interest. TF2, C1+2+3		Choose, listen to, critically respond to and create texts in a range of genres and in other languages where appropriate, across the curriculum for pleasure, interest and specific purposes. TF2, C4	
	3. Social conventions and awareness of others	Recognise that language style changes with different relationships and audiences. Show understanding of the listener's needs while, with support, initiating, sustaining and engaging in conversations on personal and curriculum-based topics and responding verbally and non-verbally. TF3, C1 Use language with confidence to work collaboratively with others and share outcomes with familiar and unfamiliar audiences. TF3, C1+2	Use language appropriately in order to initiate, sustain and engage in conversations on personal and curriculum-based topics and use a language style and tone suited to the audience. TF3, C2	Use language flexibly and with empathy while initiating, sustaining and engaging in conversations on personal and curriculum-based topics. TF3, C3 Adapt language style such as tone, pace, choice of vocabulary, gestures, facial expressions and body language for a range of audiences whilst communicating orally in a range of genres. TF3, C4	Explore how culture and identity can influence how people communicate with others, verbally and non-verbally. Listen and speak with increasing confidence, independence and skill in order to work collaboratively with others and to share feedback, ideas, decisions and outcomes in a range of contexts with familiar and unfamiliar audiences.
	4. Sentence structure and grammar	Use coherent sentences of increasing complexity with correct tense, word order, and sentence structure, while using connectives and producing compound and complex sentences to elaborate appropriately. TF4, C1+2+3		Vary sentence length and structure, moving fluidly between a range of sentence types; simple, compound and complex, as appropriate to audience, purpose and language being spoken. Use grammar conventions appropriately and identify differences in sentence structure and grammar across languages and dialects. TF, C4	

Learning Outcomes for Oral Language (L1)				
Understanding	5. Vocabulary	<p>Use different strategies such as a speaker's gestures, tone of voice, known words, pictures, sentence structure, definitions and descriptions to acquire and show understanding of new words, to include other languages where appropriate.</p> <p>Use sophisticated oral vocabulary and phrases, including the language of text, topic and subject-specific language, and express and use decontextualized language. TF5, C1+2</p>	Select and apply a variety of strategies to acquire a wide range of words and phrases from different sources such as literature, subject-specific texts and other languages. TF5, C3+4	Critically select and use a wide-ranging, complex oral vocabulary, phrases and figurative language for familiar, abstract and subject-specific concepts and topics, as appropriate to audience and purpose.
	6. Demonstration of understanding	Demonstrate understanding through the ability to give and follow instructions, comprehend texts and clearly state a case. TF6, C1+2	Demonstrate understanding by listening actively to, understanding, analysing and responding appropriately to conversations and texts in a range of genres and across other languages where appropriate. TF6, C3+C4	Demonstrate understanding by listening actively to, analysing, comparing and evaluating conversations and texts in a range of genres and across other languages where appropriate.
Exploring and using	7. Requests, questions and interactions	<p>Express personal needs, opinions and preferences, and make requests with confidence.</p> <p>Ask and answer a variety of open and closed questions to seek help, get information, develop understanding, clarify and extend thinking. TF7, C1 + 2</p>	<p>Respond creatively and critically to what they have heard and experienced</p> <p>Express personal needs, opinions and preferences, explaining and justifying their perspective. TF7, C3 + 4</p> <p>Ask and answer a variety of questions – open, closed, leading, rhetorical – for a range of purposes, such as exploring and discussing texts; clarifying and extending thinking; comparing views and opinions; interviewing, speculating, arguing and persuading.</p>	Select how and when appropriate to ask and answer a wide range of question types; open, closed, leading and rhetorical, for an increasing range of complex purposes.
	8. Categorisation	Name, describe and categorise people, objects, experiences and concepts of increasing complexity, demonstrating growing depth of knowledge and improved understanding. TF8, C1+2	Explain and justify categorisation, across the curriculum, as appropriate, and demonstrate understanding that categories are fluid and can vary. TF8, C3+4	
	9. Retelling and elaboration	Tell and retell imaginative stories and narratives of increasing complexity to familiar and unfamiliar audiences using appropriate sequencing, tense and oral vocabulary. TF9, C1+2+3	Create narratives and retell stories and events, both real and imaginary, for various audiences, using imaginative and figurative language, elaborating where appropriate. TF9, C4	
	10. Playful and creative use of language	Listen and respond to the aesthetic and creative aspects of language and use language playfully and creatively, and across other languages as appropriate. TF10, C1+2	<p>Manipulate language creatively through listening and responding to the aesthetic and creative aspects of language, at sound, word, sentence and text level.</p> <p>Use language playfully and creatively in their own conversations and texts and across other languages as appropriate. TF10, C3+4</p>	
	11. Information giving, explanation and justification	Supply, explain and justify points of information to familiar and unfamiliar audiences using topic-specific language. TF11, C3+4	Analyse and select information to communicate ideas and opinions for a variety of purposes, such as informing, debating, explaining, justifying and persuading.	
	12. Description, prediction and reflection	Describe, predict and reflect upon actions, events and processes relating to real and imaginary contexts. TF12, C3+4	Describe, predict, reflect upon and evaluate actions, events, processes, feelings and experiences relating to a wide range of real and imaginary contexts.	

Appendix Y

Template Analysis: The ‘Distillation Process’ and Integrative Themes (King & Brooks, 2017)

The difficulty with seeking solutions	The difficulty with asking why	Curriculum implementation
The role of an ‘expert’	Interpreting questioning as judgement	The significance of witnessing visible change

<p>1. Content Embedded in Teachers Practices</p> <p>1.1 Unfamiliarity with using Classroom Content</p> <p>1.1.1 Difficulty with Self-Analysis</p> <p>1.2 Knowledge that Required Interpretation</p> <p>1.2.1 Content to Apply to Practice</p> <p>1.3 Unique Learning Journeys</p> <p>1.3.1 Individual Engagement</p> <p>1.3.2 Critical Engagement</p> <p>1.4 The PLC/CTB (NCCA, 2019) as a PL Tool</p> <p>1.4.1 Curriculum Access and Understanding</p> <p>1.4.2 Supported Access</p> <p>2. Collaboration</p> <p>2.1 Supportive PLCs</p> <p>2.1.1 Group Support</p> <p>2.1.2 Group Membership</p> <p>2.1.3 Working within a Group</p> <p>2.2 Comfortable PLCs</p> <p>2.2.1 Pre-existing Relationships</p> <p>2.2.2 Group Dynamics that Underpin Individual Experience</p> <p>2.3 PLCs as a Different Type of Engagement</p> <p>2.3.1 Intimidation</p> <p>2.3.2 Group Dynamics that Underpin the Group’s Work</p> <p>3. Opportunities for Active Learning (AL)</p> <p>3.1 AL as Something New</p> <p>3.1.1 Teacher Contributions are Required</p> <p>3.1.2 Trying Out Activities</p> <p>3.2 Difficulties with AL</p> <p>3.2.1 AL is Work</p> <p>3.2.2 AL is Challenging</p> <p>3.3 AL that does not Provide Answers</p> <p>3.3.1 A Starting Point</p> <p>3.3.2 PL that does not Provide Solutions</p> <p>3.4 AL that Deepens Understanding</p> <p>3.4.1 Models and Modelling</p> <p>3.4.2 Generating Knowledge through Discussion</p> <p>3.5 AL that Includes Disagreement/debate</p> <p>3.5.1 Critiquing as part of analysis</p> <p>3.5.2 School Culture/ Culture</p> <p>4. Teacher Reflection</p> <p>4.1 Shared Reflection</p> <p>4.1.1 Shared Learning</p> <p>4.1.2 Easier with Others</p> <p>4.2 Informed Reflection</p> <p>4.2.1 Reflection that Requires CK</p> <p>4.2.2 Reflection that Underpins Changes to Practice</p> <p>4.3 Evidenced – based Reflection</p>	<p>5. Agency</p> <p>5.1 Agency in the Classroom</p> <p>5.1.1 Normalising and Externalising</p> <p>5.1.2 Changing Practices</p> <p>5.1.3 Dealing with Uncertainty</p> <p>5.2 Agency beyond the Classroom</p> <p>5.2.1 Action based on New Learning</p> <p>5.2.2 Whole-school Conversations</p> <p>5.3 Agency within the PLC</p> <p>5.3.1 Deciding the Focus of the PLC</p> <p>5.3.2 The PLC as a Unique Experience</p> <p>5.3.3 The Role of the MKO</p> <p>5.3.4 Discomfort</p> <p>6. Facilitation</p> <p>6.1 Balancing Facilitation and Direction</p> <p>6.1.1 Management and Over-view</p> <p>6.1.2 Flexibility in Discussions</p> <p>6.2 Facilitation that Promotes Self-Determination</p> <p>6.2.1 Challenging rather than Telling</p> <p>6.3 Relationships and Facilitation</p> <p>6.3.1 Managing Discomfort</p> <p>6.3.2 The MKO-Participant Relationship</p> <p>6.4 Facilitation and Coaching</p> <p>6.4.1 Sourcing Information</p> <p>6.4.2 The MKO as Expert</p> <p>6.4.3 PRMs as a Supportive Space</p> <p>7. Duration</p> <p>7.1 Staged PLC Engagement</p> <p>7.1.1 The Initial Not-Knowing Phase</p> <p>7.1.2 Becoming Comfortable in the Group</p> <p>7.2 Time for Changes to Occur</p> <p>7.2.1 Change Takes Time</p> <p>7.2.2 The Impact of Visible Change</p> <p>7.3 Reviewing Practice</p> <p>7.3.1 Opportunities to Trial</p> <p>7.3.2 Returning to Question</p> <p>7.3.3 Ongoing Advice</p> <p>8. Tools</p> <p>8.1 A/AV recordings</p> <p>8.1.1 Relevancy and Impact</p> <p>8.1.2 Evidence-based Learning</p> <p>8.1.3 Difficulties with A/AV Recording</p> <p>8.1.4 Judgement</p> <p>8.2 Recording Transcripts</p> <p>8.2.1 Reading and Looking</p> <p>8.2.2 Assisting Reflection</p> <p>8.3 A Protocol</p> <p>8.4 Glance Cards</p> <p>8.4.1 Scaffolding Reflection</p> <p>8.4.2 Providing Direction</p> <p>8.5 Academic Articles</p> <p>8.5.1 Supported Engagement</p> <p>8.6 PLC/CTB (NCCA, 2019)</p>
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Appendix Z

Four Unique Professional Learning Journeys: Extracts from Conversations that occurred during PLCMs

Helen

At PLCM 3

(Show understanding of the listeners needs with support initiating, sustaining, and engaging in conversation (PL/CTB, 2019)).

Helen: That's hard – I think that's the one I think that I'm struggling with – to get them to listen to each other because ... it's trying to get him to build on each other's idea. It's the hard part, I think.

Helen reflects anecdotally on her practice. She has identified a specific element of engagement she believes she needs to address but despite her efforts, she is struggling to develop dialogue amongst her children.

At PLCM 4

Other: ... as a teacher you can say I actually don't know... They are not yes no questions.

Helen: It is the setting and different schools that will allow conversations - not not allow. I shouldn't say that, but you know it's a culture in a place. If there's a more relaxed culture and that's what you talk - like the bullying conversations, I think were probably eye-opening for the older classes because the teachers were sitting there going what's going on here? What happens? I don't know. I'm not aware. So, then the kids are kind of empowered to give the teacher information and you know, a conversation like that as X was saying - I don't know. You tell me. But sometimes I think we feel like we need to know all the answers and that's the thing.

Helen speaks generally about classroom culture as a factor in whether children are allowed to speculate. She considers her own role as a teacher and the value of authentic questions.

At PLCM 6

Helen: ... (referencing hand signs taken from an article) We've softened the 'because' part of it because it's easier for them to use 'maybe'. It's not definite so the maybe – they can throw out anything and then they can say it but I think that's age appropriate.

Other: Do you think if it was another child who tried to justify it or was it just because of her?

Helen: I think I was trying to get something from her (a child) because I think it was in the previous one she had given something but she – I'm not sure why it didn't work for her because – she got into it the last time because it was a story and it was imaginative but maybe his was too far gone for her. ... She is very inconsistent isn't she – (fairy door) I wonder if there is a door – so she is building on this isn't she. (Helen reads on.) I tried to get her going again but that was a fail... It went everywhere.

R: I listened to the whole thing and apart from the fact that there are some who are contributing more than others and there is a bit of dialogue, is it going anywhere?

Helen: It's going in circles, but I think that's what I said. I didn't know what to come in on. I didn't have a particular direction I wanted it to go in. Maybe it wasn't concrete enough... I think when I was planning this I thought I wanted to bring G1 along more because she had got involved in the previous one and I wanted to leave that freeness so there wasn't a right or wrong answer to it but I think as I said to you there is a place for that where they let their imagination go but it's hard to get that sweet spot between being very off kilter... I definitely believe above any other conversations they definitely were feeding off each other a bit more and they were listening to each other. They were excited about it – most of them. And even G2 was more enthused than she had been in the previous one. It worked for some and not for others and that's the importance of having a place for everything and opportunities.

Helen describes how she changed a practice in order to support her children's dialogic engagement. She has increased the authenticity of the engagement. Instead of requiring the children to justify their comments she believes having them speculate is less difficult. She continues to reflect on how particular children engage while identifying gaps in her own practice.

Rachel

At PLCM 3

Rachel: I know and just my point – and I hope it's a valid point – is like if I'm doing SESE and it's wonderful to hear their really lovely language and to hear them interacting and justifying. But if I am doing SESE my assessment criteria is can they name three signs of Autumn. Not can they give three sentences, even though obviously it's not written down as my assessment of them. My assessment of SESE is the few facts they can name or can they discuss it. So that's where I would struggle a little tiny bit, but I fully see it's wonderful to hear them.

R: ... Okay so that's your assessment. That's fair enough but that's content and that's recall...how do we get the other happening alongside it?

Rachel: Well, I mean to be honest obviously I'm doing something like this and thoroughly enjoying it and see huge value in it. But I wouldn't be doing it in the group situation as much without this because I suppose of time constraints and - so ideally it would be wonderful to do it with each group, to be able to sit down in small groups but you can certainly have them talking to each other and then writing down ...

Rachel describes in general and positive terms how her children engage. She recognises a gap between what she deems oral OL&C development and developing dialogue. However, she feels restricted by the classroom and the curriculum.

At PLCM 4

Rachel: ... the child of mine who the last time engaged hugely with the playground and what she was going to have - the water park. She didn't engage at all in this because she lives in her imagination and with something more practical, she wasn't clued in at all whereas she excelled the last time.... It's funny how different types of lessons –

Other: Your kids though are using I agree or I disagree when they are with me (Support Teacher).

Rachel: Good. Cos they used that a lot in the last one but not in this cos it wasn't as pertinent. So it is good to hear them -

Rachel continues to speak generally about her children's behaviours. In highlighting possible within-child factors she does not appear to reflect on her own role.

At PLCM 5

Rachel: (During transcript analysis) You can imagine who gave that, one of your ladies who likes to – [R: So what is she doing?]

Rachel: Is she waffling?

Other: She's going off on a tangent and she does that all the time.

R: Which is interesting Rachel because if you were thinking about her in terms of oral language she hasn't got the joint attention so that's where the emphasis needs to be for her. It's like *hear what I'm saying and respond to what I'm saying*.

Rachel: It's her imagination, her own little world and she irritates the others a little bit with that... And also they find it slightly - She's a bright little thing but they find it childish sometimes.

Rachel continues to describe her children anecdotally. Her analysis of her recordings does not appear to be influencing her practice. Her reflection on her role appears limited.

At PLCM 7

Other: ... Like I didn't know what direction it would take once it started as such. And I could just see it evolving as it went along but it was the fact that they were asking **so** many questions.

Rachel: And the bit of agreeing and disagreeing... But your role was more facilitator rather than instructor and you were affirming what they were saying.

Rachel notices elements in another's recording and identifies them as contributors to the dialogue. Her reflections appear to have caused a significant shift in how she perceives the teacher's role.

Niamh

At PLCM 3

Niamh: ... they're actually creating - this is dialogue ... they're having a discussion about this. Like whereas I suppose before we might have just answered that question, what colour is he? That he's black and white.

R: So then you're kind of noticing it we'll say... Has your role changed?

Niamh: I think I'm more open to allowing it happen ... and to letting it go you know, to let go and allow it to just you know, let them talk about, let them talk out, you know.

R: And has your questioning changed?

Niamh: I don't think my questioning has changed. I would definitely question. Like I might say the same question and let lots of other people answer it. I think that has changed. Whereas before I'd get one answer. (clicked fingers). OK grand, that's it.

Niamh has begun to reflect on her recordings and adapt her questioning in order to encourage engagement. She feels this has impacted her children's contributions.

At PLCM 5

Niamh: She's justifying there isn't it because she's nearly critiqued you know. (pause)

R: (Reading from transcript) *I didn't say they look the same. I said their eyes look the same.*

Niamh: Or is she explaining?

Other: And she's kind of recalling her own information as well.

Niamh: Is it explaining? Maybe clarifying?

R: *And they're all not the same colours.*

Niamh: Describe. It's just describe.

Niamh analyses a recording transcript. She questions herself on what the child is doing in terms of language use. In her evaluation she recognises the hierarchy of skills.

At PLCM 6

Niamh: And today a boy in my class, we were doing *The Bad-Tempered Ladybird*, and I stopped, or no he put his hand up and was like, I wonder what the last animal will be or I wonder what the biggest animal will be which will be the last animal. And then I paused, and I was like let's answer XX's question. I wonder, you know, and only one or two of them said maybe but like I was like, Oh my God, you're saying I wonder (expressing delight) ... later...

Niamh: I've gone mad. Like I wonder how long it might take them to grow, you know or like I wonder how tall will that get. You know these kind of things (referring to planting activity).

Later...

Niamh: That was just today. Yeah. You know, there were lots of answers. There was a few that had put maybe in front of their answer and then some of them might have said, oh, maybe it will be this. And then others would say oh but that's not as big. That's smaller than a rhino. The next one will have to be bigger than a rhino. So they were kind of thinking.

Niamh notices how changing her behaviours and using 'I wonder' brings about speculation. This in turn increases the opportunities for children to respond.

At PLCM 7

Niamh: I don't know if I ask enough questions. [R: Okay?] ... Maybe I challenge but I think for this kind of thing I was hoping they would talk without being directed or, I don't know (unclear).

R: But I think you achieved what you needed to achieve without the questions.

Niamh: ... And I suppose what they were doing in the video that I did, they just had to generate it themselves and do all the wondering nearly themselves.

Niamh continues to examine her role. She analyses her recording and challenges herself to consider how she has applied new practices.

Ann

At PLCM 4

R: Do you feel your role has changed?

Ann: I'm probably trying to talk less in the video. The last one I had to talk because they just went silent... I had to ask more questions then. The one before they were chatting away themselves but this time it was like 'what do you think'?

Other: And what were you doing?

Ann: It was em our garden theme. The flowers and stuff and there was too much equipment for them to look at. They got overwhelmed. They got too much at once and they kind of were in awe of it rather than – one or two were talking. One girl was actually getting camera shy the whole time. She won't speak.

Other: If she was off the camera, would she?

Ann: Yeah. I think she knows it's recording... She'd be quite good in the class, but I think when it comes to the video, she knows that the camera is recording her.

Ann uses anecdotal information to describe her children's engagements. She is not inclined to consider her role in advancing the dialogue.

At PLCM 5

Ann: The first one, the sound didn't go and they actually did. They were taking turns. They were talking about it (slug repellent) but then when the sound didn't work, I was like oh. Cos, I felt like it actually, I went through like turn taking and listening to people's questions. At the start some, it took a while to prompt them. They were given the item (slug repellent) and I talked about it and I had to kind of bring in more about ok what would happen... they needed more explanation as to I think what would happen to the birds and what food they get before they kind of started thinking. But it was the same children again that always spoke more.

Later...

Ann: Initially at the start when the video had no sound they were talking about how birds would be sad and what they'd eat. They actually got into that... They were all about what the birds could eat and what we do to make the birds happy. So there was a good conversation there.

R: But you noticed that there was a change in their conversation?

Ann: it changed, kind of off topic, well a bit off topic. But then like the greenhouse came up and how the birds can't get – you put the plants in there instead.

Ann begins to recognise her role in establishing dialogue. She notices the children's increased engagement when she introduces a stimulus. However, she continues to reference within-child factors as the reason for difficulties.

At PLCM 6

Ann: ... I suppose in my eyes it went off my original plan and I think I was going in there knowing two kids were out who are very vocal, so I had no expectations of what was going to happen. But actually, looking back it was ok. I just hate hearing my voice...

R: We talked about how your role had changed from previous videos.

Ann: Yeah I had stopped asking too many questions and let them speak.

R: We also talked about B1 and his kind of personal contributions, to the thing which –

Ann: Making connections, he always does and XX but she's not there. She would too. They are probably a bit more advanced I suppose in some ways... they were kind of responding to each other as well as me.

Ann has begun to notice the need for children to respond to each other and how she can facilitate this. She has consciously reduced her questions and is applying what was discussed at the PLC. She continues to attribute success to within-child factors.

Appendix AA

Extracts from Children-Teacher Dialogue

Extract from Children-Teacher Dialogue illustrating Playfulness

Context: The Scarecrows' Wedding by J. Donaldson is under discussion. A photograph showing Reginald Rake's head peering in the classroom door, is presented to the children, along with a letter. The children wonder where he is now.



Harry and Betty look happy in your school
But don't forget the scarecrow who is far more cool.

Your school deserves a guy like me.
I can fight, I can drive, I can climb a tree.

Hang me up on the fence and I promise to behave.
I'll wash my suit, I'll even shave.

I learned my lesson. I changed my ways.
Write me a letter to let me know if I can stay.

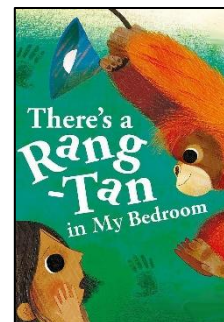
Yours sincerely,

R. Rake

T	Does he deserve to stay in our school
G3	Wait how can you make up by his build up by his booty up and everything in his hands if he needs someone to make him?
G5	I just want Betty to stay in our school
G3	Someone has to make Reginald Rake. He can't make his own self
G4	Yeah
T	Oh so F.. is asking how did he even get made. Is that what you're asking F..?
G5	Maybe somebody bought him
T	Mmm
G3	Maybe someone just bought him
G2	Or maybe someone in the school made him
G3	And then he turned real. Maybe a ghost wanted him.
G2	Betty and Harry might turn real
G3	Ah! What if they escaped?
G2	What if they're fighting outside now? (laughter – G3 mimics fist fighting)
T	You're wondering if Betty, Harry and Reginald Rake are all fighting in the yard?
G2	Yeah - no not -
G3	Maybe Reginald Rake wants to take Betty
G6	That means
G2	So Harry's
G5	Or they might jump over the gate (raised her voice to be heard, smiling and squirming)

Extract from Children-Teacher Dialogue illustrating ‘Dialogic Talk’

Context: A discussion about Animal Conservation takes place following the reading of *There's a Rang-tan in My Bedroom* by J. Selleck. Photographs supported the children justifying their arguments.



T	You were saying something interesting there G5. If it were a bag what did you say?
G5	If it was a plastic bag maybe that's why they're getting extinct
T	Tell me more about that
G5	Cos, Because turtles don't, cos they might think it's food
T	Oh
G2	They could choke
G3	And like people litter mostly and that's bad for the creatures
G2	In the sea
G3	like if people have plastic then what about the whales, what about creatures in there
T	So you are saying humans' pollution sometimes causes animals to be sick or die? (pause) So what can we do about that?
G2	We can try and save them and pick up all the litter
G6	I think that's like a turtle
T	Which one G6?
G6	The picture which is with the sand
T	Oh yeah. I think this is a large type of turtle
G5	You can make a poster of them (very hesitant)
T	Ahh (pause) like what G5?
G5	Like don't, To stop using animals for stuff
T	Stop using animals for stuff?
G3	But you need animals for stuff sometimes cos humans sometimes have to eat
T	Ah
G3	And like usually humans eat something like fish and that's made out of real fish
G4	Like salmon
T	(pause) So you're saying it's ok for us to eat some animals
G3	But not all of them – just let's say tiny (unclear) cos once I saw a shop and it had tonnes of dead animals in it
G5	Maybe -
T	I wonder if it was a butcher's shop. Was it?
G3	yeah
G5	Maybe if the ones what are getting extinct cos that's not really nice – the ones what are getting extinct soon
T	Oh so G5 you're saying maybe we shouldn't eat animals that are nearly extinct
G3	Cos if you do that and their mums and dads might see you and then they might also like attack you if they see you sometimes because that's their, like sometimes they can be their child and then they might attack them to leave their child alone.