Transfer of Skills Across Languages in the Primary School

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Declaration

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Do mo mháthair Finola,

mo dheartháir Gearóid, mo dheirfiúracha Finola Óg agus Thérèse,

Le cuidiú ó m'athair Gabriel, go ndéana Dia grásta air,

A thugann spreagadh, tacaíocht agus muinín dom.

I gcuimhne ar m'athair - tusa is cúis leis gur thug mé faoin taighde seo.

Bhí tú le mo thaobh agus é seo á chur i gcrích agam.

Guím solas na bhFlaitheas ort.

Nóta Buíochais

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List of Abbreviations

CEFR	Common European Framework of Reference for Languages
CPD	Continuing professional development
DCU	Dublin City University
DE	Department of Education
DEI	Department of Education and Inspectorate
DES	Department of Education and Skills
EK	Explicit knowledge
ELP	European Language Portfolio
HLE	Home language environment
IK	Implicit knowledge
LOTEI	Languages other than English or Irish
L1	Language 1
L2	Language 2
L3	Language 3
MFL	Modern Foreign Languages
MuLiPEC	Multilingual Pedagogies in Early Childhood
NCCA	National Council for Curriculum and Assessment
PCK	Pedagogical content knowledge
PDSS	Personal Data Security Schedule
PDST	Professional Development Service for Teachers
PL	Professional learning
Post-PL	Post-professional learning
Pre-PL	Pre-professional learning
PRIMR	Primary Math and Reading
SCT	Sociocultural theory
STEM	Science, Technology, Engineering and Mathematics
ToS	Transfer of skills
ZPD	Zone of proximal development

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Abstract

Transfer of Skills Across Languages in the Primary School

Máire Ní Láimhín

As part of the Primary Language Curriculum, there is a particular focus on integrated language teaching and learning and the transfer of skills (ToS) across languages (Irish, English and a variety of home languages). Skills learned in one language can be transferred to another language, and teachers can teach for ToS by exploring similarities and differences across languages in their classrooms.

This study employed a single-site case study design using a collaborative inquiry approach to professional learning. Four primary school teachers teaching junior classes in an English-medium school participated in six one-hour professional learning community sessions over eight weeks. Teachers observed lessons modelled by the researcher and subsequently implemented learning activities in their classrooms using the resources provided. Teachers participated in semi-structured individual interviews prior to and following the eight weeks of professional learning. Qualitative research methods were employed to analyse data. Drawing on De Luca's (2015) framework of collaborative inquiry, template analysis generated key research findings. Findings were supported by the researcher's reflective journal based on classroom observations and reflections on the professional learning community sessions.

Findings show that teachers developed a deeper understanding of the ToS through the collaborative inquiry approach. Teacher PL was supported by, i) observing and implementing shared reading and writing activities, ii) using resources to teach Irish phonics, and iii) explicit planning for ToS. A focused, structured, sustained approach to professional learning where community and coaching were valued, supported teachers to teach for ToS across Irish and English. Increased teacher language awareness of similarities and differences across languages supported teachers' confidence and competence to teach for ToS. Coaching, modelling of lessons and tailor-made resources may also be beneficial. Engagement in professional learning communities with coaching using a collaborative inquiry approach could support teacher pedagogical content knowledge of ToS across languages in other school contexts.

1 Chapter One: Introduction

Chapter One begins with the context within which the study was conducted and a rationale for the study. It presents a justification and identifies the research gap. The research questions and underpinning concepts to include (i) teacher pedagogical content knowledge, (ii) transfer of skills, (iii) professional learning, (iv) coaching, and (v) collaborative inquiry, are presented. The methodology to address the research gap is determined, and the researcher's positionality within the study is discussed. The chapter closes with an overview of the layout of the thesis. I begin by setting the context for the research study.

1.1 Context of the Research Study

The Republic of Ireland is a linguistically and culturally diverse country where schools have children with English as a first language, Irish as a first language and children with another language as their first language (Department of Education (DE), 2019b). Currently, children in Ireland have the opportunity to learn Irish and English in primary schools enabling them to become bilingual or plurilingual (Concannon-Gibney et al., 2022). In a statistical bulletin published by the DE in August 2024, a total of 3,089 mainstream primary schools in the Republic of Ireland were recorded (DE, 2024b). Irish-medium schools account for 8.3% of the primary schools in the Republic of Ireland (www.gaeloideachas.ie). Most children begin primary school at the age of four or five years of age (DE, 2024b). Table 1 outlines the four stages at primary level (DE, 2019a).

Table 1

Stages at Primary Level (adapted from DE, Circular Letter 0045/2019)

Stage 1	Junior and Senior Infants
Stage 2	First and Second Class
Stage 3	Third and Fourth Class
Stage 4	Fifth and Sixth Class

In the Republic of Ireland, primary education is provided through the medium of English and Irish in three linguistic contexts: English-medium schools, Irish-medium schools and *Gaeltacht* schools (DE, 2019b). The *Gaeltacht* refers to "areas of the country, mostly along the western seaboard where Irish was traditionally spoken as the vernacular of the local community" (Ní Dhiorbháin & Ó Duibhir, 2021, p. 2). In English-medium schools, the main language of instruction is English, and in Irish-medium schools the main language of instruction is Irish. In the context of English-medium schools, English is

referred to as the Language 1 (L1) of instruction in the school and Irish is referred to as the Language 2 (L2) of instruction in the school. In Irish-medium schools, Irish is referred to as the L1 of instruction in the school and English is referred to as the L2 of instruction in the school.

Ireland's first curriculum framework for primary education was launched by the Minister for Education on 9th March 2023. The Primary Curriculum Framework is to inform the work of teachers and school leaders in all primary and special schools in Ireland (DE, 2023a). A key element of the Primary Curriculum Framework is to fully redevelop the Primary School Curriculum. It seeks to further embed and implement the Primary Language Curriculum (DE, 2019b) and provide updated specifications (for the 2025/2026 school year) to include Modern Foreign Languages (MFL) for particular age groups. The Primary Curriculum Framework (DE, 2023a) "supports the introduction of modern foreign languages in stages 3 and 4" (p. 17). Time allocation for a third language (Language 3 (L3)) has been included for Stages 3 and 4. This means that MFL will be taught in primary schools from third to sixth class. Transfer of skills (ToS) is also relevant to this context.

Significant curriculum reviews and research conducted on the 1999 Primary School Curriculum (Department of Education (DES), 1999) indicted that its structure was "not suitable to meet the needs of diverse learners in different contexts" (Ó Duibhir & Cummins, 2012, p. 16). Drawing on international good practice, Ó Duibhir and Cummins (2012) proposed the introduction of an integrated language curriculum which would "enable teachers to achieve learning efficiencies by explicitly drawing children's attention to similarities and differences between their languages" (p. 16). Considering the structures and tools of the Common European Framework of Reference for Languages (CEFR) and the European Language Portfolio (ELP) as a potential guide for the Irish primary school context, Ó Duibhir and Cummins (2012) suggested that the L1 curriculum be cross-referenced with the L2 and modern language curricula and use largely the same structures and descriptors. They proposed small-scale research projects to ascertain supports required by teachers to use the tools effectively.

The Primary Language Curriculum (DE, 2019b) was launched on 13th November 2015 and was described by the Minister of Education at that time as a significant and welcome reform of how our youngest pupils learn their language skills. It acknowledged the use of "over two-hundred languages" in Irish society (DE, 2019b, p. 4). It is for all pupils at all class levels in all primary schools. The context includes four school types: English-medium schools, Gaeltacht schools and Irish-medium schools, and special schools (Department of Education & Inspectorate (DEI), 2022). Cognisant of the language profile of children in schools – the Primary Language Curriculum (DE, 2019b) sought "to support children on their language-learning journeys, in both English and Irish, while also

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acknowledging the diversity of languages spoken in Irish primary schools" (DE, 2019b, p. 6).

A phased implementation approach for the Primary Language Curriculum (DE, 2019b) in line with a three-year professional learning (PL) framework was announced (DE, 2015). This consisted of half-day and full-day seminars, school closures, involving various groupings of school staff to include school principals, school principals and one other teacher, whole-staff, some of which was facilitated by *Oide*, formerly the Professional Development Service for Teachers (PDST), a support service funded by the Teacher Education Section of the DE. With regard to the continuing professional development (CPD) during school time during the school years of 2016/17 to 2019/20, primary teachers availed of "104,588 CPD days in total, approximately 2.5 days per teacher, related to the implementation of the Primary Language Curriculum" (DEI, 2022, p. 41).

The phased implementation approach for the Primary Language Curriculum (DE, 2019b) began with junior infants to second class during the 2016/17 school year and was later available for all class levels during the 2019-20 school year (DE, 2019a). Revisions were made to the learning outcomes at stage one and two and the progression continua were moved to the online toolkit during the implementation phase (DE, 2019a). It was noted in the Chief Inspector's report that despite provision of and engagement in PL, the "implementation of the integrated Primary Language Curriculum proved challenging for schools" (DEI, 2022, p. 315), particularly so regarding the teaching of Irish in English-medium schools. Significantly, the Chief Inspector's report noted that there was no significant improvement in the teaching of Irish in English-medium schools. Of particular interest to this research study, the Chief Inspector's report stated, "… when schools struggled with the revised curriculum, they prioritised the teaching of English in English-medium schools and Irish in Irish-medium schools" (DEI, 2022, p. 315). The DEI identified that primary schools need "intensive support to enable them to introduce challenging, targeted interventions to enhance pupils' attainment and engagement, enjoyment and motivation in Irish language learning" (DEI, 2022, p. 126).

The National Literacy, Numeracy and Digital Literacy Strategy 2024-2033 (DE, 2024a) was launched on 16th May 2024 by the Minister for Education. Building on the national strategy (DE, 2011) and the interim review (DE, 2017), it identifies a number of key themes two of which are of particular interest in the present study. The national strategy (DE, 2024a) notes that, "Learning experiences and outcomes in the Irish language need to be enhanced" and "Inclusive plurilingual and pluricultural practices should be developed" (DE, 2024a, p. 17). The strategy commits to provision of PL to support the "evolving demands of the linguistic and cultural landscape" by promoting

"plurilingual and pluricultural awareness and practices" and enhancing "the Irish language competence of teachers" (DE, 2024a, p. 39).

It is worth noting that the Primary Language Curriculum (DE, 2019b) was introduced at a time of an unprecedented programme of curriculum and assessment reform at primary level. Implementation at all class levels (to include third class to sixth class) was to begin in the school year 2019/2020. Aside from the impact of Covid-19, the DE had also published an Action Plan for Education 2016-2019 (DE, 2016) during that time. This resulted in primary schools implementing a number of curricular initiatives simultaneously to include Science, Technology, Engineering and Mathematics (STEM) education, digital education, wellbeing, creativity, education for sustainable development and Gaeltacht education.

Due to the evolving linguistic profile in society, adjustments to the implementation of the Primary Language Curriculum (DE, 2019b) during its introduction to schools, the impact of the global pandemic, and policy developments in the area, teaching for ToS across languages as part of the integrated Primary Language Curriculum (DE, 2019b) may not have received the attention required. While primary schools now turn to the implementation of the Primary Mathematics Curriculum (DE, 2023b), there is much to be learned from the context in which the Primary Language Curriculum (DE, 2019b) was introduced. This research study identifies how a professional learning community with coaching using a collaborative inquiry approach can support teacher pedagogical content knowledge (PCK) of ToS across languages. Building on the context of the research study, I present the rationale for the research in the next section.

1.2   Rationale for the Research Study

This research project explored how teachers in an English-medium primary school were supported through PL and coaching to learn about how knowledge of one language can help in learning another language. The Primary Language Curriculum (DE, 2019b) refers to this as teaching for ToS across languages.

The Primary Language Curriculum (DE, 2019b) identifies language as "central to how and what we learn" and considered language as "key to the development of the child as a person" (DE, 2019b, p. 7). Language is the means through which children in primary school communicate and access the curriculum. Being a communicator and using language is identified as one of the seven key competencies in the Primary Curriculum Framework (DE, 2023a). It is the responsibility of teachers to apply their knowledge and experience in facilitating children's holistic development (Teaching Council, 2016).

Various types of teacher knowledge and experiences of teaching and learning are noted for their contribution to teacher effectiveness (Darling-Hammond et al., 2017). These include, subject matter knowledge, teacher qualification and certification, and opportunities to learn about content and content-specific teaching methods. High quality teacher knowledge of content and content-specific teaching methods can support teachers in improving student learning in their classrooms. Research suggests that teachers require PCK in order to teach effectively (Shulman, 1986, 1987). The 'content' of particular concern in the present study was teacher language awareness of ToS between English (L1 of school) and Irish (L2 of school), while also recognising the role of the diversity of languages spoken in Irish primary schools in ToS. Andrews (2007) defines teacher language awareness in L2 contexts as consisting of three interrelated knowledge bases: (1) knowledge of language, (2) knowledge about language, and (3) knowledge of the learners.

Research on the relationship between teacher PL and improved student outcomes continues to be a matter for debate. An overly-directed focus on PL as the mechanism for improving student outcomes can complicate teacher engagement in PL (Hattie, 2003). Engaging teachers to learn in order to continue to teach is identified as the 'hallmark' of the teaching profession of Ireland (Teaching Council, 2016). PL is proposed as an opportunity to build on teacher PCK throughout a teacher's career (Giblin et al., 2022). This study provided teachers with an opportunity to engage in a professional learning community with coaching about how to teach for ToS across languages through a professional learning community, and supported teachers in implementing ToS across languages in their classrooms. Resourcing teacher time for PL with coaching and working collaboratively is proposed.

Aside from DE mandated PL about implementation of the Primary Language Curriculum (DE, 2019b), I did not identify any research specific to professional learning communities with coaching about ToS across English and Irish. Research into the use of professional learning communities to support teachers in teaching for ToS across languages in primary schools is limited. This study provided teachers with PL and coaching that supported their PCK in implementing the Primary Language Curriculum (DE, 2019b).

Despite the provision of PL about the Primary Language Curriculum (DE, 2019b) in schools, teachers in primary schools reported challenges with implementing the Primary Language Curriculum (DE, 2019b) due to limited PL (Mac Domhnaill & Nic an Bhaird, 2022) and curriculum implementation overload (McGarry, 2017). Significant difficulties and challenges in understanding and implementing the Primary Language Curriculum (DE, 2019b) were highlighted by the Inspectorate in the Chief Inspector's Report 2016-2020

(DEI, 2022). Lack of resources for minority languages, such as Irish in the case of this study, has been noted by Schwinge (2017). Concannon-Gibney et al. (2022) determine that educational digital resources with clear language learning goals should be "developed and carefully implemented" in the context of learning Irish (p. 2). It is noted by Ó Duibhir (2018) that resources for the Irish language do not reflect the first language status of Irish.

ToS across languages is based on the premise that learning languages leads to the development of a common underlying proficiency (Cummins, 1979) reflective of the linguistic interdependence hypothesis (Cummins, 1981). This suggests that languages by their nature are interconnected (DE, 2019b). In the present study, PL and coaching about teaching for ToS incorporated PCK of the interdependence hypothesis with a specific focus on drawing teachers' awareness to similarities and differences between English and Irish.

This study provided a unique opportunity for teachers to participate in PL and coaching about teaching for ToS across languages in a supportive way. The study addressed the gap in the research regarding how to support teacher PCK of ToS across languages through professional learning communities with coaching using a collaborative inquiry approach. Data gathered during the study enabled the researcher and teachers to gain knowledge of how to support ToS across English and Irish while also recognising the role of the diversity of languages spoken in Irish primary schools in ToS. The study also enabled the researcher and teachers to develop and refine teaching resources used in the primary classroom. The findings of this study contribute to the debate on curriculum reform and curriculum PL and implementation. In the next section, I define the research questions for the thesis.

1.3   Research Questions

There are two research questions which guided the study:

1. How does participation in a professional learning community with coaching support teachers', a) dialogical sharing, b) taking action to promote, and c) reflecting on teaching for transfer of skills (ToS) across English and Irish?
2. What are the other factors that, a) support, and/or b) hinder teaching for transfer of skills (ToS) across English and Irish?

In the following section, I present the key concepts central to the study.

1.4   Concepts Underpinning the Research Study

The following key concepts were central to this work.

1.4.1   Teacher Pedagogical Content Knowledge (PCK)

Teacher pedagogical content knowledge (PCK) is a blend of content knowledge and pedagogical knowledge which includes knowledge of ways to teach a subject and knowledge of (mis)conceptions and difficulties commonly experienced by learners (Shulman, 1986, 1987). In the present study, the content in teacher PCK is knowledge of similarities and differences between the English and Irish languages. For Andrews (2007), language teachers in L2 contexts require (i) knowledge of language, (ii) knowledge about language and (iii) knowledge of the learners. In the present study, teachers developed their PCK in relation to similarities and differences between the English and Irish languages.

1.4.2   Transfer of Skills (ToS)

Transfer of skills (ToS) is the use of knowledge of one language in helping to learn another language through reflecting on similarities and differences between the languages (Cummins, 1979, 1981; Ó Duibhir & Cummins, 2012). ToS is a key feature of the integrated Primary Language Curriculum (DE, 2019b). In the present study, the Primary Language Curriculum (DE, 2019b) is the key curriculum document. It is built upon the assumption that "languages by their nature are interconnected" (DE, 2019b, p. 43). Drawing children's awareness to similarities and differences between the English and Irish language supports children in using one language to learn another. Teaching for transfer has been defined by Thomas and Mady (2014) as the "contextually-inscribed set of instructional strategies that connect language and literacy across languages" (p. 400). In the context of the present study, rather than teaching languages in isolation which was the practice with the 1999 Primary School Curriculum (DES, 1999), the Primary Language Curriculum (DE, 2019b) promotes teaching for transfer across English and Irish to enable children to "make connections between languages and develop an awareness of how languages work" (p. 43).

1.4.3   Professional Learning (PL)

Professional learning (PL) encompasses the professional development experiences, activities or programmes that teachers engage with that may lead to PL (King, 2014). The seven core features of effective PL should include content focus, active learning, collaboration, models of effective practice, coaching and expert support, feedback and reflection, and sustained duration (Darling-Hammond et al., 2017). In the

present study, teachers engaged in PL and coaching about teaching for ToS that reflected the seven core features of effective PL.

1.4.4 Coaching

Coaching is a multifaceted mechanism for teacher learning that supports teachers to navigate new instructional practices based on their prior held knowledge and beliefs about teaching. It is consistent with five of the research-based principles of effective teacher learning which include, content focus, active learning, coherence, sustained duration, and collective participation (Desimone & Pak, 2017). In the present study, I fulfilled the role of facilitator/coach to support teacher learning about teaching for ToS.

1.4.5 Collaborative Inquiry (CI)

Collaborative inquiry (CI) is a PL structure that engages teachers in a cyclical process of dialogical sharing, taking action and reflecting on professional practice to lead to new understandings and changes in classroom teaching (DeLuca et al., 2015). Teachers engaged in CI as a structure for PL. Teachers engaged in dialogical sharing about teaching for ToS, they took action to promote teaching for ToS and reflected on teaching for ToS to support their PCK of ToS across languages. Further review of the literature pertaining to each of these concepts is provided in Chapter Two. Next, I describe the research design employed in the study.

1.5 Research Design

The research study employs a qualitative, exploratory, single-site case study methodology (Cohen et al., 2018). Case study research provides rich and vivid (Hitchcock & Hughes, 1995) fine-grain detail (Cohen et al., 2018) which in turn provides context concerning "what it is like to be involved in the situation" (Lincoln & Guba, 1985, p. 214). Teachers engaged in a three-stage cyclical process of CI (DeLuca et al., 2015). CI is described as a method of engaging teachers jointly to inquire into a shared problem of practice and is commonly used in qualitative case studies of individual collaborative inquiries (DeLuca et al., 2015). The three stages of CI employed in this study were, a) dialogical sharing, b) taking action to promote, and c) reflecting on teaching for ToS across languages.

Four data collection techniques were used in the present study to support triangulation of data. They include, 1) interview schedule; used at the beginning and end of the eight-week period, 2) audio-recordings of professional learning community sessions, 3) classroom observation schedule, and 4) field notes in the form of a researcher reflective journal. Template analysis (King & Brooks, 2018) was used to analyse the data to generate findings, conclusions and recommendations in response to

the research questions. My own positionality as a researcher is discussed in the next section.

1.6 Researcher's Positionality

I provide a "researcher identity memo" (Braun & Clarke, 2013, p. 36) which positions me in relation to the thesis. The researcher identity memo is followed by my positionality as doctoral researcher and facilitator providing PL and coaching as part of the present study.

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Researcher Identity Memo

I have been fortunate to have had the opportunity to attend Montessori, primary, secondary and third-level education. My educational career to date has been received predominantly through the medium of English. Throughout the course of my doctoral studies, I engaged with my supervisors through the medium of Irish.

Despite having lived outside the *Gaeltacht*, I have been positively disposed to the Irish language through engaging with the Irish culture, through music, song and dance from a young age. My interest in language learning and teaching has been fostered through exposure to language, an awareness of language, and positive attitudes towards language learning and language teaching. My knowledge of, and interest in the Irish language has been supported by my family, friends, teachers, colleagues, and supervisors.

In particular, with reference to this thesis, my positive engagement with the Irish language and experience of working in both English-medium and Irish-medium educational contexts, supported my understanding of the transfer of skills across languages. I enjoy learning and teaching about how languages are taught and learned.

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During this research study, my role consisted of two elements. These included, the role of doctoral researcher conducting the research study and the role of facilitator providing PL and coaching as part of the study. I collected qualitative data by conducting pre-professional learning (pre-PL) interviews and post-professional learning (post-PL) interviews with the teachers. I collected qualitative data through the use of observation schedules and a researcher reflective journal. I also facilitated the professional learning community sessions and coaching through modelled lessons and observing classroom practice in all classrooms. This enabled me to undertake a detailed analysis of the area of research. I was committed to conducting a comprehensive research study which sought to support teaching for ToS across languages through a professional learning community

with coaching through a CI approach. Cohen et al. (2011) encourage the researcher to "seek to understand their part in, or influence on, the research" (p. 225). It is important therefore to explore my positionality in relation to the study.

My interest in language teaching and learning played a significant role in forming my positionality in relation to the present study. As a former mainstream primary school teacher, I taught a range of class levels in English-medium and Irish-medium school settings and participated in PL and coaching about the Primary Language Curriculum (DE, 2019b). I also worked as a language advisor with *Oide*, formerly known as the Professional Development Service for Teachers. I facilitated whole-school and sustained support models of PL and coaching to support the implementation of the Primary Language Curriculum (DE, 2019b) in English-medium and Irish-medium school settings. This work included facilitation of professional learning communities pertaining to the implementation of the Primary Language Curriculum (DE, 2019b). I was aware that my role in the present study was different from that of an advisor, as I was both researching and facilitating/coaching in the area of teaching for ToS across languages. Furthermore, I was aware of reciprocity, particularly during professional learning communities and therefore, avoided sharing my own experiences as both a teacher and advisor so as not to influence the participants' contributions to the study (Creswell, 2008).

During the data collection and analysis phases of the study, I worked as an initial teacher educator in the teaching of Irish language pedagogy in Dublin City University (DCU). As an initial teacher educator in the teaching of Irish language pedagogy, conducting doctoral research, and facilitating PL with coaching about the Primary Language Curriculum (DE, 2019b), I was aware of being perceived as an 'insider' and/or 'outsider' by the participants of the study (Mercer, 2007). This can result in informant bias through power relationships (Mercer, 2007) where the participants may consciously or unconsciously participate in the study in ways that they perceived as what might please the researcher (Creswell, 2008). Although the school chosen for this study was not a school where I previously worked, I am familiar with a typical primary school setting from my experience in education. Hammersley and Atkinson (1983) highlight the challenge for the researcher to balance their role between 'familiarity' and 'strangeness'. The researcher is required to negotiate the space between the familiar setting of a school and the strangeness of being an outsider to the participants. The necessity for the researcher to disclose "their own selves in the research" is highlighted by Cohen et al., 2011 (p. 225), particularly so in qualitative research. Therefore, through gathering a 'chain of evidence' (Yin, 2009) such as classroom observation notes and field notes in the form of a researcher's reflective journal, I, as the researcher, monitored researcher reaction to maintain trustworthiness throughout the study (Cohen et al., 2018).

PL and coaching in teaching for ToS across languages have featured at each stage of my educational career to date. As a former primary school teacher advisor and initial teacher educator, the challenges encountered by teachers in teaching for ToS and limited access to PL and coaching in the area were apparent. This doctoral journey provided an opportunity to deepen my knowledge by engaging with the relevant literature and conducting extensive research on how professional learning communities with coaching can support teacher PCK of teaching for ToS across English and Irish. Finally, I conclude the chapter by providing an overview of the layout of the thesis.

1.7 Layout of the Thesis

This chapter presented the context of the research in relation to primary curriculum reform and PL for teachers about the Primary Language Curriculum (DE, 2019b). Having identified the gap in the research regarding PL and coaching to support teacher PCK of ToS, and identifying challenges experienced by teachers in implementing the Primary Language Curriculum (DE, 2019b), the rationale and justification for the study were established. The research questions and relevant underpinning concepts for the study were described, with further review of the literature pertaining to each of the concepts provided in Chapter Two. The methodology to address the research gap was outlined, and the researcher's positionality as doctoral student both undertaking research and facilitating/coaching was discussed.

A review of the literature and a conceptual framework for the research is presented in Chapter Two. A review of four main bodies of literature was conducted to include, 1) theoretical concepts of language learning, 2) pedagogical content knowledge and teacher language awareness, 3) transfer of skills across languages, and 4) professional learning communities and coaching. The conceptual framework underpinning the study is presented at the end of Chapter Two.

Chapter Three describes the methodology and a rationale for selecting qualitative research methods for the study. Detail of the methodological paradigm of interpretivism is provided. Data collection, piloting and analysis procedures are accompanied by sampling procedures and a description of the research instruments. Ethical factors and a timeline for the research study are presented. Chapter Three concludes with a discussion of the strengths and limitations of the research design.

Research findings and analysis in light of the relevant literature underpinned by the conceptual framework for the research study are presented in Chapter Four.

Chapter Five presents the recommendations and conclusions from the research findings and analysis. Limitations of the research study and recommendations for future

practice, policy and research are identified. A summary contribution of the study to the field of language education forms the concluding statement for the thesis.

2   Chapter Two: Literature Review

Chapter Two presents four main bodies of literature pertaining to this study and is therefore presented in four sections. Section One focuses on literature pertaining to theoretical concepts of language learning and teaching. Literature regarding pedagogical content knowledge (PCK) and teacher language awareness is presented in Section Two. Section Three focuses on transfer of skills (ToS) across languages. Literature relating to professional learning communities and coaching is presented in Section Four. Arising from the literature review and rationale discussed in Chapter One, Chapter Two concludes with the conceptual framework which informs the research study.

2.1   Section One – Theoretical Concepts of Language Learning and Teaching

This section presents broad theoretical concepts of language learning and teaching relevant to the present study. It outlines the linguistic interdependence hypothesis, the concept of translanguaging and an overview of Vygotskian sociocultural theory (SCT). Cummins (2017) identifies theoretical contributions to the evolution of the multilingual turn away from monolingual instructional assumptions. These contributions are central to the teaching for ToS across languages. I begin Chapter One by introducing the linguistic interdependence hypothesis. Later, in Section Two, I present how knowledge and application of the linguistic interdependence hypothesis can support teachers in teaching for ToS across languages in light of the Primary Language Curriculum (Department of Education (DE), 2019b).

2.1.1   The Linguistic Interdependence Hypothesis

In a Montreal French bilingual immersion programme, Lambert and Tucker (1972) noted that students spontaneously engaged in contrastive linguistics in French and English. Contrastive linguistics focuses on comparing the structural similarities and differences between two or more languages (Lado, 1957). Cummins (2017) identifies examples of such structural similarities and differences as grammatical and lexical aspects of languages. Where consistently significant relationships between academic aspects of Language 1 (L1) (i.e. Lx) and Language 2 (L2) (i.e. Ly) were noted, Cummins (1979, 1981) articulated the 'linguistic interdependence' hypothesis and described it as:

> To the extent that instruction in Lx is effective in promoting proficiency in Lx, transfer of this proficiency to Ly will occur provided there is adequate exposure to Ly (either in school or environment) and adequate motivation to learn Ly. (p. 29)

The significance of adequate exposure and adequate motivation to learn Ly is noted here. This is of particular importance in the case of minority languages, for example Irish in the bilingual (English and Irish) and immersion contexts where the majority of

children do not have contact or have very limited contact with the language outside of school. This also includes languages other than English or Irish (LOTEI).

The linguistic interdependence hypothesis suggests that languages are not separate but are connected with each other by means of a common underlying proficiency. A common underlying proficiency construct across languages notes that development of the L1 can support the development of the L2 (Cummins, 1979). In this way, the linguistic interdependence hypothesis proffers that when literacy skills are learned in one language, a common underlying proficiency is also being developed. The existence of a common underlying proficiency presents an opportunity for ToS from one language to another. Ó Duibhir and Cummins (2012) note that the theory of a common underlying proficiency for language and literacy development enables the "transfer of literacy skills and learning strategies to other languages" (p. 11). This means that when language learners develop skills in one language, the skills are not exclusive to that language. Proficiency in one language impacts how subsequent languages are learned (DE, 2019b; Cummins, 1979, 1981; Pinter, 2011).

Baker (2011) determines that two-way transfer (i.e. from Lx to Ly and Ly to Lx) is possible where the sociolinguistic and education context supports such transfer. While acknowledging the complexity of the oral language domain, significant correlations between languages exist in the more instructionally dependent domain of decoding/phonological awareness (Melby-Lervåg & Lervåg, 2011).

Grosjean (1989) emphasised that the bilingual is not two monolinguals in one person. From this, Cook developed the concept of multicompetence (1995, 2007), emphasising that multicompetence is not comparable to monolingual competence in each language. Building on the concept of multicompetence, Herdina and Jessner (2002) and de Bot et al. (2007) proposed the dynamic systems theory. It posits that where one or more language systems are present, a metamorphosis of the overall multilingual system occurs, including the development of both first and second language.

In the context of immersion education, Cummins' common underlying proficiency construct proposes that learners learning a minority language develop stronger language skills in the minority language in bilingual programmes than in monolingual programmes, and at no cost to their majority societal language skills (Cummins, 2021). This construct identified an instructional approach to enable learners learning a minority language to succeed in language learning. In this way, it is understood that the common underlying proficiency construct "makes possible the transfer of concepts, skills, and learning strategies across languages" (Cummins, 2021, p. 9). Cummins (2017) notes that these constructs share "is a recognition that the languages of bilinguals and multilinguals

interact in complex ways that can enhance aspects of overall language and literacy development" (p. 108).

The continued widespread nature of monolingual instructional assumptions in most language teaching contexts is highlighted by Cummins (2017). Such approaches view languages as separate from one another, with exclusive use of the target language, and with little to no reference to the home or dominant language. Instead, Cummins (2017) encourages an openness to the opportunities offered by bilingual/multilingual instructional strategies that "acknowledge the reality of, and strongly promote, cross-language transfer" (p. 104). As the credibility of monolingual instructional approaches continues to be questioned, language teachers are encouraged to teach for ToS across languages.

The Primary Language Curriculum (DE, 2019b) is presented as an integrated language curriculum (English and Irish) for implementation in both English-medium and Irish-medium schools in the Republic of Ireland. The integrated approach to language learning adopted in the Primary Language Curriculum (DE, 2019b) is derived from the linguistic interdependence hypothesis (Cummins, 1979, 1981). Similarities and differences between English and Irish learning outcomes and continua of language learning are presented. In order to deliver an integrated approach to teaching, teachers require a high level of skill in both subject knowledge and pedagogy (Burgess, 2004). Next, I discuss the concept of translanguaging.

2.1.2 Translanguaging

Translanguaging was first proposed by Williams (1996) in the Welsh context of bilingual instruction. This concept was extended by García (2009) and defined as the "multiple discursive practices in which bilinguals engage in order to make sense of their bilingual worlds" (p. 45). This is in contrast to the monolingual principle proffered by Howatt (1984) in the context of Canadian French immersion programmes. The concept of translanguaging, as understood by García (2009), requires more flexible instructional strategies such as strategic use of code-switching (Celic & Seltzer, 2011) and encourages judicious use of the stronger language to support development of the weaker language (Fu, 2009; Luk & Lin, 2014). Translanguaging instructional strategies are presented by Celic and Seltzer (2011). These include, a culturally relevant learning environment, a multilingual learning environment, language portfolio, and community study. However, the linguistic interdependence hypothesis recognises that languages interact in complex ways which can support all language development. Genesee (2004) suggests that learners need to be made aware of ToS and comparative structures across languages.

Otheguy et al. (2015) define translanguaging as "the strategic deployment of a speaker's full linguistic repertoire without regard for watchful adherence to the socially and

politically defined boundaries of named (and usually national and state) languages" (p. 283). Translanguaging occurs when information is received through the medium of one language (Lx) and responded to (by speaking or writing) through the medium of another language (Ly) (Lewis et al., 2012).

The concept of translanguaging has continued to evolve from its initial interpretation and is used now as a term to refer to a wide variety of understandings. Kirsh (2020) denotes that during translanguaging practices, speakers make strategic choices about what and how they use resources from their linguistic repertoire to respond to their environments. The concept has been further extended to refer to a range of strategies using multiple languages (Cenoz & Gorter, 2017; Vallejo and Dooly, 2020). Such pedagogical translanguaging activities include;

    i)   opportunities to see similarities and differences between languages,

    ii)   using different languages for input and output and other planned activities,

    iii)   using translation and bilingual readers,

    iv)   exploring the knowledge learners have about the status and use of different languages in society, and

    v)   the development of multilingual identities (Cenoz & Gorter, 2017; 2020).

More recently, research on translanguaging is noted for both its advantages and disadvantages (Thomas et al., 2022). For example, the use of the strongest language to promote the development of the weaker language proffers the possibility of proficiency in both languages, but also presents a challenge to ensure there is balance between the languages and activities. Also, while translanguaging can promote positive attitudes towards minority languages (Moriarty, 2017), there is much fear that the increased use of the majority language may result in diminished overall use of the minority language. As noted by Cenoz and Gorter (2021), developing the minority language is at the heart of translanguaging, and protecting a space for the minority language is a key aspect of pedagogical translanguaging. Pedagogical translanguaging is described by Cenoz & Gorter (2021) as:

> … planned by the teacher inside the classroom and can refer to the use of different languages for input and output or to other planned strategies based on the use of students' resources from the whole linguistic repertoire. (p. 17)

In the next section, I discuss Vygotskian SCT as it relates to L2 teaching.

2.1.3 Sociocultural Theory

Golombek and Johnson (2019) present language teacher education practices using the principles and concepts of Vygotskian SCT to promote the development of L2 teaching. VSCT is grounded in dialectics as opposed to dichotomies. It embraces a

dialectic unity of theory and practice, where theory guides practice and practice shapes theory. Cochran-Smith & Lytle (1999) advocate for teachers to "interrogate the theory and research of others" (p. 289). The present study is grounded in a Vygotskian SCT approach to professional learning (PL). As the teacher educator/coach and researcher in the present study, I devised a PL programme with coaching which was informed by my understanding of the linguistic interdependence hypothesis (Cummins, 1979, 1981) as influential in the Primary Language Curriculum (DE, 2019b), and what I uncovered as a researcher in this study was informed by what occurred during my language teacher education practices. This is summed up by Golombek and Johnson (2019) as follows:

> For Vygotskian SCT-informed teacher educators/researchers, what we do as teacher educators is informed by our theory, and what we uncover as researchers is informed by what happens in our language teacher education practices. (p. 25)

Primary classrooms reflect dialectic spaces and are likened by Vygotsky to laboratories where principles of theory are to be tested. Andrews and Lin (2017) highlight that "much of the recent discussion of L2 teachers' knowledge about language explicitly embraces a sociocultural perspective" (p. 58).

The basic principles of Vygotskian SCT are that the development of an individual's mental processes is social in origin and moves through two stages – internalisation and mediation. Internalisation is a stage in which mental functions appear 'twice', once on the social/interpsychological plane (between people) and can then transition to the individual/intrapsychological plane (within an individual) (Vygotsky, 1978). As the individual interacts with the world and with others, mediation occurs. Mediation (or written and verbal dialogue) is considered the central concept in Vygotskian SCT. Mediation shapes the individual's interactions with the world and with others and the qualitative transformations that occur in the processes of mental development. Such interactions provide the opportunity for the emergence of a zone of proximal development (ZPD). The ZPD is "the distance between the actual development level as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978, p. 86). The ZPD is both a metaphoric space where individual cognition originates and an area of potentiality where teachers support individuals, (I supported teachers in the case of the present study) to extend their learning beyond their competence and comfort (Golombek & Johnson, 2019).

Vygotsky (1978) distinguishes between everyday concepts and academic concepts. Everyday concepts are derived from observations of everyday experiences, are typically inaccurate and unanalysed whereas academic concepts are based on systematic study of entities and phenomenon around us (Golombek & Johnson, 2019). Academic concepts present the potential to restructure everyday understandings (Golombek & Johnson, 2019). Everyday and academic concepts interact dialectically. Golombek and

Johnson (2019) call for teacher language educators to provide teachers with opportunities to engage with academic concepts. This supports teacher conceptual thinking. Structured mediation spaces are required for individuals to promote and develop conceptual thinking through dialogic interactions. For Vygotsky (1986), formal schooling is considered the fundamental setting in which educators are to work intentionally to develop conceptual thinking needed to transform everyday concepts. Golombek and Johnson (2019) highlight the key role of language teacher educators in mediating and supporting teacher PCK of L2 teaching:

> Knowledgeable and intentional language teacher educators (expert others) are essential to mediate teacher development, externalising the kinds of pedagogical knowledge and academic concepts that language teachers need, and creating spaces for teachers to engage with pedagogical knowledge and concepts in a range of teaching activities. (p. 27)

In the present study, using a Vygotskian SCT lens, I used and encouraged professional discourse to link the concrete teaching activities of the lessons I observed to the relevant academic concepts while also remaining sensitive to the teacher's emerging ZPD (Golombek & Johnson, 2019).

Ellis (2015) described explicit knowledge (EK) as conscious, declarative knowledge about language that a learner can draw upon when given sufficient time. Explicit learning encompasses metalinguistic knowledge and requires an intention to learn. For Vygotsky (1978), EK is an example of an academic concept and is considered as important to language teachers and language learners (Ní Dhiorbháin, 2022). Implicit knowledge (IK) is described as unanalysed, intuitive knowledge of language, accessed in real-time, unplanned communication (Ellis, 2005, 2015). Implicit learning happens naturally and without conscious operations (Ellis, 1994).

EK increases L2 awareness and attainment (Lightbown, 2014; Lightbown & Spada, 2006), thus presenting an opportunity for language analysis. In fact, EK can be processed to IK over time, where adequate exposure and application are present (DeKeyser, 2005). EK of the similarities and differences between English and Irish is important in this study as part of teacher PCK (Shulman, 1987) in teaching for ToS across languages.

2.1.4 Section Summary

This section presented the broad theoretical concepts of language learning and teaching relevant to the study. The linguistic interdependence hypothesis (Cummins, 1979, 1981) as a key theoretical influence in the Primary Language Curriculum (DE, 2019b) was presented. The concept of translanguaging and Vygotskian SCT were also discussed.

Teaching for ToS across languages is derived from the interdependence hypothesis. A Vygotskian SCT for language teacher education (Golombek & Johnson, 2019) where theory guides practice and practice shapes theory was outlined in the context of the study where explicit teacher knowledge of the similarities and differences between English and Irish as part of teacher PCK (Shulman, 1986, 1987) supports teachers to teach for ToS across languages. The section concluded with an overview of Vygotskian SCT approach to PL which highlighted the importance of EK in L2 teaching. In the next section, I review the literature pertaining to PCK and teacher language awareness.

2.2   Section Two – Pedagogical Content Knowledge and Teacher Language Awareness

Section Two provides a review of the literature pertaining to pedagogical content knowledge (PCK) and teacher language awareness relevant to the study.

2.2.1   Pedagogical Content Knowledge

PCK is defined as "… that special amalgam of content and pedagogy that is uniquely the province of teachers, their own special form of professional understanding' (Shulman, 1987, p. 8). PCK is concerned with subject-matter knowledge. It consists of knowledge of content and knowledge of pedagogy. Figure 1 presents Shulman's (1987) model of PCK and shows that the intersection of knowledge of content and knowledge of pedagogy is the core of PCK. He states:

> … the key to distinguishing the knowledge base of teaching lies at the intersection of content and pedagogy, in the capacity of a teacher to transform the content knowledge he or she possesses into forms that are pedagogically powerful and yet adaptive to the variations in ability and background presented by the students. (p. 15)

Figure 1

Shulman's (1987) model of pedagogical content knowledge (adapted from Shulman, 1987)
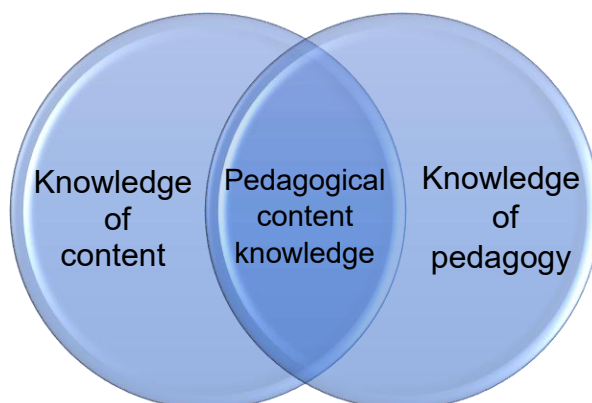
The Code of Professional Conduct for Teachers (Teaching Council, 2016) which is relevant to this study identifies "teacher professional knowledge" as an element of teacher practice and development (p. 8). Subject-matter knowledge is identified as an essential part of teacher professionalism (Andrews, 2003; Shulman, 1999). Next, I consider the type of PCK teachers would need in this research study – teacher language awareness. Later in Section Three, I discuss ToS across languages.

2.2.2 Teacher Language Awareness

In order to promote ToS across languages, teacher language awareness of the L2 is required to implement instructional practices that support it. Teacher language awareness is defined as the knowledge that teachers have of the "underlying systems of the language that enables them to teach effectively" (Thornbury, 1997, p. x). This would suggest the more L2 aware a teacher is, the more effective the L2 teaching. In the case of the Primary Language Curriculum (DE, 2019b) in English-medium schools in Ireland, the languages are English and Irish. Therefore, teachers need sufficient levels of teacher language awareness in English and Irish to best facilitate teaching of both languages and ToS across languages. Teacher language awareness is considered as a "core element of the language teacher's professional identity" (Andrews & Lin, 2017, p. 71). It is defined as "a label applied to research and teacher development activity that focuses on the interface between what teachers know, or need to know, about language and their pedagogical practice" (Andrews & Svalberg, 2017, p. 220). For Andrews (2007), teacher language awareness in L2 contexts is made of three interrelated knowledge bases:

(1) knowledge of language,

(2) knowledge about language, and

(3) knowledge of the learners.

Knowledge about language is defined as EK. According to Ní Dhiorbháin (2022), teachers require knowledge about language to perform effectively as language analysts and language teachers. Figure 2 provides an overview of the interrelated knowledge bases of teacher language awareness in L2 contexts.

Figure 2

Interrelated knowledge bases of teacher language awareness in L2 contexts (adapted from Andrews, 2007)

Knowledge of language

Knowledge about language

Knowledge of the learners
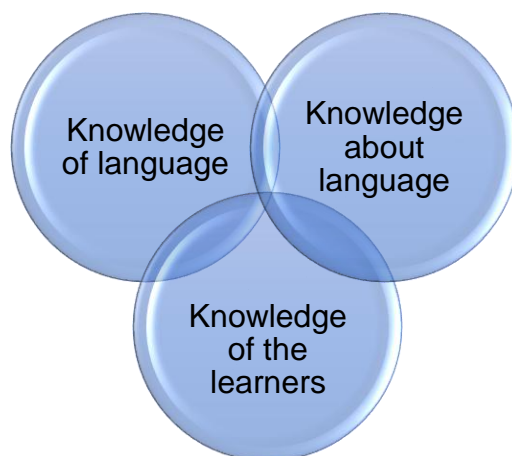
Building on the work of Shulman (1987) and the key role of subject-matter knowledge, Andrews (2003) argues teacher language awareness should be considered "as equally important for the teacher of language subjects" (Andrews, 2003, p. 81). Presenting from the perspective of teachers of foreign/second languages and also applicable to teachers of English as a first language, Andrews (2003) identifies characteristics of teacher language awareness. They include:

(1) the closeness of the relationship between knowledge about language and knowledge of language,

(2) teacher language awareness as metacognitive in nature, and

(3) an awareness of language from the learner's perspectives in relation to development and difficulties.

The closeness of the relationship between knowledge about language and knowledge of language is evident in the ways in which L2 teachers use knowledge of language to teach knowledge about language (Andrews, 2003). Knowledge about language is also referred to as subject-matter knowledge. Knowledge of language is referred to as language proficiency. The metacognitive aspect of teacher language awareness refers to the knowledge base of the teacher versus the knowledge base of the learner. Therefore, according to Andrews (2003), language teachers require a different type of knowledge than that which is required of the student. This is known as metalinguistic awareness. Language teachers require an "extra cognitive dimension of reflections upon both knowledge of subject matter and language proficiency" to teach the language, in comparison to the cognitive dimension required by students to learn the language (Andrews, 2003, p. 86). Teachers who are language aware are conscious of how students learn languages and how they can be supported on their language learning journey.

While much of the focus of teacher language awareness was placed on knowledge about grammar historically (Andrews, 1994; Borg, 1998), teacher language awareness now incorporates teachers' feelings, beliefs and understandings about language, the language they teach, and their awareness of students' developing interlanguage (Andrews & Lin, 2017). The broader conception of teacher language awareness to include evolving understandings and perceptions (Andrews & Lin, 2017) calls for teachers to continually re-evaluate personal conceptualisations of their knowledge about language (Andrews, 2007; Svalberg, 2016). Figure 3 presents two dimensions of teacher language awareness, the declarative dimension and the procedural dimension. While an increasingly blurred distinction of the relationship between the two dimensions is recognised, the procedural dimension and the "need for declarative knowledge to become proceduralised in order to be useable … has profound implications for language awareness and teacher development" (Andrews & Lin, 2017, p. 60).

Figure 3

Dimensions of teacher language awareness (adapted from Andrews & Lin, 2017, p. 60)

The declarative dimension:
... the 'language- aware' L2 teacher needs a deep and wide ranging knowledge (however defined) about both the target language and about how language works.

The procedural dimension:
... the 'language- aware' L2 teacher needs to be able to **draw appropriately on that declarative knowledge** in all aspects of his/ her pedagogical practice.
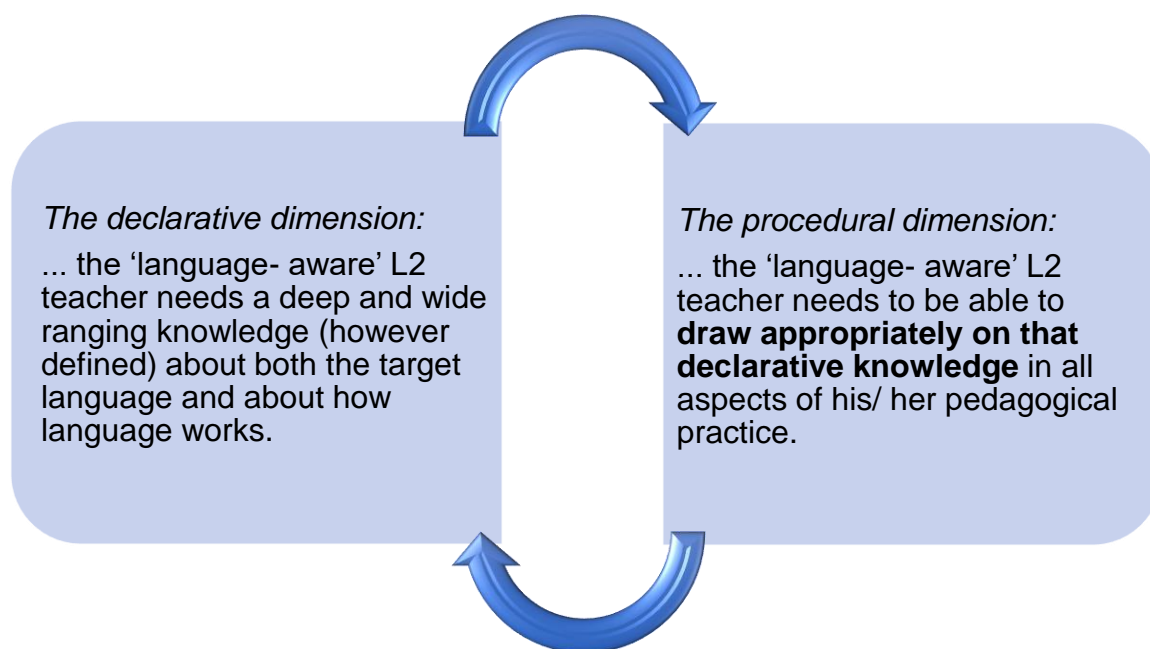
2.2.3 Teacher Language Awareness and Teacher Development

Wright and Bolitho (1993) called for language awareness professional development for teachers as it supports the decisions that teachers make about language teaching. Andrews and Lin (2017) highlight the significance of teacher language awareness in the planning and teaching of language lessons. Analysing target language from the perspective of the learner, identifying key language features, selecting examples of language features, specifying appropriate learning outcomes, and choosing appropriate material and tasks to teach the learning outcomes are presented as examples of the ways in which teacher language awareness is necessary in L2 contexts. Furthermore, Andrews and Lin (2017) highlight the greater significance of teacher language awareness while teaching language lessons. Scaffolding, drawing attention to, providing spontaneous examples and clarifications, assessing the use of the language by the children, and limiting confusion require a degree of teacher language awareness that can be used with ease in 'real-time' in the classroom. For this reason, teaching language lessons requires confidence and competence in knowledge of language, knowledge about language, and knowledge of the learners. Later, in Section Four, I provide further discussion regarding teacher PL and coaching about teacher language awareness.

While PL to develop teacher language awareness of L2 teachers was historically reactive, a methodological framework for devising language awareness activities for teachers proposed by Edge (1988) posited the teacher as operating in three roles. These include:

(1) language users,

(2) language analysts, and

(3) language teachers.

According to Andrews and Lin (2017), this conceptual contribution to "the development of teacher language awareness has been highly influential on the approaches to the development of L2 teachers' language awareness … and the conceptualisation of teacher language awareness" (p. 63). The framework has been widely referenced (see Andrews, 2007; Lindahl, 2016; Wright and Bolitho, 1993).

For Andrews (2003), the language user requires an adequate level of language proficiency i.e. knowledge of language. The language analyst requires knowledge of the language systems i.e. knowledge about language. The language teacher requires the capacity to create opportunities for language learning in the classroom (Andrews, 2003). Figure 4 provides an illustration of the domains of teacher language awareness (Lindahl, 2016) and how each contributes to L2 teacher cognition. Suggestions as to what PL about teacher language awareness could look like are presented by Lindahl (2016).

Figure 4

Domains of teacher language awareness (Lindahl, 2016, p. 132)

The Venn diagram shows three overlapping circles labeled User, Analyst, and Teacher.

User
Language proficiency
Social/pragmatic norms
Implicit
Procedural

Analyst
Knowledge about language (forms & functions)
Linguistic sub-fields
Explicit
Declarative
Metalinguistic awareness

Teacher
Pedagogical Content knowledge
General pedagogical knowledge
Expertise
L2 theory knowledge
Empathy for ELL experience
Institutional requirements (text, curriculum, etc.)

- Repair/reformulation strategies
- Awareness of varieties

- Attitude
- Curiosity
- Sensitivity toward linguistic imperialism
- Life experience
- Context
- Beliefs

- Solve language problems
- Metacognitive reflection
- Recognition of language demands
- Awareness of ELL interlanguage
- Subject-matter knowledge

Having reviewed the breadth of the literature on PCK in the context of L2 language teaching, and drawing on the various approaches, I define how the domains of teacher language awareness apply to the present study. Teachers in the study need PCK of teacher language awareness in ToS across English and Irish. This entails:

(1) language users: require procedural knowledge of English and Irish,

(2) language analysts: explicit knowledge (EK) of English and Irish, including metalanguage, require explicit knowledge (EK) of the similarities and differences between English and Irish, and

(3) language teachers: require pedagogical skills to teach for ToS across languages in the context of English and Irish.

2.2.4 Engagement with Language

Engagement with language supports teacher language awareness. Svalberg (2012) discusses the affective, cognitive, and social dimensions of engagement with language. Svalberg (2012) notes that a language awareness approach to language learning/teaching is likely to make use of consciousness raising tasks. Consciousness raising tasks are used to support the learner to engage with language to "arrive at an explicit understanding of some linguistic property or properties of the target language" by carrying out a task using L2 materials (Ellis, 1997, p. 160). Svalberg (2012) notes that

careful consideration must be given to the place of L2 EK in task design of consciousness raising tasks. Consciousness raising tasks that incorporate a "measure of tension" may enhances the learning effect (Svalberg, 2012, p. 381). Noticing and attention are fundamental concepts in language teacher awareness (Schmidt & Frota, 1986; Schmidt, 1990; Svalberg, 2012). Despite limited effect (Lee & Huang, 2008), visual input enhancement, or drawing language learners' attention to specific target features, entails formatting target features with underline, bold, italics or capitals to increase their visibility in a piece of text. Svalberg (2012) suggests that if learners were required to interact with visual input enhancements as part of their consciousness raising tasks, it may enhance the language learning experience. Learners would enact the visual input enhancements, i.e. circling, highlighting instances of the target feature themselves ('learner-produced' visual input enhancements) as opposed to teacher provided 'ready-made' visual input enhancements.

2.2.5 Section Summary

This section presented the literature pertaining to PCK and teacher language awareness as key to the research study. Supporting teacher PCK of teacher language awareness in the context of ToS enables teachers to become more language aware. Wright and Bolitho (1993), advocate for language awareness professional development for teachers stated, "The more aware a teacher is of language and how it works, the better" (p. 292). This in turn provides teachers with opportunities to work as language users, language teachers and language analysts as was the case in the present study. In the next section, I review the literature pertaining to ToS across languages.

2.3 Section Three – Transfer of Skills Across Languages

Section Three presents the concept of ToS across languages as a key feature of the Primary Language Curriculum (DE, 2019b). With reference to the linguistic interdependence hypothesis as outlined in Section One – Theoretical concepts of language learning and teaching, similarities and differences between English and Irish are presented.

2.3.1 An Integrated Language Curriculum

An integrated approach to language learning is a key feature of the Primary Language Curriculum (DE, 2019b). It is defined as "an integrated curriculum that makes connections across and within languages and that seeks to support ToS between languages" (DE, 2019b, p. 4). This is in contrast to the previous Primary School Curriculum (Department of Education and Skills (DES), 1999) where "English, *Gaeilge* [Irish] and modern languages [were] compartmentalised and little emphasis [was] placed

27

on encouraging children to transfer skills acquired in one language to the other languages" (Ó Duibhir & Cummins, 2012, p. 10). Children with English as a first language, children with Irish as a first language and children with a first language other than English or Irish are currently attending primary schools. Responding to linguistically diverse classrooms, the Primary Language Curriculum (DE, 2019b) promotes ToS across languages. Transfer is described as a "complex, multidimensional, bidirectional or multidirectional phenomenon of influence among languages known or being learnt by an individual, which is affected by individual and contextual factors" (Thomas & Mady, 2014, p. 401). Bidirectional transfer refers to transfer between L1 and L2, or between L2 and L1. Multidirectional transfer refers to transfer in multiple directions at the same time. In this way, Thomas and Mady (2014) reframe transfer as a resource as opposed to a hindrance. In research on transfer of early literacy skills conducted by Farver et al. (2013), transfer refers to "children's ability to simultaneously acquire emergent literacy skills and develop conceptual knowledge about these skills that they can apply to any language they learn subsequently" (p. 786). With knowledge about language, teachers can facilitate language awareness activities as part of a plurilingual approach to language teaching (Ní Dhiorbháin, 2022). A plurilingual approach incorporates the analysis of linguistic features across languages in a way that acknowledges and affirms the value of all linguistic knowledge of all learners (Dooly & Vallejo, 2020). Research conducted by Little and Kirwan (2019) provides a 'thick description' of plurilingual education in action. Their research highlights that the use of home languages in classrooms "facilitates comparison between languages, which is likely to foster the development of unusually high levels of language awareness in all learners" (Little & Kirwan, 2019, p. 159).

2.3.1.1 Types of Cross-Linguistic Transfer. Acknowledging the potential for ToS, Cummins (2017) identifies six major types of cross-linguistic transfer which are influenced by sociolinguistic and educational contexts. These are:

(i) the transfer of *conceptual knowledge* (for example, understanding the concept of photosynthesis),

(ii) transfer of *specific linguistic elements* (for example, knowledge of the meaning of *photo* in photosynthesis),

(iii) transfer of *phonological awareness* (for example, knowledge that words are made up of distinct sounds),

(iv) transfer of *metacognitive and metalinguistic learning strategies* (for example, use of reading strategies, vocabulary acquisition strategies, visualisation strategies, mnemonic devices, use of graphic organisers, Venn diagrams),

(v) transfer of *more general morphological awareness* (for example, awareness of the –*tion* in acceleration [English] and –*tion* in accélération [French]), and

(vi) transfer of *pragmatic aspects of language use* (for example, willingness to take risks in communication through L2, ability to use paralinguistic features such as gestures to aid communication).

For Thomas and Mady (2014), teaching for ToS expands on Cummins' (2008) definition of teaching for transfer as "bilingual instructional strategies" (p. 65) to include intralingual and cross lingual learning activities (p. 401-2). They caution against the use of translation or a diminished focus on L2 development and instead see the presence of cognitive and academic aspects of the L1 and L2 in classrooms as an "ever-present resource in language learning" (Thomas & Mady, 2014, p. 403). Drawing on data from an exploratory multiple case study of three participating core-French teachers in Ontario, Thomas and Mady (2014) provide examples of teachers' practice of transfer-related activities. They describe teaching for ToS as:

> … the contextualised set of activities that serves to harness the potential of language/literacy transfer, which would include promoting learning about transfer and promoting transfer within students' language repertoires: it involves learners, teachers, and classroom / institution / policy / social contexts. (p. 401)

Teachers are encouraged to orchestrate classroom activity to support students to harness transfer towards L2 learning (Thomas & Mady, 2014) through learners' activities. Examples of learners' activities and suggestions for teacher actions are provided in Table 2.

Table 2

Examples of learners' activities and suggestions for teacher actions (adapted from
Thomas and Mady, 2014, p. 403-405)

Examples of learners' activities:	Suggestions for teacher actions:
- bilingual classrooms activities - metalinguistic talk - literacy practices from home and community - school literacy experiences - contributing to groups discussions or learning - language identity texts written bilingually and collaboratively by bilingual students - bilingual co-construction of text	- promote a transfer-friendly classroom culture - create learning experiences that activate prior knowledge - plan for literacy transfer - emphasise oral language development as a base for literacy - acknowledge students' first languages and/or other known language - maximise access to L2 - make explicit connections among/between languages in the classroom - connect literacy practices across languages - compare curricula - collaboratively plan for transfer

2.3.1.2 Constrained and Unconstrained Skills. The teaching of English and Irish in the Primary Language Curriculum (DE, 2019b) includes three strands – oral language, reading and writing. Kennedy et al. (2012) identify constrained and unconstrained literacy skills that feature across the strands of the language curriculum. Constrained skills are more skill-based (Feinauer et al., 2013) and can be learned quickly (Paris, 2005). Examples include letter knowledge, letter-sound association, phonological awareness, phonics, grammar and punctuation. However, unconstrained skills are more meaning-based (Feinauer et al., 2013) and continue to be learned over a lifetime. Such examples include oral language, vocabulary knowledge, and comprehension (Kennedy et al., 2012). A call for greater attention to be given to the overlooked area of Irish orthography is highlighted by Hickey and Stenson (2011). Orthography refers to the written code or printed symbol associated with languages. In the case that teachers were knowledgeable about Irish orthography this would further support teachers to teach for ToS across English and Irish.

2.3.2 Similarities and Differences between English and Irish

2.3.2.1 English and Irish Orthography. Orthographies can be syllabic, consonantal or alphabetic (Aro, 2004). The English and Irish language have an alphabetic orthography. Bialystok et al. (2005) note that ToS occurs more readily when languages share the same alphabet. The English alphabet comprises five written vowels and twenty-one written consonants which are illustrated in Table 3.

Table 3

Written consonants and vowels in the English alphabet

Consonants	b	c	d	f	g	h	j	k	l	m	n	p	q	r	s	t	v	w	x	y	z
Vowels	a				e				i				o				u				

Hickey and Stenson (2011) state that, the Irish alphabet comprises five written vowels and thirteen written consonants illustrated in Table 4.

Table 4

Written consonants and vowels in the Irish alphabet (adapted from Hickey & Stenson, 2011, p. 24)

Consonants	b	c	d	f	g	h	l	m	n	p	r	s	t
Vowels	a		e		i		o		u				

Stenson and Hickey (2019) suggest that a "solid understanding of the sound system can be helpful to both teachers and learners for developing literacy in Irish" (p. 39). They advocate for learners to be guided in matching sounds and spellings. Table 5 provides definitions of linguistic terminology to aid clarification when discussing the sound system (Stenson & Hickey, 2019).

Table 5

Stenson and Hickey (2019) definitions (adapted from Stenson & Hickey, 2019, p. 20 & p. 34)

Decoding:	Decoding is a general term for any form of analysis (conscious or not) that individuals use to identify and recognise the relationship between the units used to write a particular language and the units of the spoken language that those symbols represent.
Phonics:	Phonics is a specific method of reading instruction based on decoding processes that call attention to the relationship between sounds and letters in alphabetic writing systems.
Phonetics:	Phonetics is the scientific study of speech sounds.
Phoneme:	A phoneme is a distinctive unit of sound.
Phone:	A phone is any speech sound.
Grapheme:	A grapheme is a unit of writing.
Digraph:	A digraph is a complex grapheme, consisting of more than one letter to represent a single sound.
Trigraphs:	A trigraph is a complex grapheme, consisting of more than two letters to represent a single sound.
Schwa:	'Schwa' is the name given to the indistinct vowel sound that is found in unstressed syllables in both English and Irish. It sounds rather like 'uh'.
Diphthong:	A diphthong is a complex phoneme, which begins as one vowel sound and ends as another, all within a single syllable.
Syllable:	Syllables are units of speech usually built around vowels and their attendant consonants.

The Irish alphabet represents approximately fifty sounds: j, k, q, v, w, x, y and z are used in loan words such as *vardrús* (wardrobe) and *zú* (zoo) (Hickey & Stenson, 2011). The vowel sounds in Irish can be either short or long, creating ten vowel sounds

presented in Table 6. A *síneadh fada* (length mark or diacritic) placed above the vowel represents a long vowel sound. Short vowel sounds that are not stressed are not represented orthographically but are pronounced as schwa /ə/. Hickey and Stenson (2011) present the example of the Irish word '*bó'* (cow) and '*beo*' (alive) as an example of the use of the schwa sound. Table 6 provides the short and long vowel sounds in the Irish language.

Table 6

Short and long vowel sounds in the Irish language

Vowels (short)	a	e	i	o	u
Vowels (long)	á	é	í	ó	ú

It is determined by Stenson and Hickey (2019) that most individual consonant phonemes in Irish are the same in English except for those which result from initial mutations. Pairs of slender/palatalised and broad/non-palatalised consonants are a significant difference that exist between the Irish and English languages. In the Irish language, slender and broad vowel sounds precede or succeed the consonant symbol. Slender vowel sounds include i or e and broad vowel sounds include a, o and u. This means that in the Irish language, "some vowels in Irish orthography are used to identify consonant quality and are not themselves pronounced" (Hickey & Stenson, 2011, p. 29). For example, in Table 7, Hickey and Stenson (2011) present the following examples of minimal pairs of broad and slender consonants with the palatalised consonant marked with a following /'/. Hickey and Stenson (2011) note that the 'i' in *báid* and *tais* should not be syllabified as /id/ or /is/ but signals palatalisation of the following /d'/ and /s'/).

Table 7

Examples of minimal pairs of broad and slender consonants (adapted from Stenson & Hickey, 2011, p. 29)

Example	Pronunciation	Example	Pronunciation
buí (yellow)	/bi:/	bí (be)	/b'i:/
bó (cow)	/bo:/	beo (alive)	/b'o:/
bád (boat)	/ba:d/	báid (boats)	/ba:d'/
teas (heat)	/t'as/	tais (damp)	/tas'/

Two of the most common consonant mutations in the Irish language are lenition and eclipsis. Nine consonants are affected by lenition and seven by eclipsis (Hickey and Stenson, 2011) and are presented in Table 8.

Table 8

Consonants affected by lenition and eclipsis

Consonants affected by lenition	bh	ch	dh	fh	gh	mh	ph	sh	th
Consonants affected by eclipsis	mb	gc	nd	bhf	ng	-	bp	-	dt

2.3.2.2 English and Irish Morphology. Irish is considered a morphologically rich language and is more morphologically complex than English as its spelling system includes mutations, lenitions and eclipsis (Barnes, 2017). Orthographic consistency is found to significantly impact the rate of progress in early reading (Hickey & Stenson, 2011). The 1999 Primary School Curriculum (Department of Education and Skills (DES), 1999) acknowledged that 'a certain degree of skill transference may occur' from English to Irish reading (DES, 1999, p. 5-6), and teachers of the 1999 Primary School Curriculum were encouraged to engage in analysis of similarities and differences between English and Irish sound-symbol correspondence (Hickey & Stenson, 2011). Despite being encouraged, such analysis was lacking (DES, 2008; Hickey, 2007; Ó Faoileáin, 2006). Hickey and Stenson (2011) argue that this was due to a lack of, and awareness of, available materials, limited input during initial teacher education, and limited PL to support teachers to teach Irish orthography in English-medium schools. They argued that an overreliance on the whole-word approach was favoured, and analysis of the differences between orthographies or of the regularities unique to Irish was left unexplored. Stenson and Hickey (2019) call for explicit focus on learning spelling rules in Irish. Awareness of the necessity to explicitly teach grapheme-phoneme correspondences is an example of how teachers can engage their learners in analysis of similarities and differences through ToS. Grapheme-phoneme correspondences describe the relationship between sounds and the letters which represent those sounds (Kennedy et al., 2012). Phonics is defined by Ehri (2003) as:

> … a method of instruction that teaches students correspondences between graphemes in written language and phonemes in spoken language and how to use

these correspondences to read and spell. Phonics instruction is systematic when all the major grapheme-phoneme correspondences are taught and they are covered in a clearly defined sequence. (p. 3)

Tse and Nicholson (2014) explored the effect of phonics-enhanced 'Big Book' reading on the language and literacy skills of 96 six-year-old children in New Zealand. 'Big Book' reading (Holdaway, 1982) is teacher use of enlarged books to teach reading through a shared-reading experience. The teacher reads the book to the class, all children can see the picture book and engage with the text and illustrations. It does not teach phonics as sounding out words but instead focuses on the use of initial letter sounds and consonant blends. Tse and Nicholson's (2014) findings show that children who engage with 'Big Book' reading that includes explicit teaching of phonics make significantly better progress than those who engage in reading on its own and phonics on its own. Access to reading material is described as a "necessary condition for encouraging reading" (Krashen, 2013, p. 21). In the present study, I use the term picture book to describe the type of books used in the study.

Ross and Joseph (2018) conducted a comprehensive analysis of the effects of word boxes on students' reading performance. They analysed ten studies that examined the effects of the use of the word boxes intervention on 22 preschool and 114 elementary students' reading performance. The use of Elkonin boxes (Elkonin, 1963), also known as word boxes (Clay, 1993) are used to help children link phonological with orthographic features of words. Ross and Joseph (2018) describe the steps involved in using Elkonin boxes. First, children move counters into respective connected boxes while making the sounds in a word. Next, children move letters (instead of counters) into respective connected boxes while making the sounds in a word. Finally, children write the letters into respective connected boxes while making the sounds in a word. Findings showed that there was evidence to support their use in helping preschool to elementary students acquire phonemic awareness, letter-sound correspondences, and spelling. Stenson and Hickey (2011) propose nine rules which determine regularity in Irish as displayed in Table 9.

Table 9

Nine rules of regularity in Irish (adapted from Stenson & Hickey, 2011, p. 35-6)

Rule 1	There is a standard vowel system of five short and five long vowel sounds and the diphthongs /ai/ and /au/.
Rule 2	In unstressed syllables, reduction to schwa is the norm outside of Ulster, and is treated as regular non-initially. Monosyllabic words in Irish bear stress, (for example, prepositions).
Rule 3	Vowels signal consonant quality (for example, *rúnaí* [secretary])*.
Rule 4	Two types of consonant mutation occur and are marked consistently by digraphs, (a) lenition mutation marked orthographically by an h (for example, *Mhámo* [Grandmother]) and (b) eclipsis marked by a symbol (for example, *gcat* [cat]).
Rule 5	Common vowel digraphs are likewise treated as regular.
Rule 6	Vowels that undergo certain broadly applicable rules are treated as regular, pronounced with long vowel sound consistently triggered by -nn, -ll, -rr, -m in a closed syllable (for example, *ann*, *am*, *poll*, *carr* pronounced with long vowels).
Rule 7	The unwritten vowel or epenthetic of words are treated as regular as it occurs quite predictably between a sonorant (speech sound produced without turbulent airflow in the vocal tract) and voiced consonant (feeling of vibration of the vocal cords) (for example, *banbh* /banəv/).
Rule 8	Single and double sonorants are treated as a consistent phoneme-grapheme pattern (for example, nn, ll, rr) but not as a letter-sound regularity.
Rule 9	When dialects vary in the pronunciation of words in ways that lead to irregularities in some regions but not others, we have treated a form as regular if in any dialect the phoneme – grapheme correspondences are regular or are altered from the usual value of the spelling in general and consistent ways.

Hickey and Stenson (2011) acknowledge that although unanimous agreement on the above rules may not be expressed, the presentation of such provides an opportunity for discussion and builds an educational research literature on the Irish orthographic system. Awareness of Irish orthography enables teachers to be Irish language-aware so that they can teach for ToS in an explicit way. Such an approach is proposed by Ó Duibhir and Cummins (2012) in respect of the integrated Primary Language Curriculum (DE, 2019b). In the context of the present study, supporting teacher language awareness of Irish orthography supports teacher PCK of ToS. EK of the sound system of Irish would

enable teachers to recognise the similarities and differences that exist between the English and Irish languages. In particular, the Primary Language Curriculum (DE, 2019b) outlines learning outcomes for both English and Irish for phonics.

2.3.2.3 **English and Irish Learning Outcomes.** The Primary Language Curriculum (DE, 2019b) outlines English and Irish learning outcomes. Learning outcomes are used to describe "the expected learning and development for learners at the end of a period of time" (DE, 2019b, p. 18). Teachers are encouraged to plan for and facilitate opportunities for transfer through language curriculum planning. The Primary Language Curriculum (DE, 2019b) builds on what was suggested by Harris (2008) as a 'starting point' in calling on teachers to analyse curriculum documents to locate connections between expectations for the L1 and L2 learning. The integrated nature of the Primary Language Curriculum (DE, 2019b) and opportunities for ToS between L1 and L2 is particularly evident in the way in which the learning outcomes are presented. Learning outcomes describe "what children should know and be able to do as a result of the teaching and learning

process" (Connaughton-Crean & Ó Duibhir, 2015, p. 2). A chain-link symbol (
) identifies an opportunity for ToS between L1 and L2 in the Primary Language Curriculum (DE, 2019b) documentation. For example, in an English-medium school where English is the L1 and Irish the L2, in the strand of Reading, learning outcome Number 3: Conventions of print and sentence structure in English, is linked with the correlating learning outcome – *Uimhir 3: Gnásanna cló agus struchtúr abairte* [Number 3: Conventions of print and sentence structure] – in Irish. This is presented in Table 10.

Table 10

Learning Outcomes for Reading/Torthaí Foghlama don Léitheoireacht [Learning Outcomes for Reading]

	Learning Outcomes (LO) for Reading			
Element	Number and label	Stage 1 (S1): Junior and senior infants	Stage 2 (S2): First and second classes	Stage 3 (S3): Third and fourth classes	Stage 4 (S4): Fifth and sixth classes
Understanding	3. Conventions of print and sentence structure	Identify and use basic conventions of print in text. 🔗 TF3, C1+2	Use conventions of print and sentence structure to help understand text. 🔗 TF3, C1+2	Analyse and compare conventions of print in texts of increasing complexity. Analyse sentence structures, including simple, compound and complex sentences in texts. Compare sentence structures and texts in various languages. 🔗 TF3, C3+4	

	Torthaí foghlama (TF) don Léitheoireacht [Learning Outcomes for Reading]				
Gné **[Element]**	*Lipéad agus uimhir* [Number and label]	*Céim 1 (C1): Naíonáin shóisearacha agus naíonáin shinsearacha* [Stage 1: Junior and senior infants]	*Céim 2 (C2): Rang 1 agus Rang 2* [Stage 2: First and second classes]	*Céim 3 (C3): Rang 3 agus Rang 4* [Stage 3: Third and fourth classes]	*Céim 4 (C4): Rang 5 agus Rang 6* [Stage 4: Fifth and sixth classes]
Tuiscint **[Understanding]**	*3. Gnásanna cló agus struchtúr abairte* [Conventions of print and sentence structure]	*Gnásanna bunúsacha an chló a aithint agus a úsáid.* [Identify and use basic conventions of print.]	*Gnásanna an chló a aithint agus a úsáid.* [Identify and use conventions of print.]	*Gnásanna an chló a úsáid chun brí a bhaint as téacs. Struchtúr abairte a thabhairt faoi deara agus a phlé.* [Use conventions of print to interpret text. Observe and discuss sentence structure.]	*Staidéar a dhéanamh ar struchtúr na habairte, idir abairtí simplí, abairtí comhshuite agus abairtí casta, i dtéacsanna.* *Comparáid a dhéanamh idir struchtúr abairte na Gaeilge agus struchtúr abairte i dteangacha eile.* [Analyse sentence structure in texts, including simple sentences, compound sentences, and complex sentences. Compare the sentence structure of the Irish language with sentence structure in other languages.]
		🔗 *LO3, S1*	🔗 *LO3, S1*	🔗 *LO3, S1*	🔗 *LO3, S3+4*

Applying the knowledge of constrained and unconstrained skills Kennedy et al. (2012), the skill detailed in Learning Outcome Number 3: Conventions of print and sentence structure, is an example of a constrained skill. Enabling learners to transfer the skill of Learning Outcome Number 3: Conventions of print and sentence structure to a subsequent language draws on Cummins' (1979, 1981) linguistic interdependence hypothesis. Teacher language awareness in the form of subject matter knowledge is necessary. When teachers possess PCK and teacher language awareness, they are in positions to facilitate ToS from L1 to L2 through effective L2 teaching. Other concepts and skills that can be transferred from one language to another are available in the support material for the Primary Language Curriculum (DE, 2019b) (Connaughton-Crean & Ó Duibhir, 2015). Table 11 presents a summary of suggestions in the support material regarding teaching for ToS across languages.

Table 11

Approaches to teaching for transfer of skills across languages (adapted from Connaughton-Crean & Ó Duibhir, 2015, p. 4)

Reading	Writing	Whole-school approaches
- An awareness and understanding of the conventions of print, including left to right orientation and identification of the title and author of a text - Phonological awareness, including the ability to recognise, hear and distinguish words within sentences, syllables within words, rhyming words and words with the same initial sound - The skills associated with word recognition and decoding - The use of comprehension strategies to interact with and make meaning of text - The knowledge and development of a range of vocabulary	- The recognition that writing is to communicate with the reader - Engagement in the writing process, including topic choice, planning, drafting, editing and presentation/sharing of work - Extension of vocabulary and creation of wordlists in writing activities - The use of spelling strategies and sound patterns to aid in the spelling of words	- Use multi-lingual displays and labels in the school (in English and Irish). - Display dual language work in English and Irish, e.g., children's writing, audio recorded videos and voice recordings. - Involve children in the production of a bilingual video about the school where children speak in both English and Irish. - Use common approaches, where suitable, to language teaching in both languages. - Ensure that teachers engage in joint planning for - adopting and developing cross-language initiatives and activities. - Ensure common terminology is adopted throughout the school in relation to concepts, terms and skills so that children are repeatedly exposed to the same terminology. - Ensure teachers are familiar with the gradual release of responsibility model where children are exposed to the modelled, shared, guided and independent phases of instruction.

In the next section, I share some examples of studies on the transfer of skills.

2.3.2.4 Studies About the Transfer of Skills. In a meta-analysis of evidence from research on six- to ten-year-olds on cross-linguistic transfer in the area of oral language, decoding, phonological awareness and reading comprehension Melby-Lervåg and Lervåg (2011) found varying levels of cross-linguistic correlations. Little transfer seemed to occur in the oral language domain, moderate to strong transfer occurred in decoding and phonological awareness. In cases where both L1 and L2 have alphabetic orthography and the samples were instructed in L1 and L2, larger L1-L2 correlations on decoding skills were reported. L1 decoding was correlated to L2 reading comprehension.

Research by Aldekoa et al. (2020) found that carefully planned language alternation, integration of languages, and genre-focused teaching sequences can offer an effective teaching approach for Basque immersion education, promoting multilingual development including the minority language. Students engaged in a multilingual classroom project – *Gure Ikastola en tres Languages* ('Our School in Three Languages') involving alternation between three languages – Basque (L2) Spanish (L1) and English (L3). A total of 21 sixteen-year-old students engaged in a trilingual intervention delivered primarily in the minority L2 Basque, which incorporated an oral presentation at the beginning and end of the intervention. Results showed developments in oral presentation skills not only in Basque, but also in Spanish and English.

Focusing on a plurilingual approach to teaching Irish grammar, recent research by Ní Dhiorbháin et al. (2024a) involving 291 children in English-medium schools shows that learning Irish provides valuable learning opportunities for all learners to develop language learning skills and make connections between languages. Findings show that with adequate support, teachers promoted a plurilingual approach in their classrooms by teaching Irish grammar.

In research conducted on 392 primarily Latino immigrant (85%) families and their children in the US, Farver et al. (2013) systematically examined the home language environment (HLE) and children's literacy skills in both English and Spanish. They found that children who were English language learners presented in preschool with early literacy skills from their HLE. Three early literacy skills discussed were oral language, phonological awareness and print knowledge and were found to be significantly associated within and across Spanish and English. The study suggested the possible transfer of such early literacy skills across languages. Phonological awareness is considered a type of metalinguistic awareness (Kim & Piper, 2018) and refers to the ability

to recognise and manipulate various sizes of sound units, and is one of the most critical skills for word reading in alphabetic languages (Adams, 1990).

Feinauer et al.'s (2013) research on 174 young learners enrolled in a Spanish-English two-way bilingual immersion programme provided evidence of cross-linguistic transfer from L1 to L2. Transfer of constrained skills was recorded in cases of English monolingual students who had limited L2 proficiency. Transfer of unconstrained skills was recorded in cases of Spanish bilingual learners who had reached a level of proficiency in both their first and second languages. The study highlights the importance of considering the type of literacy skill that is being examined for transfer, as constrained and unconstrained functions differently in terms of growth trajectories (Paris, 2005), for students with different language profiles (Feinauer et al., 2013). It supports the linguistic interdependence of L1 and L2 skills where L1 and L2 language abilities vary, and how teaching for ToS may be beneficial to all students.

Kim and Piper (2018) conducted research on cross-linguistic transfer of children in Kenya learning to read in Kiswahili and English. Despite the government's curriculum to teach Kiswahili and English as two separate subjects, the study focused on the Primary Math and Reading (PRIMR) initiative which capitalised on underlying principles in learning to read in the two target languages. Their research aimed to examine the bidirectional influences of literacy in multilingual contexts, and whether the nature of relations varied as a function of literacy instruction environment. Two groups of children were involved in the study, one group received explicit and systematic instruction on literacy (e.g., phonological awareness, phoneme–grapheme correspondences), and the other group did not. Results showed the bidirectionality of relations, i.e. children's literacy skills in Kiswahili and English were reciprocally related over time. Both groups displayed examples of relations from English to Kiswahili, however, only the group that received explicit and systematic instruction on literacy displayed examples of relations from Kiswahili to English. Kim and Piper (2018) support the linguistic interdependence hypothesis (Cummins, 1979), and suggest that transfer may occur bidirectionally, i.e. L1 literacy acquisition could influence L2 literacy acquisition; and literacy acquisition in L2 could also influence the development of L1 literacy skills if taught explicitly and systematically as was in the case of the PRIMR initiative.

Research conducted by Siu and Ho (2015) on 413 six- to- ten-year-old Cantonese-English bilingual students in Hong Kong suggest that young bilinguals draw on the correspondence between L1 and L2 syntax to support L2 learning. Cross-linguistic transfer in developing L2 literacy involves L1 phonological awareness, morphological awareness and orthographic processing and is evidenced in Cummins' (1979) model of

language transfer (Siu & Ho, 2015). L1 syntactic skills cross-linguistically are a predictor of L2 reading comprehension (Siu & Ho, 2015). Syntactic skills are described by Gombert (1992) as the recognition of and ability to manipulate the grammatical structure of sentences in a language. Syntactic skills comprise morphosyntactic skills (i.e. grammar) and word order skills (Siu & Ho, 2015).

Kirsh (2020) identifies some studies that explore translanguaging practices of teachers. Research from early years settings in France, Luxembourg and the US depict a positive shift for teachers who embraced multilingualism, raised the visibility and use of multiple languages, and provided opportunities for the children to engage in multilingual communication. Other research identified by Kirsh (2020) from the Netherlands, the Basque Country, Singapore and South Africa focus on translanguaging pedagogies and their implementation such as student metalinguistic talk and improved reading comprehension. Kirsh (2020) conducted research on two teachers and one educator in Luxembourg to investigate the challenges of moving from a monolingual language policy to translanguaging pedagogies. To support the shift to a multilingual education programme in Luxembourg, teachers and educators engaged in PL, namely Multilingual Pedagogies in Early Childhood (MuLiPEC). A long-term, collaborative inquiry- and performance-based model that promoted reflection and included coaching, meetings and training was used. The participants encountered and addressed challenges. They include: negative attitudes towards multilingualism, experience of a monolingual policy, their understanding of learning theories and pedagogy, and the necessity to monitor languages to guarantee responsible translanguaging. Kirsh (2020) found that the use of the home language while focusing on developing the target language of Luxembourgish and introducing some French, provided opportunities for the practitioners to experience success of the multilingual education programme. Children were motivated and practitioners were renewed in their approach. Kirsh (2020) also noted the move towards social-constructivist classroom design and legitimating translanguaging in the classroom. The practitioners were not familiar with designing child-centred learning environments and observed one another's practices. They discovered that children in early years settings, engaged in language learning in a non-formal, fun way and were capable of develop language skills by engaging in meaningful conversations. Incorporating guided activities and more informal and child-centred activities are examples of how the practitioners embraced multilingualism. Importantly, Kirsh (2020) also reflected on moving towards responsible translanguaging. This is of particular importance in the case of this research study, where the target language Irish is also a minority language. Monitoring the language use ensures that due consideration is given to the target language, inclusive practice and educational goals.

2.3.3 Section Summary

This section presented the concept of ToS across languages as a key feature of the Primary Language Curriculum (DE, 2019b). Six types of cross-linguistic transfer were presented including detail of constrained and unconstrained skills. Similarities and differences between the English and Irish languages, particularly orthography and morphology, were discussed. This was accompanied by relevant learning outcomes from the Primary Language Curriculum (DE, 2019b).

As I was unable to access any example of a study that focused on ToS across English and Irish in the context of English-medium schools in the Irish context, I drew on international examples. The section concluded with some examples of international research which reflected Cummins' linguistic interdependence hypothesis (1979, 1981), providing evidence for ToS across languages in other contexts. Therefore, as the Primary Language Curriculum (DE, 2019b) is premised on the linguistic interdependence hypothesis and I was unable to access any example of such a study, I thought it was necessary to address this gap in the research by conducting doctoral research on ToS across English and Irish in the context of an English-medium school. In the next section, I review the literature pertaining PL and coaching.

2.4 Section Four - Professional Learning and Coaching

Section Four provides a review of the literature pertaining to PL and coaching in light of the present study. It provides a definition and discussion of PL and discusses models of signature pedagogies of PL. Of particular relevance to the present study, professional learning communities, as an example of a community of practice is described. Literature pertaining to collaborative inquiry and coaching is also reviewed.

2.4.1 Professional Learning

The terms professional development, PL, continuous/continuing professional development are terms used interchangeably in the literature (King, 2014, 2022). The term PL encompasses the professional development experiences, activities or programmes that teachers engage with that may lead to PL (Boylan et al., 2018; King, 2014). The term PL is also recognised as cognisant of the varying practices and activities that teachers actively engage in throughout the learning stages of their career (Giblin, 2022). In the present study, despite the lingering use of the term professional development in some of the literature, I intentionally adopt the term PL as opposed to professional development as it is the terminology in use by the Teaching Council of Ireland in their publication, *Cosán:* A Framework for Teachers' Learning (Teaching

Council, 2016). PL is viewed by the Teaching Council as both a right and a responsibility of teachers (Gilleece, 2023).

The Teaching Council of Ireland is the national professional standards body for the teaching profession in Ireland. The Teaching Council holds the statutory power to review and accredit programmes relating to the continuing education and training of teachers via Section 39 of the Teaching Council Act. On this basis, the Teaching Council advocates for the advancement of professional learning communities through purposeful collaboration in action research and inquiry. Section 5 of the Code of Professional Conduct for Teachers (Teaching Council, 2016, p. 8) details the expectation of teachers in respect of professional development. Teachers are required to actively maintain their professional knowledge and understanding as outlined in Table 12.

Table 12

Professional Development (adapted from Code of Professional Conduct for Teachers, Teaching Council, 2016, p. 8)

5. Professional Development
Teachers should:
5.1 take personal responsibility for sustaining and improving the quality of their professional practice by:
• actively maintaining their professional knowledge and understanding to ensure it is current
• reflecting on and critically evaluating their professional practice, in light of their professional knowledge base
• availing of opportunities for career-long professional development.

In its publication, *Cosán*: A Framework for Teachers' Learning, it states that "it is the hallmark of the teaching profession that its members continue to learn so that they can continue to teach" (Teaching Council, 2016, p. 3). The *Cosán* framework "seeks to foster" a culture of "powerful professional learning" that supports teachers to learn "for their benefit and the benefit of their students" (Teaching Council, 2016, p.3). It outlines four dimensions of teachers' learning. Teacher learning is both formal and informal, personal and professional, collaborative and individual, and school-based and external.

Darling-Hammond et al. (2017) describe seven core features of effective professional development which include content focus, active learning, collaboration, models of effective practice, coaching and expert support, feedback and reflection and sustained duration. Effective PL is based on leadership that promotes a learning culture in

schools (Kennedy, 2014). PL is not something that is "done to" teachers (Timperley et al., 2007, p. 233) but instead involves the teacher as an active learner who is responsible for their own learning (Labone & Long, 2016). Darling-Hammond et al. (2023) note the importance of an understanding of the curriculum as a starting point for teachers in their planning for learning outcomes. An understanding of the subject matter and curriculum supports meaningful teacher learning (Hammerness et al., 2005).

Much of the research about PL has focused on attempts at measuring its effectiveness by assessing its impact on improved student outcomes (Darling-Hammond et al., 2017; King, 2014; Ventista & Brown, 2023). Teacher expertise has been shown to be the most significant variable to impact student outcomes. In the DE's *Looking at Our School 2022* framework, it states that "improving the quality of pupils' learning should be the main driver of teacher learning" (DE, 2022, p. 9). PL is recognised as key to improving teacher expertise and as a result, student outcomes (Brunsek et al., 2020; Hattie, 2003). This remains a contentious issue as student outcomes are often identified as the ultimate goal of PL.

Boyd (2014) invites teachers to reflect on their understanding of PL as it can shape teacher practice. He encourages teachers to consider adopting an understanding of PL as the 'interplay' between published knowledge and practical wisdom, rather than focusing on the theory-practice gap. He argues that the theory-practice gap presents PL as "either one or the other, either abstract theory or what works [in our school]", whereas PL as the interplay between published knowledge and practical wisdom reflects the kinds of knowledge that are "interwoven within the complexity of the successful classroom teacher's approach" (Boyd, 2014, p. 372).

2.4.1.1 Professional Learning and Teacher Beliefs/Practice. Beliefs held by teachers can influence practice and engagement with PL (Borg, 2017; Guskey, 2002). Where teachers experience success in their classrooms having engaged with PL, there is an opportunity for a change to occur to teacher beliefs, which in turn can change teacher practice (Ciesielski & Creaghead, 2020; Goldsmith et al., 2014). Borg (2017, p. 218) states that "teacher cognition is concerned with understanding what teachers think, know, and believe, and how these relate to what teachers do". For example, teachers may hold beliefs about teaching, learning and subject matter, which is of particular relevance in the case of language awareness. Looking at the relationship between teacher beliefs and practice about language teaching can support teachers to change their beliefs and practice through PL (Borg, 2017).

Understanding teacher beliefs and practices can help to illuminate why teachers approach curriculum change in particular ways. It can highlight teacher lack of confidence in relation to subject matter. Using the example of teaching pronunciation, Borg (2017) shows that if teachers have limited confidence in their own pronunciation, it may cause them to avoid teaching pronunciation, and therefore identify pronunciation as a subject matter focus for PL. Ní Dhiorbháin et al. (2024b) note that PL can support both teachers and students.

2.4.2 Models of Professional Learning

Much of the literature pertaining to PL describes models of PL. Kennedy (2014) presents a framework of nine models of PL ranging from transmissive, to transitional to transformative models (see Table 13 Continuum of models of PL). Of note, teachers in this study had previously engaged in a cascade model of PL in the form of mandatory seminars which all schools were required to attend about the Primary Language Curriculum (DE, 2019b). The cascade model involves large-scale transmission of knowledge. An example of this is the teacher learning the "concrete, operational acts of teaching and learning" and "enacting a set of assumptions about how best to impart knowledge and know-how" (Parker et al., 2016, p. 141). This type of PL is often employed in scenarios where resources i.e. funding is limited (Kennedy, 2014). In the case of the Primary Language Curriculum (DE, 2019b), this was facilitated by *Oide*, the support service for teachers in Ireland. Following whole-school engagement using the cascade model, further support in the form of a community of practice model was available to schools by request of the school. Communities of practice are presented in the literature as an example of how teachers engage in PL. The Teaching Council (2016) promotes the "advancement of professional learning communities" in enabling teachers to extend their expertise (p. 24).

Table 13

Continuum of models of PL (adapted from Kennedy, 2014)

Transmissive	Transitional	Transformative
- The training model - The award-bearing model - The deficit model - The cascade model	- The standards-based model - The coaching/mentoring model - The community of practice model	- The action research model - The transformative model
→ Increased capacity for professional autonomy →		

I provide a definition of communities of practice and professional learning communities, as a variant of communities of practice. I also introduce a more recent variant of communities of practice, namely community of transformation (Kezar et al., 2018).

2.4.3 Communities of Practice, Professional Learning Communities and Communities of Transformation

Communities of practice are defined as groups of people with a shared interest who wish to deepen their knowledge through sustained interaction (Lave & Wenger, 1991; Wenger, 1998). Kennedy (2019, p. 524) considers communities of practice as a "capability lens to empower teachers as learners". Also referred to as "communities of learners", they enable collective learning around a shared concern or a passion (Parker et al., 2016) and enable teachers to engage in sustained pedagogical and curricular innovation over time (Deglau & O'Sullivan, 2006; Parker et al., 2015). Communities of practice provide opportunities for social, situated and distributed learning (Wenger, 1998). Due to their nature, teachers are enabled challenge long-held values and beliefs. This enables meaningful, contextualised engagement (Kirk & MacDonald, 1998; Deglau & O'Sullivan, 2006; Parker et al., 2010). According to Patton & Parker (2017), communities of practice develop a deeper understanding of practice and profession.

Stoll et al. (2006, p. 223) define professional learning communities as "a group of people sharing and critically interrogating their practice in an ongoing, reflective, collaborative, inclusive, learning oriented, growth-promoting way". Bond and Lockee (2014) note that professional learning communities are commonly found in early years, primary and post-primary settings. The basic principle of professional learning communities is that "community is central to learning" (Kezar et al., 2018, p. 836). Kezar et al. (2018) consider professional learning communities as a variant of communities of practice. However, they find that the literature on communities of practice is insufficient in explaining professional learning communities. While the literature on traditional communities of practice refers to an "adaptation of practice", and "not transformation" of practice (p. 837), Kezar et al. (2018) propose a further variant of communities of practice, namely communities of transformation.

Communities of transformation are defined as "communities that create and foster innovative spaces that envision and embody a new paradigm of practice" (Kezar et al., 2018, p. 833). Kezar et al. (2018) provides a comprehensive set of distinctive features that define communities of practice, professional learning communities and communities of transformation from one another. I discuss the similarities and differences between the models with regard to purpose, context and membership, and determine why professional learning communities is the chosen model for the present study.

2.4.3.1   Purpose. While all models are committed to bringing individuals together to learn and improve their practice, each has a defining purpose that delineates itself as different from another. Communities of practice involve individuals who want to learn how to better the practice that they share a passion for through peer-to-peer interaction. Communities of transformation are designed to create, foster and enact new paradigms of practice which did not exist in the organisation in a substantial way prior to the development of the communities of transformation. Communities of transformation occur in settings where deep or fundamental change is needed. Professional learning communities focus more explicitly on bringing together teachers and administrators to bring about change in a school. Professional learning communities involve groups of individuals who are committed to working collaboratively in ongoing processes of collective inquiry and action research to achieve better results. There is a specific focus on discussing teacher work, student work and data, and engaging with the professional literature.

2.4.3.2   Context. The context within which the models are applied vary. Communities of practice have been adopted most readily in business. Communities of transformation have been identified in higher education and rely mostly on distance interaction, using a hybrid structure with some in person interaction. Professional learning communities are mostly embedded in schools.

2.4.3.3   Membership. Communities of practice and communities of transformation share a somewhat similar approach to membership. Membership is organic, is determined by a shared domain of interest, a commitment to the domain and a shared competence. However, membership in professional learning communities is hierarchical and highly constructed, often defined by a leader who created the community (Roberts, 1998). Professional learning communities are therefore intentionally created and very structured. Professional learning communities are defined around a specific agenda led by a leader or coach.

Having reviewed the literature on communities of practice, professional learning communities, and communities of transformation, I determined a professional learning community as a suitable model for the present study. While communities of practice are considered a "capability lens to empower teachers as learners" (Kennedy, 2019, p. 524), it is recognised that the community of practice model has the potential to reinforce ineffective practice as it focuses on learning within a community (Kennedy, 2005). The professional learning community reserves the potential to incorporate collaborative professionalism in that a problem is identified and subsequent activity follows (Kennedy,

2005). Darling-Hammond (1998) notes that collaborative PL is considered to be most effective where teachers from the same school are engaged in identifying real problems of practice relevant to their school and engaging in subsequent activity to address the problem. Such activity directs inquiry into one's own practice and learning about other practice "through engagement with existing research" (Kennedy, 2014, p. 693). In this study, the professional learning community was intentionally created for the purpose of exploring teacher PCK of ToS across languages. Therefore, membership in the professional learning community was defined by the teachers of first and second class in the school and the research was led by myself in the role of a coach/facilitator. As the doctoral student undertaking the study, I also fulfilled the role of doctoral researcher. Therefore, a professional learning community was deemed most suitable for the present study.

2.4.4 Collaborative Professional Learning

According to the Teaching Council (2016), collaboration is considered to be the most important aspect of successful, positive teacher PL. Collaboration enhances the effects of PL (Desimone, 2009). PL can achieve positive and sustained impact on teachers, learners and organisations when "collaboration and the sharing of expertise among teachers is fostered" (Borg, 2015, p. 3). Hargreaves and O'Connor (2018) discuss the difference between professional collaboration and collaborative professionalism. Professional collaboration is a descriptive term which refers to how teachers collaborate together. Collaborative professionalism is prescriptive and refers to how to collaborate more deeply, in ways that achieve greater impact (Hargreaves and O'Connor, 2018, p. 3). Borg (2015) notes that when teachers come together to collaborate, reflect and support one another, PL is likely to have a positive and sustained impact on teachers, learners and organisations. Hargreaves and O'Connor (2018) note that professional learning communities, collaborative planning networks and particular types of lesson study are examples of more robust forms of collaborative professionalism, as opposed to mere professional collaboration. An 'accelerated' level of collaborative professionalism was reported in schools where collaborative professionalism existed prior to the Covid-19 pandemic (Hargreaves & Fullan, 2020). During this time, 'open and collaborative' teacher professionalism became a feature of curriculum, pedagogy and organisational arrangements among teachers (Campbell, 2020). Collaborative inquiry as central to the Primary Language Curriculum (DE, 2019b) in this study is discussed in the next section.

2.4.5 Collaborative Inquiry

Since 2000, collaborative inquiry as a PL structure for teachers has increased in popularity in North America, the United Kingdom and Australia (DeLuca et al., 2015). Collaborative inquiry is described as a method of engaging teachers jointly to inquire into

a shared problem of practice and is commonly used in qualitative case studies of individual collaborative inquiries (DeLuca et al., 2015). It is described as a structure that "engages educators in collaboratively investigating focused aspects of their professional practice by exploring student responses to instruction, leading to new understandings and changes in classroom teaching" (DeLuca, 2015, p. 640). Collaborative inquiry encourages collaborative systemic inquiry in teacher PL (Opfer & Pedder, 2011). Despite as many as eleven stages being identified by DeLuca et al. (2015), three stages are identified as core structural features or components of collaborative inquiry – dialogical sharing, taking action, and reflecting. In the present study, the cyclical process of a collaborative inquiry approach as described by DeLuca et al. (2015) was adopted and applied and is shown in Figure 5. King (2014, 2016) highlight that collaborative cultures are seen as a cornerstone for implementing and sustaining new practices for school improvement. I describe these three features in the three sections that follow.

Figure 5

Collaborative inquiry as a structure for professional learning (adapted from DeLuca et al. , 2015, p. 643-4)
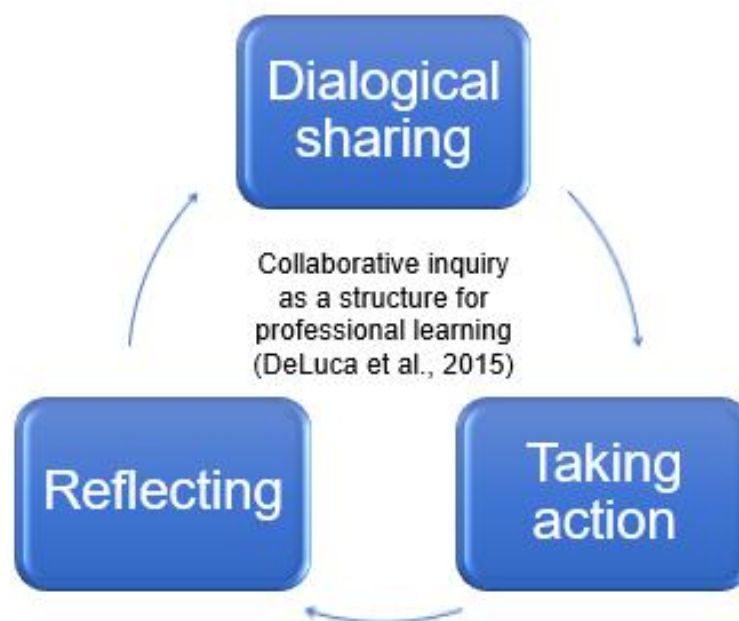
2.4.5.1 Dialogical Sharing. Dialogical sharing occurs in acts of shared participation, shared leadership and responsibility (Clauset & Murphy, 2012; Nelson et al., 2010), in constructing a shared vision (Nelson & Slavit, 2007) and negotiating shared values and goals (Carroll et al., 2010). DeLuca et al. (2015, p. 651) note that teachers "associate their engagement in the project with various teacher leadership opportunities". It acknowledges the significance of personal and experiential knowledge in co-construction of meaning (Mcwayne et al., 2020) and the use of individual knowledge as basis for co-constructing deeper, shared knowledge (Holmlund et al., 2012). Nelson et al. (2010, p. 178) note that teachers "must try themselves to figure out how to lead their colleagues into deep and productive conversations". Schnellert (2011, p. 2) determines that the practice of collaborative inquiry is grounded in a "socio-constructivist perspective of teacher learning". This means that knowledge cannot be attained and transmitted but is co-constructed within the context of inquiry through dialogical sharing. Teachers who "build on each other's comments, questions, and actions" are considered by Holmlund et al. (2012, p. 25) as holding the "most potential for transformative teacher learning". There is an acceptance that such knowledge about shared experiences is negotiated (Nelson, 2005) through interactions among teachers (DeLuca et al., 2015) through collaborative inquiry.

2.4.5.2 Taking Action. Taking action involves embedding practical activities within the teaching and learning context (Holmlund et al., 2012). It involves change in teacher classroom pedagogy to try new approaches and determine their effects. Teachers work collaboratively to engage in the action of inquiry by researching, analysing and consolidating their learning. Teachers may analyse student data to determine trends and changes in performance. Taking action involves discussing and learning about participants' beliefs, pedagogical orientations and practices, the developmental complexities of students and engaging with the written word of the curriculum document. This reflects Ritchie's (2023, p. 14) 'practice of praxis' which is described as "engaging in learning with an active awareness of the developmental process as it occurs". Bulter and Schnellert (2012, p. 1208) place a central focus on the 'practice-level' of inquiry. In broad terms, practice-level inquiry can be understood as teachers' "recursive engagement in planning, enacting, monitoring, and revising practices in order to achieve valued goals for students". For Hindley (2022), professional collaborative inquiry is most effective when teachers have opportunities to apply their learning and findings from research to practice. Taking action is explicitly linked to the act of dialogical sharing (DeLuca et al., 2015). Dialogue (or dialogical sharing i.e. the previous phase of the collaborative inquiry process) involves asking questions, suspending judgement and wondering about others (Wells, 1999). Discussion (as part of taking action) follows dialogue. Teachers also took action by discussing and learning about developmental complexities of students by recognising learner diversity. Messiou et al. (2016, p. 45) note that recognising learner diversity has the "potential to challenge teachers to go beyond the sharing of existing practices in order to invent new possibilities for engaging students in their lessons". Collaborative inquiry supports teachers to also learn from their students (Macias et al., 2021).

2.4.5.3 Reflecting. Reflecting involves provoking learning that will change practice and can occur at the individual and/or group level. Brown et al. (2021) highlight the need for teachers to have time to reflect when engaging with new knowledge and ideas. It enables participants to make connections between PL and experiences. At an individual level, teachers may review previously established goals at the end of a process, or the act of continuous reflection through the use of a journal. At the group level, teachers may reflect by engaging in group facilitated meetings. Billups (2021, p. 15) notes that participant reflection is the "intentional strategy to encourage an individual to move from embedded perception to acknowledged reality". For Borg (2015, p. 3), effective PL "inquiry and reflection are valued as central professional learning processes". According to DeLuca et al. (2015) it is at the nexus of dialogical sharing, taking action and reflecting where effective collaborative inquiry occurs. In the following section, I discuss coaching as a key element of the present study.

DeLuca et al. (2015) highlight three support structures that enable collaborative inquiry. They are supportive leadership, supportive environmental structures and supportive practices. Facilitators, school leaders and teacher-leaders play a key role in providing supportive leadership for collaborative inquiry. Supportive environmental structures such as time and space, and school culture produce teachers who are more engaged in collaborative inquiry. Group membership, collegial dialogue, and norms, protocols and resources are enablers of collaborative inquiry.

2.4.6 Coaching

As PL is continually linked to increasing student achievement (Darling-Hammond et al., 2017; King, 2014; Ventista & Brown, 2023), teacher/instructional coaching has been noted for its influence of systemic reform (Desimone & Pak, 2017) and a promising alternative to professional development (Kraft et al., 2018). Coaching involves experts sharing expertise about content and evidence-based practices in response to teachers' needs and is considered as a key feature of effective PL (Darling-Hammond et al., 2017). Coaches are referred to as "master teachers who offer ongoing, in-person support either one-on-one or in small groups" (Didion et al., 2020). Coaching reflects Desimone's (2009) five key features of effective PL, which are content focus, active learning, sustained duration, collective participation, and coherence.

Kraft et al. (2018) conducted a meta-analysis of sixty studies of teacher coaching programmes in the US and other developed countries that employed a casual research design and examined effects on instruction or achievement. The studies involved coaching for prekindergarten and elementary school teachers. The meta-analysis showed

that coaching presented large positive effects on instruction and smaller positive effects on achievement. While coaching models provide a 'flexible blueprint' for continued innovative PL programmes, it is considered that further research is required to determine whether such models can maintain effectiveness when taken to scale. Their tailored application to local contexts in small-scale targeted programmes remains promising (Kraft et al., 2018).

Where coaches are working with teachers on a one-to-one basis, they may support teachers to ensure students are acquiring subject-matter knowledge by advising about lesson design and assessment and offering real-time feedback during implementation (Desimone & Pak, 2017). In research on PL and coaching with elementary teachers on the teaching of writing conducted by Brisk and Zisselberger (2011), they found that one-to-one coaching proved to have had the most impact on teaching and by extension on students' learning. Kalinowski et al. (2020) highlight that coaching to support teachers' implementation of teaching methods to develop K-12 students' language and literacy proficiency was found to be particularly effective. Active learning may include observing modelled lessons delivered by a coach, being observed, interactive feedback and discussion; reviewing student work, and leading discussions. Active learning occurs as part of an interactive relationship between the coach and teacher. Knight (2011) adds that debriefing as soon as possible after observing a lesson is another form of active learning. Sustained duration is considered as key in coaching. Multiple points of interaction in a variety of settings support student outcomes (Darling-Hammond et al., 2009). Coaching can facilitate discussion and offer expert advice during collective participation (Desimone & Pak, 2017). It can support the teachers to bridge the gap between external and internal demands (Killion, 2012) by providing teachers with clear directions about how to integrate new ideas and strategies into their teaching through embedding PL into teachers' daily instructional routines (Desimone & Pak, 2017). Despite the challenge of adequate resourcing to provide coaching, it is affirmed as a developmental tool for PL (Kraft et al., 2018).

In the present study, I acted as a coach providing the teachers with feedback and making connections between theory and practice. Cochran-Smith and Lytle (2009) proffer that such opportunities to construct new knowledge are key to practitioner research. It has been noted that when teachers combine theory and practice reflectively, children benefit from improved achievement (Boud et al., 1998). I provided modelled lessons using resources that supported me to demonstrate for the teachers how to teach for ToS across English and Irish. I observed teachers implementing the resources as learning activities in their classrooms which enabled the teachers to gain one-to-one feedback on a weekly basis to support their PCK of ToS across languages.

2.4.7 Section Summary

This section provided a review of the literature pertaining to PL and coaching in light of the present study. It provided definitions and review of the literature pertaining to professional learning communities and coaching as key elements of this study. Collaborative inquiry as the structure for PL was defined (DeLuca et al., 2015). In the next and final section of this chapter, I present the conceptual framework for the study and this concludes Chapter Two.

2.5 Conceptual Framework for the Research Study

Arising from the literature review and supported by the rationale discussed in Chapter One, Figure 6 presents the conceptual framework for the research study.

- A key and list of acronyms is provided at the bottom left-hand corner of the conceptual framework.
- The first, second and third boxes detail the research and policy context, and the theoretical influences in the study. As outlined in Chapter One, the launch of the Primary Language Curriculum (DE, 2019b) and Primary Curriculum Framework (DE, 2023a) presented the Government policy responses to the changing linguistic profile of children in Irish society. Collaborative inquiry as a structure for PL was employed throughout the study (DeLuca et al., 2015).
- The fourth box identifies the research problem. It highlights findings from the Chief Inspector's Report 2016-2020 (Department of Education & Inspectorate (DEI), 2022) regarding difficulties and challenges experienced by teachers in implementing the Primary Language Curriculum (DE, 2019b) and the lack of research on the use of professional learning communities with coaching to support teachers to teach for ToS in primary schools. It identifies that PL could be used as a means of building teacher PCK (Giblin et al., 2022).
- Arising from the research context and research problem, the fifth box presents the research questions.
- The sixth box identifies the chosen research paradigm for the study. Interpretivism was chosen as a suitable paradigm as the researcher was concerned with producing rich, thick descriptions of the phenomena in their natural environment.
- Detail of the research methodology which is a single-site exploratory case study approach using qualitative research methods is provided in the seventh box. The study involved pre-interviews and post-interviews, professional learning community sessions, modelled lessons, classroom observation and a researcher reflective journal.

- The eighth box presents the research participants who were four mainstream primary school teachers of junior primary classrooms from one primary school convenient to the researcher.
- Finally, the research outcomes are outlined in the ninth box. The study aims to provide teachers with PL and coaching that supports their PCK in implementing the Primary Language Curriculum (DE, 2019b). It aims to gain knowledge of how to support teaching for ToS across English and Irish while also acknowledging the diversity of languages spoken in the primary school. It also aims to develop and refine teaching resources used to teach for ToS in the primary school.

Figure 6

Conceptual framework for the research study

The transfer of skills across languages in the primary school
Máire Ní Láimhín

1. Research context:
Launch of Primary Language Curriculum (13/11/2015):
- seeks to support children on their language-learning journeys, in English and Irish, while acknowledging the diversity of languages in primary schools

Launch of Primary Curriculum Framework (09/03/23):
- seeks to further embed and implement the Primary Language Curriculum and provide updated specifications for the 2025/2026 school year to include MFL for particular age groups

2. Policy context:
- Primary Language Curriculum (DE, 2019)
- Circular Letters 0061/2015 & 0045/2019
- Primary Curriculum Framework (DE, 2023)
- Chief Inspector's Report 2016-2020 (DE&I, 2022)
- Ireland's LNDL Strategy 2024-2033 (GoI, 2023)
- *Cosán* framework for Teachers' Learning (TC, 2016)
- Looking at Our School framework (DE, 2022)

3. Theoretical influences:
- Interdependence hypothesis (Cummins, 1979, 1981)
- Teacher language awareness – user, analyst, teacher (Wright & Bolitho, 1993)
- Professional learning communities (Kezar et al., 2018) and coaching (Kraft et al., 2018)
- Collaborative inquiry approach (DeLuca et al., 2015)

List of acronyms
CSO: Central Statistics Office
DE: Department of Education
DE&I: Department of Education & Inspectorate
GoI: Government of Ireland
LNDL: Literacy, Numeracy & Digital Literacy Strategy
MFL: Modern Foreign Languages
TC: Teaching Council
ToS: Transfer of Skills

Key
A informs B
A ⟶ B

4. Research problem:
Significant difficulties and challenges in understanding and implementing the Primary Language Curriculum was highlighted by the Inspectorate in the Chief Inspector's Report 2016-2020 (DE&I, 2022).

In response to this, resourcing teacher time for professional learning with coaching is proposed. Research into the use of professional learning communities with coaching to support teachers to teach for the ToS in primary schools is limited. Professional development is proposed as an opportunity to build on teacher pedagogical content knowledge throughout a teacher's career (Giblin et al., 2022).

Context: Ireland, Primary Education, Primary Language Curriculum, Transfer of Skills Across Languages

9. Research outcomes:
- To provide teachers with professional learning that supports teacher pedagogical content knowledge of the ToS across English and Irish to implement the Primary Language Curriculum (DE, 2019)
- To gain knowledge of how to support teaching for ToS across English and Irish while also acknowledging the diversity of languages spoken in primary schools
- To develop and refine teaching resources used to teach for ToS in primary schools

5. Research questions:
1. How does participation in a professional learning community with coaching support teachers', a) dialogical sharing, b) taking action to promote, and c) reflecting on teaching for ToS across English and Irish?
2. What are the *other* factors that, a) support, or b) hinder teaching for ToS across English and Irish?

6. Paradigm: Interpretivism

7. Research methodology:
- Single-site case study
- Qualitative research: QUAL
- Exploratory
- Pilot study
- 4 pre-interviews and 4 post-interviews
- 6 professional learning community sessions
- 4 modelled lessons by the researcher
- 24 classroom observations
- Researcher reflective journal
- Template analysis

8. Research participants:
- Purposive and convenience sampling
- Mainstream class teachers *(n=4)* of junior primary classes from one primary school convenient to the researcher

2.6   Conclusion

This chapter presented a review of the literature pertaining to the research study. Section One introduced the linguistic interdependence hypothesis which details how knowledge of one language can support learning another language. Teacher language awareness as the relevant PCK to support teachers to teach for ToS was discussed in Section Two. Specifically, ToS across English and Irish was discussed in Section Three with a particular focus on English and Irish orthography, morphology, and learning outcomes from the Primary Language Curriculum (DE, 2019b). Finally, Section Four provided a review of the literature pertaining to professional learning communities, teacher coaching, and collaborative inquiry as key elements of the present study. Informed by the literature review, I devised a conceptual framework for the study. The main concepts were defined and the policy context was presented. The next chapter presents the research methodology.

3   Chapter Three: Research Design

The research design of the study is described in this chapter. It is presented in two sections. In the first section, the research questions are outlined and a justification for the methodological paradigm of interpretivism within which the study is conducted is presented. Literature pertaining to the foundations of qualitative research and case study design are then explored. Information regarding sampling procedures, methods of data collection, piloting and data analysis procedures are explained in the second section. The strengths and limitations of the chosen research design are discussed and the chapter concludes by discussing ethical considerations pertaining to the study.

3.1   Section One

3.1.1   Research Questions

This research study employed a qualitative, single-site case study design, in which multiple methods of data collection were employed to explore the following research questions. The questions for the research study are based on DeLuca et al.'s (2015) collaborative inquiry as a professional learning (PL) structure for educators.

1.   How does participation in a professional learning community with coaching support teachers', a) dialogical sharing, b) taking action to promote, and c) reflecting on teaching for ToS across English and Irish?

2.   What are the other factors that, a) support, and/or b) hinder teaching for ToS across English and Irish?

I begin by describing the methodological paradigm that underpins the study.

3.1.2   Methodological Paradigm

In choosing the methodological paradigm that underpins this study, I considered the philosophical assumptions that inform my worldview. A philosophical assumption, also known as a worldview, has been described by Guba (1990, p. 17) as a "set of beliefs that guide action". Other literature describes worldviews as 'paradigms' (Mertens, 2014; Lincoln & Guba, 2000); 'epistemologies and ontologies' (Crotty, 1998); or broadly conceived 'research methodologies' (Neuman, 2000). As researchers conducting any research study, from conception to interpretation, our own philosophical assumptions not only influence but guide the strategies of enquiry and research methods (Creswell & Creswell, 2018). Creswell (2009, p. 15) suggests that "whether we are aware of it or not, we always bring certain beliefs and philosophical assumptions to our research". He highlights the fact that even though philosophical ideas remain largely hidden in research (Slife & Williams, 1995), they still influence the practice of research and need to be identified. Indeed, Sefotho (2015, p. 25) argues that the researcher's philosophical

assumptions act as a 'philosophical lens' or paradigm through which the researcher "views the world and makes sense of it". Four such paradigms exist in educational research (Sefotho, 2015). These are positivism, post-positivism, interpretivism and pragmatism, although a debate exists on whether pragmatism should be considered a paradigm (Creswell & Plano Clark, 2018). Table 14 provides an overview of the paradigm characteristics applicable for the present study.

Table 14

Paradigm characteristics applicable for the present study (Adapted from Sefotho, 2015)

Paradigm	Positivism	Post-positivism	Interpretivism	Pragmatism
Method:	Uses quantitative methods only	Uses quantitative methods predominantly but can also incorporate qualitative methods	**Uses qualitative methods predominantly but can also incorporate quantitative methods**	Uses a blend of methods
Focus:	QUAN	QUAN or QUAN-qual	**QUAL or QUAL-quan**	QUAN/qual and/or QUAL/quan
Characteristics:	Scientific verification, mathematical proof	Concerned with generalisation, acknowledges that scientific evidence involves errors	**Phenomena are studied in their natural environment in order to aid meaning**	Chooses the paradigm(s) most appropriate to answer the research question(s)
Reality/(ies):	Single, objective reality		**Multiple, subjective realities**	
Truth(s):	One truth	Probable truths	**Knowledge is socially constructed**	Knowledge is socially constructed
Findings:	Numerical, statistical		**Rich, thick descriptions, researcher flexibility**	

Positivism is a philosophical assumption or paradigm through which the quantitative researcher views the world (Castellan, 2010). Positivists recognise only that which can be scientifically verified or capable of logical or mathematical proof. Post-positivism suggests that "the social world is patterned and that causal relationships can be

discovered and tested via reliable strategies" (Sefotho, 2015, p. 31). Post-positivists are concerned with generalisation in the same way as positivism, but "extend it beyond the narrow view of looking at reality as capable of being generalised" (Sefotho, 2015, p. 27). Interpretivism involves studying phenomena in their natural environment in order to make sense of the phenomenon and the meanings people assign to it (Denzin & Lincoln, 2005). Interpretivists are concerned with producing rich thick descriptions (Geertz, 1973) in order to truly understand the situation under investigation (Collis & Hussey, 2009). Pragmatism is referred to as "the primary philosophy" (Johnson et al., 2007, p. 113) which encourages researchers to draw liberally from quantitative and qualitative assumptions when they engage in their research (Creswell, 2008). Pragmatists exercise researcher flexibility to select the paradigm(s) most appropriate to answer the research question(s) and subsume the 'paradigm wars' of positivism and interpretivism (Creswell & Plano Clark, 2018). Salomon (1991) highlights that identifying one's philosophical assumptions produces debate as to the potentialities and weaknesses of both quantitative and qualitative research. Therefore, I must examine my ontological, epistemological, axiological and methodological beliefs as a researcher.

Ontological beliefs "relates to the nature of reality and its characteristics" (Creswell, 2012, p. 20) and centres on the belief that reality can be singular (i.e. that "reality exists 'out there' and is driven by immutable natural laws and mechanisms), however, others contend that reality is subjective according to the perceptions of people (Creswell, 2007). Adopting a relativist ontological stance in the case of the present study, I acknowledge the nature of reality as relative to the person. This can be achieved through the use of qualitative approaches, for example, quotations presenting different perspectives, meanings and interpretations (Creswell, 2007). A relativistic ontological perspective in the case of the present study, seeks explanations and understandings of the particular case rather than concern for generalisable findings (Cohen et al., 2018).

Epistemological beliefs are concerned with "how we gain knowledge of what we know" (Creswell & Plano Clark, 2018) where the epistemological debate centres on what actually constitutes real knowledge. In the present study, adopting a constructionist epistemological stance, I acknowledge that meaning does not exist on its own but is constructed through the interactions between human beings and their interpretations that they make (Robson, 2011). This can be achieved through the use of qualitative research methods such as interviews and observations (Robson, 2011) as is the case in the present study. A constructionist epistemological perspective is concerned with how groups make meaning of the world in which they live. It seeks to record multiple perspectives and co-construct the 'reality' with the participants (Robson, 2011).

Axiological beliefs are concerned with intrinsic values that are inherent in all researchers. Creswell (2012) states that, in studies where qualitative research methods are employed, the inquirers admit the value-laden nature of the study and actively report their values and biases as well as the value-laden nature of information gathered from the field. In the present study, adopting an interpretive axiological stance, I acknowledge the part I played in what was being researched, therefore making the research value-bound. The role of the researcher in the research cannot be separated from the research and so will be subjective as "… 'objective facts' are mediated through subjective interpretations" (Cohen et al., 2018, p. 289).

Methodological beliefs are concerned with "the process of research" (Creswell, 2008). Adopting an interpretive methodological stance in the present study, I employ the use of small samples, a single-site case study, to conduct an in-depth investigation (Creswell, 2007).

Saunders et al. (2019) present the research onion shown in Figure 7. The research onion is used to conceptualise the alignment between epistemology, ontology and methodology. The five layers of the research onion were explored in the context of the present study to determine the research methodology.

Figure 7

The research onion in the context of the present study (adapted from Saunders et al. 2019, p. 108)
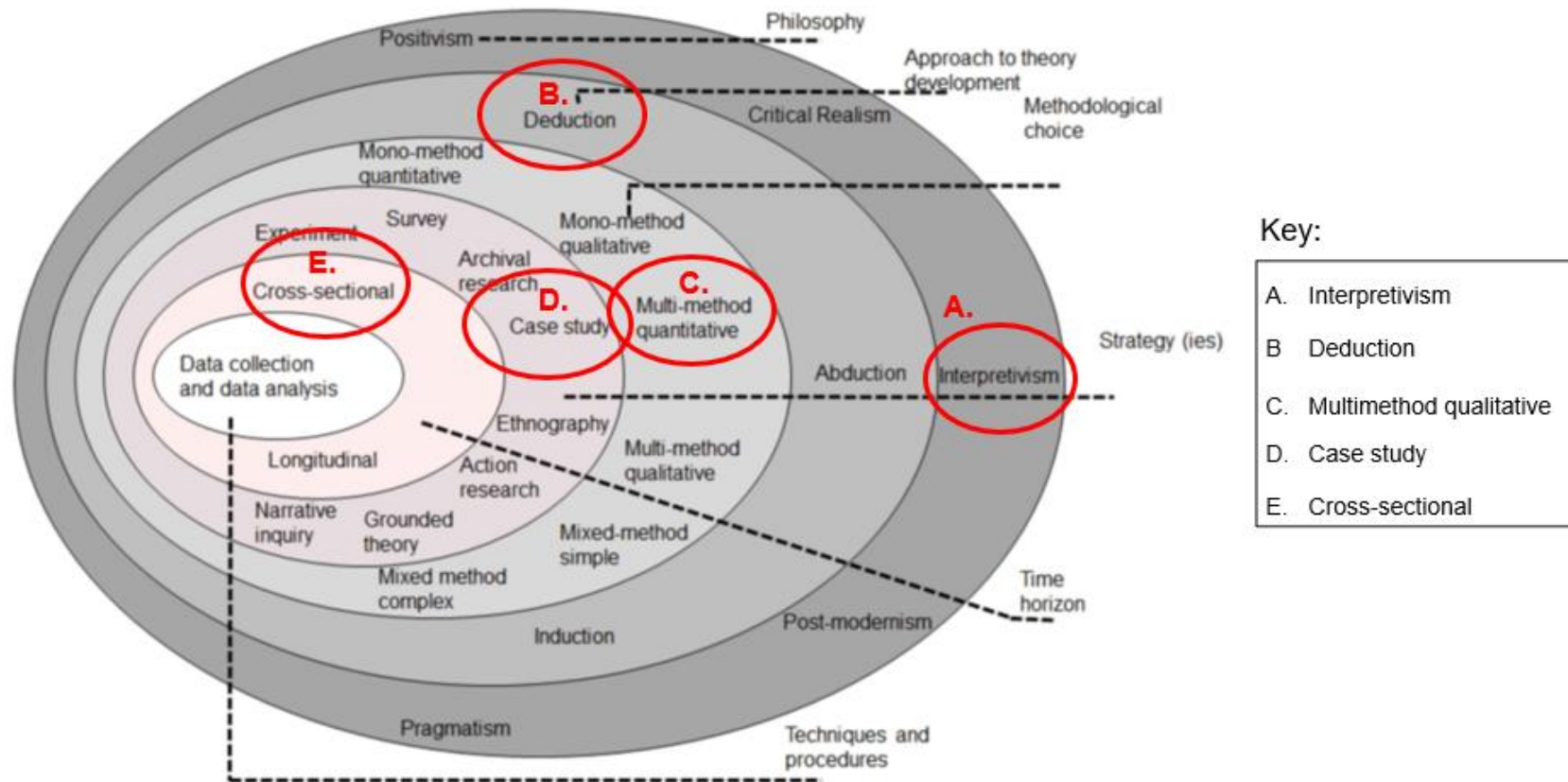
As displayed in Figure 7, an interpretivist approach was used to answer the research questions. As the phenomena (teachers) were located in their natural environment (school) and knowledge was socially constructed with the participants, a multi-method qualitative approach was chosen. A single-site case study approach was deemed suitable as the methodological strategy for this research. This supported the researcher's desire to explore the use of professional learning communities to support ToS within the school setting. A single-site case study approach was chosen as it provided the opportunity to present rich, thick descriptions typical of qualitative research. Case study is predominantly situated in the field of interpretivism and is considered a significant qualitative strategy (Cohen et al., 2018). Therefore, case study was used to represent the multiple, subjective realities of the primary school where multiple variables existed. Data for this research study were considered to be cross-sectional as opposed to longitudinal as they were collected and analysed to answer a question at a particular moment in time (Saunders et al., 2019) and the techniques and procedures used were qualitative in their nature. They included (1) interviews, (2) recording of professional learning community sessions, (3) classroom observation schedules, and (4) a researcher's reflective journal.

In the present study, my worldview aligns with interpretivism where the focus is on the details of the situation and the reality behind such details (Harrison et al., 2017). Qualitative research allows for detailed description of participant experience in the natural setting (Cohen et al., 2018). This aligns with the facilitation of a professional learning community as the reality is co-constructed with the research participants (Robson, 2011). The professional learning community was facilitated in the research participants' natural setting, i.e., school context, which aligns with my constructionist epistemological stance. My role as facilitator of the professional learning community aligned with my interpretative axiological stance as I took a participatory role of conducting the research through the collaborative inquiry process. I facilitated, interacted and reflected with the participants in the study to gain an in-depth understanding of the situation under investigation (Collis & Hussey, 2009). Next, I discuss the foundations of qualitative research as the chosen methodology for this research study.

3.1.3 *Qualitative Research*

Cohen et al. (2018) define the methodology of qualitative research as having five key foundations. In the present study, I remained cognisant of the foundations of qualitative research and ensured they were adhered to in my study. Each foundation led me to choose a qualitative research design as a methodology for this research. The site of this research study was the school where data were generated and collected. Therefore, I

was fully immersed in the setting and was well-positioned to gather 'thick descriptions' (Geertz, 1973) of observed and unobserved factors occurring in the undisturbed, natural habitat of the participants (Cohen et al., 2018). Billups (2021, p. 10) notes that qualitative researchers must "acknowledge the duality of letting the stories take shape while guiding the stories into something meaningful that others can read or hear or understand". As the researcher conducting data collection, analysis and reporting, I recognised that qualitative research involves generating rather than testing hypotheses. I was mindful of respecting the setting and minimising intrusion to the participants insofar as possible during the study. This was to ensure that the data collected reflected the uncontrived, real-world setting of the study.

Qualitative research places equal importance on the processes of data collection and analysis, and the outcomes of the research. Cohen et al. (2018, p. 289) note in qualitative research the values that inhere in the context such as those of the researcher and the participants and highlight that these may by "congruent or dissonant within and between the parties involved". The role of the researcher as an instrument (Eisner, 1991) interpreting the research can cause a blurring of the distinction between researcher and participants and between subjective and objective facts (Cohen et al., 2018). I recognised that my involvement in the facilitation of PL as researcher is different to that of research conducted where PL is facilitated by someone other than the researcher. Therefore, I was cognisant that my values were reflected and expressed through the data collection, analysis and reporting.

The context-specificity of qualitative research was evident in the present study as the data were context-specific to the school in which data were collected. Cohen et al. (2018) state that generalisability in the context of qualitative research is context-specific rather than universal. Cohen et al. (2018) state:

> The social and educational world is a messy place, full of contradictions, richness, complexity, connectedness, conjunctions and disjunctions. It is multilayered and not easily susceptible to the atomization or aggregation processes inherent in much numerical research. It has to be studied in total rather than in fragments if a true understanding is to be reached. (p. 288)

This description of the educational world reflected the setting within with the research study was conducted. Having explored my philosophical assumptions as a researcher and the foundations of qualitative research, a case study was deemed most appropriate for this study. Next, I outline the characteristics and categories of case study as it applies to the present study.

3.1.4 Case Study

The case study approach aligned with my decision to facilitate PL and coaching in a primary school through describing the "complex, dynamic and unfolding interactions of events, human relationships and other factors" (Cohen et al., 2011, p. 253). Case study research can be described as a form of inquiry most suitable for a comprehensive, holistic and in-depth investigation of a complex issue in real contexts (Creswell, 2014; Yin, 2014). Cohen et al. (2018) state that one of the strengths of case study research is that it observe effects in real contexts, recognising that context is a powerful determinant of both cause and effect. While a variety of definitions of case study exist (Yazan, 2015), Cohen et al. (2018, p. 375) argue that any research conducted in social science is a "case". Case study research rejects the notion of a single reality and recognises the embeddedness of social truths (Cohen et al., 2018). The exploration of social situations in case study research provides rich, unique and down-to-earth detail which makes for more easily understood results by a wider audience. A case may be an individual, a group, an organisation, a community or a nation (Punch, 2005). Cohen et al. (2018) argue that researchers must make clear their 'case' of analysis and what constitutes the 'case' for their research. Tight (2009) suggests that the term case study be replaced with terms such as small sample or in-depth study. For Cohen et al. (2018, p. 375), "case studies are important sources of research data, either on their own or to supplement other kinds of data, and constitute an approach to research in their own right". There are several types of case study, which are determined by a variety of categorising factors. A case study can be determined by a set of key elements (Thomas, 2011; Thomas & Myers, 2015). These include:

> i) the subject i.e. whom and what to focus on, and the object i.e. 'what is this a case of?
>
> ii) the purpose of the research i.e. intrinsic, instrumental, evaluative, exploratory
>
> iii) the approach to be used i.e. discovery-led or theory-led, illustrative, descriptive
>
> iv) the process to be adopted i.e. a single case study, multiple cases (adapted from Cohen et al., 2018, p. 378).

Cohen et al. (2018, p. 376) state that "a case study provides a unique example of real people in real situations, enabling readers to understand ideas more clearly than simply by presenting them with abstract theories or principles". According to Cohen et al. (2018), case studies report the "real-life, complex, dynamic and unfolding interactions of events, human relationships and other factors in a unique instance" (p. 376). This means that case study is a study of a case in its context (Yin, 2009). In the present study, I set the case within its research context, i.e. a primary school. Four categories of case studies

were considered for the present study – exploratory, explanatory, descriptive and evaluative. Exploratory case study is concerned with generating new ideas for subsequent research (Yin, 2014). Explanatory case study is concerned with testing theories and hypotheses for subsequent qualitative research (Brown, 2008). Descriptive case study presents a detailed account of the phenomenon under study (Yin, 2018). Evaluative case study can be described as offering an explanation of the relationship between interventions and its outcome within the contextual conditions of the case (Yin, 2018). An exploratory case study was deemed most suitable for this research. Table 15 presents detail of the case study categories considered for the study and characteristics of the present study are highlighted as appropriate.

Table 15

Categories of Case Study Research applicable for the present study (adapted from Brown, 2008)

Category of case study	Exploratory	Explanatory	Descriptive	Evaluative
Research basis:	Little to no prior research	Testing theories and hypotheses	Phenomenon under study	Explanation of relationships between intervention and outcome within the context
Knowledge generation:	New ideas for subsequent research	Setting the stage for more in-depth research	Detailed account	Strict experimental, quantitative research

Having presented the methodological paradigm of interpretivism and discussed the foundations of qualitative research and explored the literature regarding case study, sampling within the exploratory case study design is described in the next section.

3.2   Section Two

In this section I outline the sampling procedures, the methods of data collection and the data analysis technique in the present study. Strengths and limitations of the research design are described and the section concludes with a discussion of ethical considerations pertaining to the study.

3.2.1   Sampling Procedures

Purposeful or purposive non-probability sampling was employed in this research (Cohen et al., 2018). As researcher, I was cognisant that non-probability sampling does not represent the wider population and "simply represents itself … and can prove perfectly

adequate where researchers do not seek to generalise their findings beyond the sample in question" (Cohen et al. 2018, p. 217). One primary school was involved in this study. I contacted a school convenient to me using the school email address which was obtained on the school website. I visited the school to meet with the School Principal and shared a brief description of the research which was circulated to the school staff via email. I introduced myself and provided an outline of the research. Teachers from first and second classes specifically were invited to partake in the study and a total of four members of the school staff expressed an interest in participating in the study. Purposeful or purposive non-probability sampling (Cohen et al., 2018) is common in small-scale qualitative research where the researcher is focused on in-depth data collection, rather than data that can be generalised to the population. Next, I discuss the methods of data collection employed during the collaborative inquiry approach.

3.2.2 Methods of Data Collection

Using DeLuca et al. (2015) as a structure for PL for the research study, teachers engaged in a three-stage cyclical process of inquiry to include dialogical sharing, taking action and reflecting. This approach was deemed appropriate for the study as it incorporates the key factors of effective PL (Darling-Hammond et al., 2017; King, 2022) and it aligned with research on professional learning communities (Kezar et al., 2018; Stoll et al., 2006) and coaching (Desimone & Pak, 2017; Kraft et al., 2018). During the process of collaborative inquiry, I collected data using the following research methods: (1) interviews, (2) recording of professional learning community sessions, (3) classroom observation schedules, and (4) a researcher's reflective journal and are shown in Figure 8. Of note, post-professional learning (post-PL) interviews were the main source of data collection in this study. Data from pre-professional learning (pre-PL) interviews, recordings of the professional learning sessions, classroom observation schedules, and researcher reflective journal were used to support triangulation of data throughout the study.

Figure 8

Methods of data collection in the present study
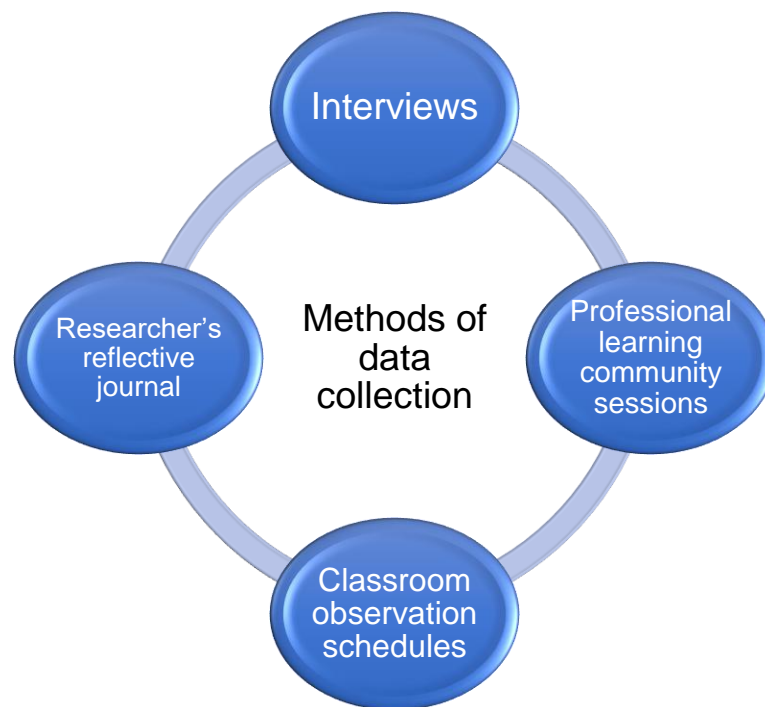
The data were collected over an eight-week period from October – December 2023 (Appendix A1 Data Schedule and Appendix A2 Week-by-week Data Schedule). In the following sections, each method is introduced and accompanied by a rationale for its inclusion in the study.

3.2.2.1 Interviews. The purpose of the interviews was to learn about teachers'
experiences of teaching Irish and English and their thoughts about teaching for
ToS across English and Irish while also recognising the role of the diversity of
languages spoken in the primary school. Interviews took place at the beginning
and the end of the six-week professional learning sessions. The interviews were
referred to as 'pre-professional learning interviews' (pre-PL) and 'post-
professional learning interviews' (post-PL), respectively. I designed a pre-PL
interview schedule (Appendix A3) and a post-PL interview schedule (Appendix
A4). The use of interviews in the research study "enabled participants to discuss
their interpretations of the world in which they live, and to express how they
regard situations from their own point of view" (Cohen et al., 2011, p. 409). Semi-
structured interviews were used. Open-ended questions enabled the participants
to provide in-depth information about their participation in a professional learning
community and its contribution to teachers' teaching for ToS across languages.
The interview questions were based on the literature review and research
questions. The semi-structured nature of the interview schedule provided the
interviewer the flexibility to enable the interviewee the opportunity to share
distinctive experiences or unique stories (Stake, 1995).

The pre-PL interviews were held during October 2023 and the post-PL interviews
were held during December 2023. Each teacher was interviewed individually using the
same open-ended interview schedule. Interviews lasted approximately forty minutes.
Measures were taken to ensure that the interview was conducted in a quiet, uninterrupted
space on the school-site where the interviewee felt comfortable (Robson, 2011). I
reminded the interviewee of the context of the study, and provided a brief explanation of
how the findings would be used, stored and disposed of following the research study.
Consent for audio recording was sought and received, and the interviewee was assured
that the recording could be paused or stopped at any time. Cohen et al. (2018) highlight
the importance of conducting the interview with the absence of judgement and withholding
of own biases and values.

3.2.2.2 Professional Learning Community Sessions. The purpose of the professional learning sessions was to provide the teachers with PL and coaching about teaching for ToS across English and Irish while also recognising the role of the diversity of languages spoken in the primary school. I devised a programme of PL with the teachers (Appendix A5). Teachers were provided with an opportunity to engage with the relevant literature, Primary Language Curriculum (Department of Education (DE), 2019b), and classroom resources to teach for ToS. The professional learning community sessions were held once per week between October and December 2023. Each session lasted approximately one hour and was based on the relevant literature and pedagogies relating to effective PL (Darling-Hammond et al., 2017; Kezar et al., 2018). In the same way as with the interviews, consent for audio recording was sought and received, and the teachers were assured that the recording could be paused or stopped at any time. A collaborative inquiry approach as a PL structure was adopted (DeLuca et al., 2015).

3.2.2.3 Classroom Observation Schedules. The purpose of the classroom observation schedules was to identify ways in which the teachers were teaching for ToS. In the same way as with the interviews and professional learning community sessions, following receipt of signed consent, I conducted observation of practice in all classrooms. I designed a classroom observation schedule (Appendix B2) and a *sceideal breathnóireachta* [classroom observation schedule] (Appendix B3). Classroom observation enabled the researcher to "gather 'live' data from naturally occurring social situations" (Cohen et al., 2011, p. 456). Classroom observation provided me with the opportunity to record data first-hand rather than depend on second-hand accounts from participants (Cohen et al., 2018).

Pre-PL classroom observation took place in all classrooms during October 2023 and post-PL classroom observation took place in all classrooms during December 2023. Classroom observation took place in all classrooms, during the week subsequent to each modelled lesson to enable teachers to implement the learning activity and gain feedback from the facilitator/coach in the form of coaching (Desimone & Pak, 2017, Didion et al., 2020; Kraft et al., 2018).

Teachers consented to for the researcher to observe classroom practice. Teachers were assured that participation in classroom observation was voluntary and all teachers took part in this aspect of the research study. I was aware of observing in a way that avoided bias and followed my classroom observation schedule in all classrooms during all observations in order to maximise the validity and reliability of data collection. Initially, I developed and adapted a classroom observation schedule based on statements

of practice relating to ToS (Thomas & Mady, 2014) (Appendix B1). Following the pilot study, adaptations were made to the observation schedule to reflect the communicative process for teaching Irish and elements of similarities and differences across the languages (Appendix B2 and Appendix B3).

3.2.2.4 Researcher's Reflective Journal. Throughout the process of the research study, I kept a researcher's reflective journal. Billups (2021) notes that journals focus on the researchers' observations of the setting whereas diaries tend to focus on the personal journey and reflections of the participants. For the purpose of this study, I use the term researcher reflective journal as I was focused predominantly on recording data from the setting. It was also used to document the research journey and record links between data, the research questions and the literature and therefore offering the possibility of validating and consolidating the findings (Kirk & Miller, 1986). It provided a space for me to record and reflect on "what went on backstage in the research" (Ellis & Bochner, 2000, p.741). My researcher reflective journal documented 'reflection-in-action' and 'reflection-on-action' (Schön, 1991). Each week, I reflected on the elements involved in the research study. Using a researcher reflective journal supports the researcher in making the process as visible as possible to support transparency (Ortlipp, 2008).

Modelling of classroom practice by the researcher was undertaken throughout the study (Appendix A6). Using the Primary Language Curriculum (DE, 2019b), I selected learning outcomes for oral language, reading and writing. Working in the capacity of a facilitator/coach, I modelled classroom practice on four occasions, each with a specific focus on teaching for ToS as it relates to the Primary Language Curriculum (DE, 2019b). Each modelled lesson lasted approximately thirty minutes and was conducted in the respective teachers' classrooms. Following each modelled lesson, I provided the teachers with the relevant resources, and on the subsequent week, teachers taught the learning activity in their classroom with the support from me as facilitator/coach. This provided teachers with an opportunity to trial the implementation of teaching for ToS in their classrooms in an incremental way. An example lesson plan is included in Appendix A7.

Using my researcher reflective journal, I detailed a first-hand account of each stage of the study which generated a story of the journey (Ortlipp, 2008). For example, I reflected on the preparation and delivery of, and response to the modelled lessons (Appendix A8). Reflecting on modelled lessons provided me the opportunity to learn from teaching for ToS and how best to coach the teachers to teach for ToS by providing real-time feedback during implemented learning activities. Teachers were encouraged to attend, observe and reflect on modelled lessons. The researcher reflective journal

provided detailed descriptions which could be used to support triangulation of data. Next, I discuss the data analysis technique used in the present study.

3.2.3 *Data Analysis*

This study employed the use of template analysis for analysis of all data collected during the research study (King & Brooks, 2018). While a primary focus was placed on analysis of the post-PL interviews, data from pre-PL interviews, recordings of the professional learning community sessions, classroom observation schedules, and researcher reflective journal were also analysed using template analysis. This supported triangulation of data throughout the study. The qualitative data analysis package NVivo was used to assist in the analysis of data for the research questions in line with the chosen research methodology i.e. qualitative, and research paradigm, i.e. interpretivism.

King and Brooks (2018) refer to template analysis as a 'style' of thematic analysis. Braun and Clarke (2023, p. 1) are widely recognised for their work on thematic analysis and describe thematic analysis as "better thought of as a family of methods". For King and Brooks (2018, p. 3), the term 'thematic analysis' refers to "forms of qualitative data analysis that principally focus on identifying, organising and interpreting themes in textual data".

A tripartite typology of thematic analysis developed by Braun et al. (2018) includes coding reliability, codebook and reflexive approaches. Template analysis is a codebook approach to thematic analysis (Braun & Clarke, 2023). Qualitative research is "always context-bound, positioned and situated" and qualitative data analysis is about "telling 'stories', about interpreting, and creating, not discovering and finding the 'truth' that is either 'out there' and findable from, or buried deep within, the data" (Braun & Clarke, 2019, p. 591). Braun & Clarke (2023, p. 2) note that codebook approaches to thematic analysis such as template analysis "combine some of the more structured procedures of coding reliability thematic analysis with some of the qualitative research values of reflexive thematic analysis". In this way, codebooks are used to "chart the developing analysis, instead of being a tool to measure whether coding is reliable" (Braun & Clarke, 2023, p. 5). In summary, template analysis, is a 'style' of thematic analysis (King & Brooks, 2018) that uses a codebook approach (Braun et al., 2018) to analyse qualitative data. It involves creating a coding 'template' consisting of broad and hierarchical themes identified by the researcher as important in the data set (King & Brooks, 2018). Next, I detail the steps taken in conducting template analysis in the present study.

As noted, literature by DeLuca et al. (2015) on collaborative inquiry as a structure of PL was central to both the design of the study and analysis of data in this study. Therefore, using DeLuca et al. (2015), I devised a template to analyse the data. The

rationale for creating the template using the literature by DeLuca et al. (2015) was that it reflected the research questions of the study. This is described and justified in the following section, in line with the procedural steps for undertaking template analysis (King & Brooks, 2017) which I followed in the present study and are outlined in Figure 9.

Figure 9

Typical steps in Template Analysis (adapted from King & Brooks, 2017)

3.2.3.1 Step 1 – Familiarisation with the Data. In the present study, I conducted all aspects of the data collection and analysis myself. I converted recordings of interviews and professional learning community sessions to text which gave me the opportunity to begin engaging with and reflecting on my data set. I gathered my observation schedules making notes of particularly interesting points in my researcher reflective journal. This enabled me to become familiar with the data. An excerpt from researcher reflective journal is provided in Appendix C1.

3.2.3.2 Step 2 – Preliminary Coding. King & Brooks (2018) describe coding as the process undertaken by researchers through which they identify themes in accounts and attach labels (codes) to index them. As noted, post-PL interviews were the main source of data collection in this study. I began preliminary coding by creating a priori themes, defined as themes identified in advance of coding (King & Brooks, 2018). As King and Brooks (2018) state, "the number of a priori themes should usually be limited" (p. 10) and treated as tentative. Crabtree and Miller (1999) suggest that researchers begin developing a priori themes "only after some initial exploration of the data has taken place" (p. 167). The a priori themes for this study were identified from the literature pertaining to collaborative inquiry in the context of ToS.

As the study adopted DeLuca et al.'s (2015) collaborative inquiry approach, and question one of the research study reads as follows, *How does participation in a professional learning community with coaching support teachers', a) dialogical sharing, b) taking action to promote, and c) reflecting on teaching for ToS across English and Irish?*, a priori codes focused on dialogical sharing, taking action and reflecting. A similar approach was taken for question two of the research study which reads as follows, *What are the other factors that, a) support, and/or b) hinder teaching for ToS across English and Irish?*, in that a priori codes were also developed.

I applied initial codes to the data using NVivo. The use of the highlighter in NVivo to aid sectioning of the transcripts was applied on all interview transcripts. Coding stripes to support development of themes were used from the outset of the coding process. Template analysis takes a pragmatic approach to inductive versus deductive coding. It allows for the use of "either or both" and does not insist on and explicit distinction between descriptive and interpretive codes" (King & Brooks, 2018, p.10). I maintained a concerted focus to locate aspects of the data that pertained to my research questions by, a) reading the data to be coded, b) reading my research questions, c) making a decision as to whether or not the data to be coded was relevant to my research questions, and d) applying initial codes. I noticed the data were rich with specific examples which responded

directly to the research questions. The list of a priori themes is shown in Appendix C2 under two main headings, (1) transfer of skills (ToS), and (2) PL and coaching.

3.2.3.3 Step 3 – Clustering. I organised the a priori codes into meaningful clusters. King & Brooks (2018) encourage researchers to think about how the themes relate to each other within and between clusters. Appendix C3 provides an outline of the clustering of a priori themes.

3.2.3.4 Step 4 – Produce an Initial Template. Following coding of post-PL interview from Teacher 1, I produced my initial template (Appendix C4). Template analysis permits the researcher to produce the initial template before all initial coding has been completed. This initial template was then applied to further data and revised and refined (King & Brooks, 2018).

3.2.3.5 Step 5 – Applying and Developing the Template. I applied and developed my template by applying it to the full data set. As I proceeded through the transcripts, I grouped themes into higher-order codes which described broader themes in the data. Particularly with research question one, dialogical sharing, taking action and reflecting came to the fore. This was to be expected with the style of research question one. As question two focused on other factors, findings presented additional factors (to question one) that supported and hindered teaching for ToS. When I came to a piece of text that did not fit comfortably in an existing theme, I made a change to the template. This process entailed moving back and forth between steps 1-5. I documented the changes made in the form of an audit trail, an excerpt of which is shown in Appendix C5.

Of note, during quality checks, the word *'other'* was included in research question two for two reasons. The first reason was that as I familiarised myself with the data (Step 1), I recognised that examples of a) dialogical sharing, b) taking action to promote, and c) reflecting on teaching for ToS (question one) also presented as examples of factors that supported teaching for ToS (question two). For example, I noticed that teachers in the study highlighted that taking action to promote teaching for ToS (question one) was also a factor that supported them in teaching for ToS (question two). The second reason for including the word *'other'* in research question two was that as I reflected on the literature about collaborative inquiry, I noted that DeLuca et al. (2015) provide examples of benefits and challenges of collaborative inquiry such as supportive leadership, supportive environmental structures and supportive practices. These examples could also be described as examples of dialogical sharing, taking action and reflecting. In response to this, and in order to represent any additional factors that supported or hindered teaching for ToS, I focused on locating *'other'* factors that, a) supported, and/or b) hindered

teaching for ToS. Where the response to question one sought to provide examples of the characteristics of collaborative inquiry in the context of teaching for ToS such as dialogical sharing, taking action and reflecting, question two sought to provide *'other'* examples of factors that supported and hindered teaching for ToS.

3.2.3.6 **Step 6 – Final Interpretation.** I used my final template to interpret and write up my findings (Appendix C6). King and Brooks (2018) refer to this as developing the final interpretation of the coded data and presenting an account of the findings.

3.2.3.7 **Step 7 – Quality Checks.** I completed quality checks at all steps of the approach to ensure that the analysis was not being systematically distorted by my own preconceptions and assumptions. I discussed all steps taken during the data analysis with my supervisors and documented quality checks in my audit trail. I returned to various aspects of the transcripts at all stages and reviewed the data in light of the research questions. This supported internal validity of the research study. Some examples were modified and some removed. I now explain the timeline for the research study.

3.2.4 Timeline for the Research Study

I used a Gannt chart to record my progress in which I included both planned time and contingency time for the research study. The data collection phase lasted for eight weeks from October 2023 to December 2023 and analysis continued to September 2024 (Appendix D1). Next, I detail the strengths and limitations of case study design in the next section.

3.2.5 Strengths and Limitations of Case Study Design

Three strengths of case study research include (i) exploring a problem in depth, (ii) developing hypotheses and theories; and (iii) representing complexity.

Case study research provides rich and vivid (Hitchcock & Hughes, 1995, p. 317) fine-grain detail (Cohen et al., 2018) which provides context of 'what it is like to be involved in the situation' (Lincoln & Guba, 1985, p. 214). As the present study adopted a case study design, I was enabled to explore ToS in the primary school in depth. The case study design provided the opportunity to gather data to describe vivid accounts of teaching for ToS which were "strong on reality" (Wellington, 2015, p. 174). Cohen et al. (2018) note significance rather than frequency as a hallmark of case studies. Quality and intensity in case study research are recognised as matters of significance and are considered as too important to overlook (Cohen et al., 2018). I focused on modelling classroom practice that provided teachers with quality examples of teaching for ToS

through learning activities in oral language, reading and writing. While conducting data analysis, I sought out quality examples of teacher practice that illustrated and illuminated teaching for ToS and supported this with triangulation of data. Lincoln and Guba (1985, p. 65-6) note that "detail of its kind found in case study research captures the informality within the context and lends itself to over-inclusion rather than under-inclusion".

Case study research is context-specific and value-bound, meaning that it facilitates the development of hypotheses and theories (Miles & Huberman, 1994). Unlike quantitative research methods where testing a predetermined hypothesis occurs and generalisability is possible in large sample sizes, this is not possible in case study research. Although development of hypotheses and theories in case study research may not hold generalisable status, such still carry validity and reliability (Cohen et al., 2018). Qualitative researchers therefore need to ensure the credibility of their research by addressing reliability, and internal and external validity (Merriman, 1998). In the present study, I maximised the credibility of the research by addressing reliability, and internal and external validity.

3.2.5.1 Reliability. Reliability within case study is the "replicability and internal consistency" evident within the study (Cohen et al. 2018, p. 318). This emerges from rigorous application of the methodology. In the present study, I conducted all aspects of data collection and analysis. I gathered data from a range of sources. Yin (2014) calls for a chain of evidence to be provided by the researcher describing every step in the research for other researchers including time and date during which data were collected (Appendix A1 and Appendix A2). This supported the credibility, reliability and validity of the research findings. Furthermore, I analysed the data using template analysis, following the seven steps as outlined by King & Brooks (2017). This is provided in the form of an audit trail (Appendix C5). Finally, I was mindful of researcher bias, and carefully completed quality checks with supervisors as part of the template analysis approach (King & Brooks, 2017) which I documented in my researcher reflective journal (Appendix C1).

3.2.5.2 Internal Validity. Internal validity within case study research refers to "ensuring agreements between different parts of the data, matching patterns of results" and that the findings and interpretations "derive from the data transparently" (Cohen et al. 2018, p. 318). In the present study, I devised the PL and data collection schedule concurrently. I engaged in meaningful reflection throughout the research study using a researcher reflective journal which supported the internal validity in the study. This meant that I was aware that pre-PL interviews would garner different data to that of post-PL interviews as it was intended that the six weeks of PL and coaching that would occur between those interviews would provide teachers with methodologies to support teaching for ToS in the primary school. I triangulated my findings across data sources to ensure that findings were derived transparently from the data.

3.2.5.3 External Validity. External validity within case study research is clarification of the "contexts, theory and domains to which generalization can be made" (Cohen et al. 2018, p. 318). As the present study was a single-site case study, it is not possible to generalise the findings to the population. However, Pring (2015) notes that despite the inability of case study to be generalisable to the population, it can develop awareness of similar possibilities in other situations.

3.2.5.4 Piloting. In order to maximise the validity and reliability of the research instruments a pilot study was undertaken as part of the research study. This allowed for adjustments to be made before the data collection began. Malmqvist et al. (2019) present findings supporting the importance of piloting in full-scale qualitative research projects, for example, in case study research where semi-structured qualitative interviews are used. Conducting pilot studies has been shown to enhance the validity and reliability of the data collection instruments (Gudmundsdottir & Brock-Utne, 2010).

I piloted the interview schedule, professional learning community sessions, and classroom observation schedule. Those involved in the pilot study included my supervisors and two teachers. First, my supervisors reviewed the research instruments. Regarding the classroom observation schedule in particular, feedback suggested that the statements of practice (Thomas & Mady, 2014) (Appendix B1) could be refined to reflect the communicative approach to teaching Irish (DE, 2019b). It was also suggested that an observation schedule be created in English for observing English lessons. I noted the suggestions in my researcher reflective journal for my own learning (Appendix B4) and made the necessary adaptations (Appendix B2 and Appendix B3).

I also piloted the research instruments with two teachers who were not participating in the study. I added to and reviewed my researcher reflective journal for my own learning (Appendix B5). For example, during the interview, I noticed that the teacher was unfamiliar with the term collaborative inquiry and the three-part cycle of dialogical sharing, taking action and reflecting. I made a note of this and made sure to take some time when introducing the terms. During the professional learning community session, I noticed a lack of awareness regarding the curriculum support materials. I made a note to incorporate the '*Teaching for Transfer of Skills Across Languages'* (Connaughton-Crean & Ó Duibhir, 2015) curriculum support material into the PL programme (Appendix A5). I noticed enthusiasm about the modelled lessons and the teachers asked if the task on the linguistic interdependence hypothesis could be conducted in pairs to support teacher collaboration. Overall, the pilot process was instrumental in gathering feedback and identifying adjustments that needed to be made to classroom observation schedules (English and Irish), interview schedules (pre-PL and post-PL), and professional learning community sessions.

Whilst case study research presents with many benefits, it is not without its limitations. Despite the opportunities to explore a problem in depth, case study does not provide opportunities to describe a problem in breadth. Similarly, testing hypotheses in case study research proves a challenge. Instead, hypotheses can only be developed in case study research. Finally, representation of complexity associated with case study

research means that lengthy descriptions and analysis can lack the simplicity offered by numeric data i.e. quantitative research methods.

Due to the context-specific and value-bound data collection, generation and analysis, case study results do not hold the same level of generalisability as that of quantitative research. Yin (2014) highlights the nature of case study research as analytic rather than statistical generalisation. As is reflected in the present study, large-scale, unbiased, systematic data collection is not possible in case study research and therefore does little to describe a problem in breadth. Shaughnessy et al. (2003) criticise case study research for the lack of high degree of control which creates problems in drawing inferences from the data set. The challenge of choosing, knowing and setting boundaries in case study research is highlighted by Cohen et al. (2018). Replication of the data across a variety of contexts and settings is not possible in case study research.

Testing of hypotheses and theories presents as a challenge in case study research. It is noted by Yin (2014) that case study research has limited generalisability. Indeed, Thomas (2010) notes that expecting generalisability in case study research is a misplaced hope. Instead, he suggests the use of the term 'exemplary knowledge' in respect of case study research as it lends itself to multiple interpretations. Researcher bias is of concern in qualitative studies and Shaughnessy et al. (2003) argue that case studies may be impressionistic due to the involvement of the researcher as self-reporter in the study. Therefore, it is important that the researcher disclose their positionality from the outset (see Chapter One). The interpretative approach of case study research renders it difficult for the researcher and the reader to separate knowledge from inference. Yin (2014) advocates for two main kinds of data collection. They are 1) actual data gathered, recorded and organised by entry, and 2) the researcher's ongoing analysis, report, comment and narrative on the data.

The lack of statistical, numeric and structured data means that findings are not easily open to cross-checking. In case study research, the researcher has to go back through the data several times to ensure that all the data fit the interpretations given and rival interpretations are considered (Yin, 2014). This was the case in the present study, where the researcher was required to complete quality checks during data analysis. Although the down-to-earth, intelligible detail that speaks for itself provided in case study research may appeal to a wider audience, the selective, biased, personal and subjective nature of case study research presents challenges for generalisability of the findings. This lack of simplicity can influence the reader's interpretation of the findings, despite quality checks. The trustworthiness of the case study is defined in terms of credibility, transferability, dependability and confirmability (Lincoln & Guba, 1985). I conclude the chapter by discussing the ethical considerations pertaining to the study.

3.2.6 *Ethical Considerations*

Ethical approval was granted by Dublin City University (DCU) Research Ethics Committee in advance of the research study (Reference Number: DCUREC/2023/179) (Appendix E1). The research study did not begin until ethical approval was granted. Access to the school was sought in writing from the School Principal and Board of Management. I provided the School Principal and Chairperson of the Board of Management with a copy of a recruitment advertisement (Appendix E2) and a plain language statement (Appendix E3) detailing the study. The School Principal and Chairperson of the Board of Management were invited to contact me at my DCU email address if they wished to partake in the study. On receipt of contact from the School Principal and the Board of Management, I provided a copy of the informed consent form (Appendix E4) which indicated the permission for the research to take place on the school premises. Following receipt of signed consent forms from both the School Principal and Chairperson of the Board of Management to undertake the research study in their school, they were asked to extend an invitation to teaching staff in their school. I provided the school with copies of teacher plain language statements (Appendix E5) and teacher informed consent forms (Appendix E6).

Following receipt of signed consent forms from the teachers to undertake the research study in their classrooms, I then provided the teachers with copies of parent/guardian plain language statements (Appendix E7) and parent/guardian informed consent forms (Appendix E8) to distribute to the parents/guardians of the children in their classrooms. Following receipt of signed consent forms from the parents/guardians in all classrooms, I then provided the teachers with copies of child plain language statements (Appendix E9) and child assent forms (Appendix E10) for the children in their classrooms. Following receipt of signed assent forms from the children in all classrooms, I then began the research study. I also completed Research Integrity Training at DCU (Appendix E11). I created a personal data security schedule (PDSS) (Appendix E12) to ensure all measures were taken in line with Dublin City University Data Protection Unit guidelines. Each participant was assigned a pseudonym to support the protection of their anonymity.

During the process of seeking consent and assent to conduct the research study, I made regular contact with the School Principal and teachers of the school to ensure I was available to answer any questions that arose from the participant group. I also sent email reminders to the teachers to remind parents/guardians about the study taking place in their child's classroom and that if any parent/guardian wished to contact me, I was available at my DCU email address to answer any questions. The School Principal and/or Board of Management were made aware that if they did not wish to participate in the study, or in the case that not enough teachers volunteered to participate in the study,

another primary school would be invited to participate. All plain language statements and informed consent/assent forms provided a data privacy notice which provided details of data protection around anonymity and confidentiality. Names were not recorded. Participants were informed that involvement in the research study was voluntary and participants were also informed of the dissemination of research findings.

3.3 Conclusion

This chapter presented the research design of the study. It was presented in two sections. Section One stated the research questions and the methodological paradigm of interpretivism. Qualitative research in the form of a case study was chosen for this study to provide an in-depth investigation and detailed descriptions. Purposeful or purposive non-probability sampling using interviews, professional learning community sessions, classroom observation schedules and a researcher's reflective journal were explained in Section Two. Steps taken to conduct template analysis of the data and timeline for the research study was outlined. Reliability, internal validity and external validity were discussed as strengths and limitations of case study design. Information regarding piloting and ethical considerations concluded the chapter. Chapter Four presents a discussion and analysis of the research findings.

4 Chapter Four: Discussion and Analysis of the Research Findings

I explore teacher pedagogical content knowledge (PCK) of ToS across languages through professional learning communities and coaching using a collaborative inquiry approach in this research study. The study was informed by DeLuca et al. (2015) which details the use of collaborative inquiry as a professional learning (PL) structure for educators. As described in Chapter Three, I developed a template to analyse the data based on DeLuca et al. (2015). I present examples of findings in response to the research questions in the context of ToS.

Template analysis (King & Brooks, 2018) was used to analyse all data in the present study. As noted, in reporting the findings, a primary focus was placed on the analysis of the post-PL interviews in particular, due to confinements in the length of the thesis. Examples of data from pre-PL interviews, recordings of the professional learning community sessions, classroom observation schedules and a researcher reflective journal were used to triangulate the data and to increase internal validity. Table 16 shows the template for collaborative inquiry as a PL structure for educators (DeLuca et al., 2015) that I created and used as a basis for my research study. A version of this template that includes examples of findings from the study is provided at Appendix C6.

Table 16

Template for collaborative inquiry as a professional learning structure for educators
(adapted from DeLuca et al., 2015, p. 643-4)

1. How does participation in a professional learning community with coaching support teachers', a) dialogical sharing, b) taking action to promote, and c) reflecting on teaching for ToS across English and Irish?		
Dialogical sharing	**Taking action**	**Reflecting**
Acts of shared participation	Teachers changing classroom pedagogy to try new approaches and determine their effects	Teacher 'reflection in action' through participation
Shared leadership and shared responsibility	Teachers working together to engage in the action of inquiry by researching, analysing and consolidating their learning	Teacher 'reflection on action' through reviewing previously established goals
Constructing a shared vision and negotiating shared values and goals		
The significance of personal and experiential knowledge in co-construction of meaning	Discussing and learning about participants' beliefs, pedagogical orientations and practices	
Using individual knowledge as basis for co-constructing deeper, shared knowledge	Discussing and learning about the developmental complexities of students	
	Discussing and learning about the written word of the curriculum document	

2. What are the other factors that, a) support, and/or b) hinder teaching for ToS across English and Irish?	
Other factors that support teaching for ToS	**Factors that hinder teaching for ToS**
Teacher pedagogical content knowledge	Lack of teacher competence and confidence in using and teaching Irish
Professional learning communities and coaching about teaching for ToS	Time constraints

There are two main sections in this chapter. In each section, I present, interpret and analyse the findings for the two research questions as presented in Table 17.

Table 17

Research questions for the present study

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1. How does participation in a professional learning community with coaching support teachers', a) dialogical sharing, b) taking action to promote, and c) reflecting on teaching for ToS across English and Irish?

2. What are the other factors that, a) support, and/or b) hinder teaching for ToS across English and Irish?

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4.1   Section 1 – Question 1

This section is divided into three sub-sections according to DeLuca et al.'s (2015) key characteristics of collaborative inquiry in the context of ToS. Each sub-section is further divided according to DeLuca et al.'s (2015) definition of each characteristic as set out in Table 16. The data sources I drew upon and the examples of findings from qualitative data analysis are displayed in Table 18.

4.1.1 Teachers' Dialogical Sharing About Teaching for ToS

This section presents the research findings and discussion for research Question 1 a) How does participation in a professional learning community with coaching support teachers' dialogical sharing about teaching for ToS across English and Irish? This section is divided into five sub-sections to reflect DeLuca et al.'s (2015) definition of dialogical sharing as evidenced in Table 18.

Table 18

Dialogical sharing (adapted from DeLuca et al., 2015, p. 643-4)

Definition of dialogical sharing (DeLuca et al., 2015)	Data sources within present study	Examples of findings from qualitative data analysis
Acts of shared participation	Post-PL interviews Researcher reflective journal	o) Importance of community in PL
Shared leadership and shared responsibility	Post-PL interviews Researcher reflective journal	o) Importance of community in PL s) Importance of reflecting
Constructing a shared vision and negotiating shared values and goals	PLC sessions Pre-PL interviews Researcher reflective journal	m) Experience of planning together q) Use of curriculum document
The significance of personal and experiential knowledge in co-construction of meaning	Post-PL interviews Pre-PL interviews PLC sessions Classroom observations Researcher reflective journal	x) Misconceptions of ToS i. Translating considered as ToS l) Teaching in an integrated way i. ToS as concepts of print v. The writing process vi. Etymology of language v) Difficulty of putting ToS into practice
Using individual knowledge as basis for co-constructing deeper, shared knowledge	Post-PL interviews PLC sessions Researcher reflective journal	h) Pedagogical approaches for English i. Using picture books as a resource e) One language as a springboard for another iii. Using pedagogical knowledge of teaching Irish to teach LOTEI

Dialogical sharing about teaching for ToS was evident in the data collected from interviews, professional learning community sessions, classroom observations, and the researcher reflective journal. Such examples include acts of shared participation, shared leadership and shared responsibility, constructing a shared vision and negotiating shared values and goals, the significance of personal and experiential knowledge in co-constructing meaning, and using individual knowledge as a basis for co-constructing deeper, shared knowledge. Examples of findings from the present study relating to DeLuca et al.'s (2015) definition of dialogical sharing are presented and analysed.

4.1.1.1 Acts of Shared Participation. Findings from the research study show that teachers participated with the researcher in a variety of acts of shared participation (DeLuca et al., 2015) about teaching for ToS. All teachers valued the professional learning community as a key factor that supported teachers to engage in dialogical sharing about teaching for ToS. A commitment of all members – teachers and facilitator/coach – to engage in open conversation (Nelson et al., 2010) supported dialogical sharing about teaching for ToS. During post-PL interviews, Niamh expressed the view that the purpose of the professional learning community is to be in "dialogue with one another", "share feedback" and ensure the "division of labour" (Niamh, post-PL interview). She continued:

> … That's what you need the community for … if you don't have a community for that, the level of take away from the curriculum, the strategies and the level of implementation, would not be the same standard as we're getting [with] the community (Niamh, post-PL interview).

Through acts of shared participation, teachers recognised that they were supported to "give something a go, you could fail, you could succeed" in the professional learning community and because of this, the professional learning community was considered a way of "improving yourself as a professional" (Mairéad, post-PL interview). This reflects the approach to PL as proffered by the Teaching Council's *Cosán* framework (Teaching Council, 2016). During post-PL interviews, reflecting on the professional learning community, Niamh stated, "I feel like the community is the best way for professional learning… for meaningful engagement" (post-PL interview). Mairéad echoed Niamh's thoughts about the value of the professional learning community as an opportunity for learning (Kezar et al., 2018; Stoll et al., 2006), recognising that it enabled teachers to engage in "sharing with …", "confiding in …" and "learning from one another" (post-PL interview).

My engagement in shared participation with the teachers as a facilitator/coach was noted by Tomás. He reflected on the reciprocal dialogical sharing amongst all members

including the researcher as a facilitator/coach in supporting teachers to engage in dialogical sharing about teaching for ToS:

> The four of us were very on board with it. We were all in ... there was interest in it. You were interested in it. And it was very much that we were working hard because you were working hard as well. There was a high expectation around us all. We all wanted to do a good job on it (Tomás, post-PL interview).

As facilitator/coach (Darling-Hammond et al., 2017; Desimone & Pak, 2017), I noticed that my contribution to the shared dialogue about teaching for ToS was central to the study. In my researcher reflective journal, I reflected on my role in the study as key to its enactment as teachers were eager to learn from me (researcher reflective journal). My commitment to the study was clear to Tomás and this strengthened teachers' commitment to the study also. These findings are echoed by Clauset and Murphy (2012) who found that acts of shared participation enhance commitment and collective responsibility and create a synergy that encourages improving practice. Teachers are required to improve their professional practice as part of the Code of Professional Conduct (Gilleece, 2023; Teaching Council, 2016).

4.1.1.2 Shared Leadership and Shared Responsibility. Findings from the research study show that teachers engaged in shared leadership and shared responsibility (DeLuca et al., 2015) about teaching for ToS. Some teachers had previous experience of teaching their class level and some teachers had also planned together for the teaching and learning of their class level, i.e. all the first class and second class teachers planned together. This was referred to by the teachers as the 'band'. Collective participation is noted as one of the five key features of effective PL (Desimone, 2009). Tomás referred to prior experience of a leadership role within the 'band'. He shared, "... So myself and Mairéad brought a lot of experience to the 'band' because we had been in the 'band' before" (Tomás, post-PL interview). DeLuca et al. (2015) note that teachers who engage in collaborative inquiry link participation to leadership opportunities.

Teachers recognised themselves as sharing the leadership and responsibility for implementing the curriculum for first and second class in the school (researcher reflective journal). Teacher leadership is noted as a critical factor in collaborative teacher inquiry (Nelson et al., 2010). Tomás expressed the nature of the collaborative inquiry to include opportunities to share responsibility amongst the teachers and the facilitator/coach, "… so yes, we were working together on it … so we were all talking together … the four of us plus you" (Tomás, post-PL interview). Reflecting a collaborative professionalism approach as described by Hargreaves and O'Connor (2018), teachers also led one another in the professional learning community through dialogically sharing about teaching for ToS in

one another's observation of the modelled lesson and in relation to implementing the learning activities in their classrooms. Tomás noted that shared leadership and responsibility was extended beyond the facilitator/coach to the teachers, "… And we got to hear about it from our colleagues" (Tomás, post-PL interview). This is echoed in research conducted by Nelson et al. (2010) where teachers who engage in the collaborative inquiry process are encouraged to lead their colleagues in meaningful discussions. Áine reflected positively on the shared leadership and responsibility to dialogically share about teaching for ToS, "it was really helpful and interesting … the teachers sharing how, their different approaches to a strategy [worked], was interesting" (Áine, post-PL interview). Reflecting Didion et al.'s (2020) conception of coaching, my role as facilitator/coach placed me in a position of leadership and responsibility. I was conscious of balancing my contribution with the teachers' contributions and also facilitating/coaching them to be confident in assuming leadership and responsibility, during and following the study (researcher reflective journal).

4.1.1.3 Constructing a Shared Vision and Negotiating Shared Values and Goals.

Findings from the research study show that teachers engaged in constructing a shared vision and negotiating shared values and goals (DeLuca et al., 2015) about teaching for ToS. At the outset of the study, teachers were asked, *what would help you to teach for the transfer of skills across Irish and English?* Teachers asked for support in how to use the curriculum document to teach for ToS (pre-PL interviews; researcher reflective journal). A key principle for success of an effective professional learning community is identifying a problem that the participants can come together on (Carroll et al., 2010; Deglau & O'Sullivan, 2006). This content-focused approach is also noted by Darling-Hammond et al. (2017) as a core feature of effective professional development. For example, during the pre-PL interviews, Mairéad felt that the Primary Language Curriculum (Department of Education (DE), 2019b) was something she was "still working with" and that she "would love to be able to go to the curriculum and be able to say … this is where you go, rather than start with an activity and then try and make the curriculum fit in" (pre-PL interview). This was also strongly echoed by Tomás (pre-PL interview). Learning new strategies (Darling-Hammond, 2016; Darling-Hammond et al., 2017) to teach for ToS (Ó Duibhir & Cummins, 2012) was a shared goal for both Áine and Niamh. In-person PL and coaching about teaching for ToS was welcomed by the teachers (researcher reflective journal) as Tomás noted that online PL lacked "external expertise or opinion on [teaching for ToS]" (Tomás, pre-PL interview). Furthermore, a "refresher course in professional Irish" was requested by Tomás as part of his shared vision (DeLuca et al., 2015) for ToS (pre-PL interview). As facilitator/coach, I worked with the teachers to develop a programme of PL (Appendix A5) that would support their vision insofar as possible within the scope of the study (researcher reflective journal).

Constructing a shared vision and negotiating shared values and goals are key principles in forming professional learning communities (Kennedy, 2019; Kezar et al., 2018; Nelson & Slavit, 2007). Tomás reflected on the importance of having a vision for ToS. Despite Tomás' self-reported confidence in Irish as extremely confident at the outset of the study (5 on a five-point Likert scale in teaching Irish), he noted an increase in his confidence as a result of the collaborative inquiry approach. "So, my confidence would have been high previously … But it's higher now" (Tomás, post-PL interview). PL and coaching about teaching for ToS supported teacher confidence in teaching for ToS. "Recognising that you have that skill [of ToS], that we are all teaching the skill [of ToS]" and identifying opportunities for teaching for ToS in the curriculum (Ó Duibhir & Cummins, 2012) maximised teacher confidence of teaching for ToS (Tomás, post-PL interview). An increased awareness (Andrews, 2003) about ToS in the curriculum supported teacher

confidence in teaching for ToS in their classrooms (Connaughton-Crean & Ó Duibhir, 2015). It is recommended by Darling-Hammond et al. (2017) that teachers engage in PL that is content-focused. Tomás shared:

> I suppose I now have the confidence to give the time to the explicit teaching of … very small level … To me as a teacher, then standing up and saying, I am spending time doing this because it helps them [the children] with the five basic sounds in Irish. So, there's a bit of confidence that I know that now and I can value them a bit more [Irish sounds] and my competence is also improved and that feeds into the confidence as well. I was very confident before. But in a lack of awareness sense … I didn't know what I didn't know (Tomás, post-PL interview).

Throughout the study, I adapted my approach as necessary to respond to the teachers dialogical sharing (DeLuca et al., 2015) about teaching for ToS as the facilitator/coach (researcher reflective journal). For example, following the first professional learning community session, teachers expressed that they would love to have more time to engage with the curriculum support materials (professional learning community sessions). In the sessions that followed, I adapted the schedule to include more time for exploration of the Primary Language Curriculum support materials (DE, 2019b) (professional learning community sessions). Teachers engaged in dialogical sharing (DeLuca et al., 2015) about the relevant support materials during all subsequent professional learning community sessions. Engaging in dialogical sharing about shared values and goals at the outset of the study supported teachers to develop a common vision for teaching and learning (Carroll et al., 2010; Nelson, 2009) and ensured that the PL would be beneficial to the participants as recommended by Darling-Hammond et al. (2017).

4.1.1.4 The Significance of Personal and Experiential Knowledge in Co-construction of Meaning. Findings from the research study highlight that teachers recognised the significance of using personal and experiential knowledge in co-constructing meaning (DeLuca et al., 2015) of ToS. Through dialogical sharing, teachers drew upon their existing conceptions and misconceptions of ToS to co-construct meaning of teaching for ToS. Such examples shared by teachers included the use of translation from English to Irish and Irish to English, teaching the concepts of print, and helping children with languages other than English or Irish (LOTEI). Áine described her personal and experiential understanding of ToS as "looking particularly at the similarities between the languages and the transfer of the basic literacy skills, like capital letters and full stops, the concepts of print" (Áine, post-PL interview) as reflected by Ó Duibhir & Cummins (2012). Niamh identified the writing process and the etymology of languages as examples of her personal and experiential knowledge of ToS. Classroom observations provided examples of translation from English to Irish and Irish to English and in discussion with the teachers this was described as an example of teaching for ToS (professional learning community sessions). I observed children saying and writing "It is raining" and "*Tá sé ag cur báistí*" [it is raining]" (classroom observations). Examples of this approach were also echoed by other teachers (Tomás & Mairéad, pre-PL interviews). Of note, an overreliance on translation from Irish to English was noted in the Chief Inspector's Report 2016-2020 (Department of Education & Inspectorate (DEI), 2022) during inspections carried out on pupil experience of Irish. A key function of my role as facilitator/coach in this study (Ciesielski & Creaghead, 2020; Goldsmith et al., 2014) was to enable teachers to recognise the significance of their personal and experiential knowledge (Borg, 2017) in co-constructing meaning (DeLuca et al., 2015) of ToS. This created a baseline from which I could support the teachers with their PCK (Shulman, 1987) of teacher language awareness (Andrews, 2003) of ToS across languages. As the study progressed, I considered the possibility that teachers might present a change in their understanding and practice of ToS following the study (researcher reflective journal). Effective co-construction of meaning with teachers is an essential means of ensuring that knowledge developed during the PL process remains, once intensive supports are removed (Mcwayne et al., 2020). Reflecting a Vygotskian sociocultural theory (SCT) approach to PL (Golombek & Johnson, 2019), Tomás referred to this co-construction of meaning about theory and practice as "hooks" upon which the teachers could hang their knowledge about ToS (post-PL interview).
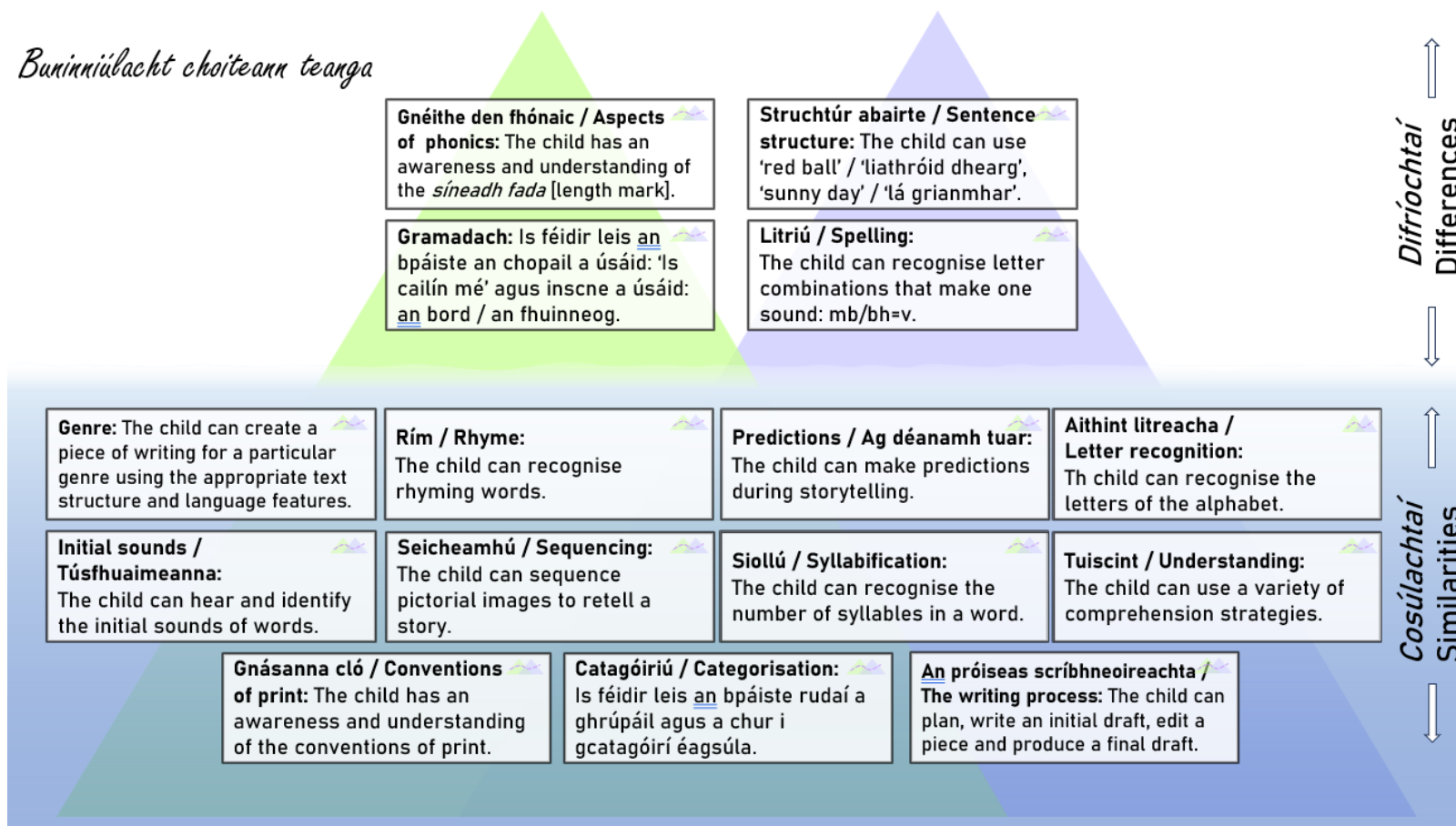
4.1.1.5 Using Individual Knowledge as a Basis for Co-constructing Deeper, Shared Knowledge. Findings from the research study show that teachers used individual knowledge as a basis for co-constructing deeper, shared knowledge (DeLuca et al., 2015) of ToS. Teachers co-constructed deeper, shared knowledge about ToS in considering that knowledge of teaching English could also be applicable to teaching Irish and LOTEI (Ní Dhiorbháin et al., 2024a; Ó Duibhir & Cummins, 2012). This is also reflected by Thomas and Mady (2014). All teachers expressed confidence in their approach to teaching English however, Tomás noted:

> … for the Irish language, teachers need to recognise … all that they *do* know in English and all the work we do with *any* English [picture book] is equally as applicable in an Irish [picture book] (post-PL interview).

Using picture books, teaching the alphabet and teaching phonics of and in the target language were identified as examples when teachers co-constructed deeper, shared knowledge about ToS in the present study. In the following example, I describe how teachers engaged in dialogical sharing (DeLuca et al., 2015) about a task I designed based on Cummins' linguistic interdependence hypothesis (1979, 1981) for teachers to engage with during professional learning community session #1 (Figure 10). An earlier version of this task was first introduced to me during my Bachelor of Education degree. The task engaged teachers in sharing their individual knowledge (DeLuca et al., 2015) in determining what aspects of language were similar and different across English and Irish (Ó Duibhir & Cummins, 2012). Figure 10 shows some of the similarities and differences between English and Irish using the 'iceberg model' (Cummins, 1979, 1981) designed by me. Features such as prediction, letter recognition, and the writing process are located beneath the water level to represent that they are features that are similar to both the English and Irish languages. Aspects of phonics, sentence structure and spelling are located above the water level to represent that they are features that are different between the English and Irish languages. Teachers were given the features and a blank 'iceberg model' and through dialogical sharing supported by me as facilitator/coach, teachers supported one another's understanding by engaging with the task.

Figure 10

Cummins' linguistic interdependence hypothesis (1981, 1991) task professional learning community session #1

Buninniúlacht choiteann teanga

Gnéithe den fhónaic / Aspects of phonics: The child has an awareness and understanding of the *síneadh fada* [length mark].

Struchtúr abairte / Sentence structure: The child can use 'red ball' / 'liathróid dhearg', 'sunny day' / 'lá grianmhar'.

Gramadach: Is féidir leis <u>an</u> bpáiste an chopail a úsáid: 'Is cailín mé' agus inscne a úsáid: <u>an</u> bord / an fhuinneog.

Litriú / Spelling: The child can recognise letter combinations that make one sound: mb/bh=v.

Genre: The child can create a piece of writing for a particular genre using the appropriate text structure and language features.

Rím / Rhyme: The child can recognise rhyming words.

Predictions / Ag déanamh tuar: The child can make predictions during storytelling.

Aithint litreacha / Letter recognition: Th child can recognise the letters of the alphabet.

Initial sounds / Túsfhuaimeanna: The child can hear and identify the initial sounds of words.

Seicheamhú / Sequencing: The child can sequence pictorial images to retell a story.

Siollú / Syllabification: The child can recognise the number of syllables in a word.

Tuiscint / Understanding: The child can use a variety of comprehension strategies.

Gnásanna cló / Conventions of print: The child has an awareness and understanding of the conventions of print.

Catagóiriú / Categorisation: Is féidir leis <u>an</u> bpáiste rudaí a ghrúpáil agus a chur i gcatagóirí éagsúla.

<u>An</u> **próiseas scríbhneoireachta / The writing process:** The child can plan, write an initial draft, edit a piece and produce a final draft.

Difríochtaí Differences

Cosúlachtaí Similarities

Reflecting on teacher engagement with this task (Hargreaves & O'Connor, 2018), some misconceptions (Borg, 2015) about similarities and differences across English and Irish were shared by the teachers. For example, *an próiseas scríbhneoireachta* [the writing process] was considered a difference between English and Irish, however, I prompted the teachers to consider the stages of the writing process such as planning, writing an initial draft, editing and producing a final draft, and to consider if this process was the same in both languages. The teachers then recognised the writing process as a similarity across English and Irish (researcher reflective journal). Exploring the linguistic interdependence hypothesis (Cummins, 1979, 1981) supported teachers' pedagogical knowledge (Shulman, 1987) of similarities and differences across English and Irish (Ó Duibhir & Cummins, 2012). Nelson (2009) expresses the importance of knowledge negotiation through dialogical sharing (DeLuca et al., 2015) among participants as a key feature of collaborative inquiry as it supports co-construction of deeper, shared knowledge. This is considered as being the most transformative teacher learning (Holmlund et al., 2012). The sharing of individual knowledge by teachers during the course of this research study acted as a basis for co-constructing deeper, shared knowledge (DeLuca et al., 2015) about ToS.

4.1.1.6 Section Summary. Findings show that through acts of participation, shared leadership and shared responsibility, with the support of me as facilitator/coach, teachers were enabled to engage in dialogical sharing (DeLuca et al., 2015) about teaching for ToS. The professional learning community sessions provided a space within which teachers and facilitator/coach engaged in shared participation (Clauset & Murphy, 2012) and learned from one another (Hargreaves & O'Connor, 2018). Teachers were aware of the shared leadership and shared responsibility in enacting the Primary Language Curriculum (DE, 2019b) in their classrooms. Teachers highlighted some examples of prior teacher leadership, with both Mairéad and Tomás as having such experience. Developing a shared vision and negotiation shared values and goals (Carroll et al., 2010; Deglau & O'Sullivan, 2006) provided the facilitator/coach with an understanding of how to adapt the research to support teachers (Darling-Hammond et al., 2017; Desimone & Pak, 2017) to engage in PL and coaching about teaching for ToS. As the teachers had worked together in the context of implementing the English curriculum in their school prior to this study, this supported the teachers in working together in the present study. Exploring personal and experiential knowledge of ToS provided examples of conceptions and misconceptions about ToS that were addressed using the Cummins' interdependence hypothesis (1979, 1981) task I designed during the professional learning community sessions. This proved to be an invaluable means of determining the prior knowledge of the teachers and devising a PL programme that would support their needs reflective of Vygotskian SCT approach to PL (Golombek & Johnson, 2019).

4.1.2 Teachers' Taking Action to Promote Teaching for ToS

This section presents the research findings and discussion for research Question 1 b) How does participation in a professional learning community with coaching support teachers to take action to promote teaching for ToS across English and Irish? The section is divided into five sub-sections to reflect DeLuca et al.'s (2015) definition of taking action as presented in Table 19.

Table 19

Taking action (adapted from DeLuca et al., 2015, p. 643-4)

Definition of taking action (DeLuca et al., 2015)	Data sources within present study	Examples of findings from qualitative data analysis
Teachers changing classroom pedagogy to try new approaches and determine their effects	Post-PL interviews PLC sessions Classroom observations Researcher reflective journal	i) Pedagogical approaches for Irish i. Using picture books as a resource ii. Teaching Irish alphabet iii. Teaching Irish phonics iv. Language specific resources e) One language as springboard for another ii. Drawing on home language (LOTEI) l) Teaching in an integrated way iii. From language segregation to integration h) Pedagogical approaches for English i. Using picture books as a resource ii. Teaching English alphabet
Teachers working together to engage in the action of inquiry by researching, analysing and consolidating their learning	Post-PL interviews Pre-PL interviews PLC sessions Classroom observations Researcher reflective journal	n) PL with coaching as beneficial iv. Learning from research r) Taking action supported teacher learning
Discussing and learning about participants' beliefs, pedagogical orientations and practices	Post-PL interviews PLC sessions Classroom observations Researcher reflective journal	n) PL with coaching as beneficial ii. Modelling of lessons ix. Learning from colleagues r) Taking action supported teacher learning

		o) Importance of community in PL
		h) Pedagogical approaches for English
		i. Using picture books as a resource
Discussing and learning about the developmental complexities of students	Post-PL interviews PLC sessions Classroom observations Researcher reflective journal	w) Underestimating language capacity of children u) Children who found Irish/English challenging supported by ToS l) Teaching in an integrated way f) Recognising the child as language aware
Discussing and learning about the written word of the curriculum document	Post-PL interviews Pre-PL interviews PLC sessions Researcher reflective journal	q) Use of curriculum document i) Pedagogical approaches for Irish l) Teaching in an integrated way ii. Change in teacher understanding of ToS – Gaeilge as focus

Taking action to promote teaching for ToS was evident in all of the data collection sources. Such examples are illustrative of teachers changing classroom pedagogy to try new approaches and determine their effects, teachers working together to engage in the action of inquiry by researching, analysing and consolidating their learning, discussing and learning about participants' beliefs, pedagogical orientations and practices, discussing and learning about the emotional and developmental complexities of students, and discussing and learning about the written word of the curriculum document. Examples of findings from the present study relating to DeLuca et al.'s (2015) definition of taking action are presented and analysed.

4.1.2.1 Teachers Changing Classroom Pedagogy To Try New Approaches and Determine Their Effects. Findings from the research study show that teachers took action to promote teaching for ToS by changing their classroom pedagogy to try new approaches and determine their effects (DeLuca et al., 2015). Examples include using Irish picture books (Holdaway, 1982), analysing the Irish and English alphabets, teaching Irish phonics, and using language-specific resources to highlight similarities and differences between English and Irish.

4.1.2.1.1 Using Irish Picture Books. Teachers took action to promote teaching for ToS by using Irish picture books to teach similarities and differences between English and Irish in an Irish picture book *An Tornapa Mór* [The Enormous Turnip] (classroom observations). During a modelled shared Irish reading lesson, I supported the children in identifying similarities between English and Irish such as capital letters as recommended by Ó Duibhir and Cummins (2012) (researcher reflective journal). Drawing the children's attention to the differences between English and Irish (Ó Duibhir and Cummins, 2012), I focused on the length mark used over the *'ó'* (Hickey & Stenson, 2011) in the Irish picture book *An Tornapa Mór* [The Enormous Turnip]. The length mark used over the *'ó'* is present in Irish but not in English (Hickey & Stenson, 2011). Using *Charmander Cosúlacht* [Similarity Charmander] and *Dexter Difríocht* [Difference Dexter] identification cards (Appendix F1), I explicitly taught the children about the length mark used over the *'ó'* as an example of a difference (Cummins, 1979, 1981) between English and Irish (Ó Duibhir & Cummins, 2012). Supporting the promotion of linguistic diversity, the children began identifying the length mark throughout the picture book and provided examples from LOTEI (classroom observations) (Dooly & Vallejo; 2020; Little & Kirwan, 2019; Ní Dhiorbháin et al., 2024a).

Teachers reported the rich learning opportunities following the removal of English workbooks in favour of English picture books in their classrooms prior to the study (researcher reflective journal). I observed Mairéad using the English picture book, Little Red Riding Hood, in an English shared reading lesson (classroom observations). Mairéad

noted "… in English, we would always start with a [picture book]" (post-PL interview). However, teachers were not using Irish picture books prior to the study (professional learning community sessions, post-PL interviews). Having observed the modelled lesson where I used an Irish picture book, teachers were making links to their pedagogical approaches in English (researcher reflective journal). This is reflective of the type of activities where teachers connect literacy practices across languages that support ToS across languages (Aldekoa et al., 2020; Ó Duibhir & Cummins, 2012; Thomas & Mady, 2014).

The teaching of Irish typically followed an Irish classroom workbook programme (classroom observations). Tomás did not favour the use of Irish workbooks as "sometimes our Irish work can be scripted" (post-PL interview). He continued:

> While positive in some ways, I can say [in first class], there's not a huge amount of engagement, there's not a lot of hooks in it. You are really just filling up a few words here are there without really having the bigger context … because I wouldn't have done as much work as I am doing now, on other [picture books], that tie into what we [are doing in this study] (Tomás, post-PL interview).

In speaking about the teaching of Irish, Tomás shared that Irish workbooks should be considered "much more as a tertiary resource rather than a primary resource (post-PL interview). Where access to Irish reading material is limited, children are not able to explore the similarities and differences between English and Irish (researcher reflective journal), and access to Irish picture books in the classrooms was limited prior to this study despite being described as a necessary condition for encouraging reading (Krashen, 2013). To support the teachers in promoting teaching for ToS, I provided the school with a set of Irish picture books (professional learning community sessions). "Moving away from" Irish workbooks towards identifying "*gutaí fada*" [long vowels] in Irish picture books was described as "really useful" (Áine, post-PL interview), echoing findings from Tse and Nicholson (2014). This was considered by the teachers as a starting point in planning for teaching for ToS. In speaking about how to take action to promote teaching for ToS, Mairéad shared:

> And now as a band in Irish, that's our first step …. starting again with a [picture book]. And then building some activities from [the Irish workbook] and finding resources outside of what we have (post-PL interview).

Using Irish workbooks supported teachers to teach Irish vocabulary (post-PL interviews). However, Irish workbooks did not provide the same opportunities to teach for ToS as using Irish picture books (professional learning community sessions). Using English or Irish picture books to teach for ToS had not been considered by the teachers prior to the study (professional learning community sessions) and had not been in evidence prior to modelled lessons (classroom observations). During the study, teachers took action to promote teaching for ToS by borrowing the pedagogical approaches used in

one language, to learn another language (Aldekoa et al., 2020; Ó Duibhir & Cummins, 2012; Thomas & Mady, 2014). For example, teachers considered the use of picture books in English to teach the narrative genre, and the use of picture books in Irish to teach *insint* [narrative] (researcher reflective journal). In the following example, Tomás shared the benefits of using English picture books and Irish picture books to promote teaching for ToS through the writing genres. He shared:

> "I wouldn't have tried teaching narrative in Irish before. I never used the word *insint* [narrative] with the children until this professional work we [are] doing at the moment. I suppose that's where, that's my level … of how I found in the [work]book … whereas now I have a bit more confidence and competence this time … we are trying to do *insint* [narrative] now, coming from the children based on [picture books] that we are doing" (post-PL interview).

As recommended by Ó Duibhir and Cummins (2012) and evident in the integrated approach of the Primary Language Curriculum (DE, 2019b), using English picture books and Irish picture books to promote teaching for ToS was considered a positive change to classroom pedagogy by Tomás, "… I think, the quality of my teaching has improved because I'm integrating, [the languages] much more so …" (Tomás, post-PL interview).

4.1.2.1.2   Teaching the Irish Alphabet and English Alphabet. Teachers took action to promote teaching for ToS by teaching the children about similarities and differences between the English and Irish alphabets. The alphabetic orthography of the English and Irish languages (Hickey & Stenson, 2011) provides the opportunity to explore similarities and differences between the languages (Ó Duibhir & Cummins, 2012). During professional learning community session #1, I provided the teachers with a learning activity I designed based on the English and Irish alphabets (Figure 11) which teachers then implemented in their classrooms with support from me as facilitator/coach. During the process, I coached the teachers on how to teach the children to identify similarities and differences between the alphabets. Teachers expressed that they had not seen or considered this type of activity in Irish prior to the research study (professional learning community sessions).

Figure 11

Learning Activity #1 – Alphabet
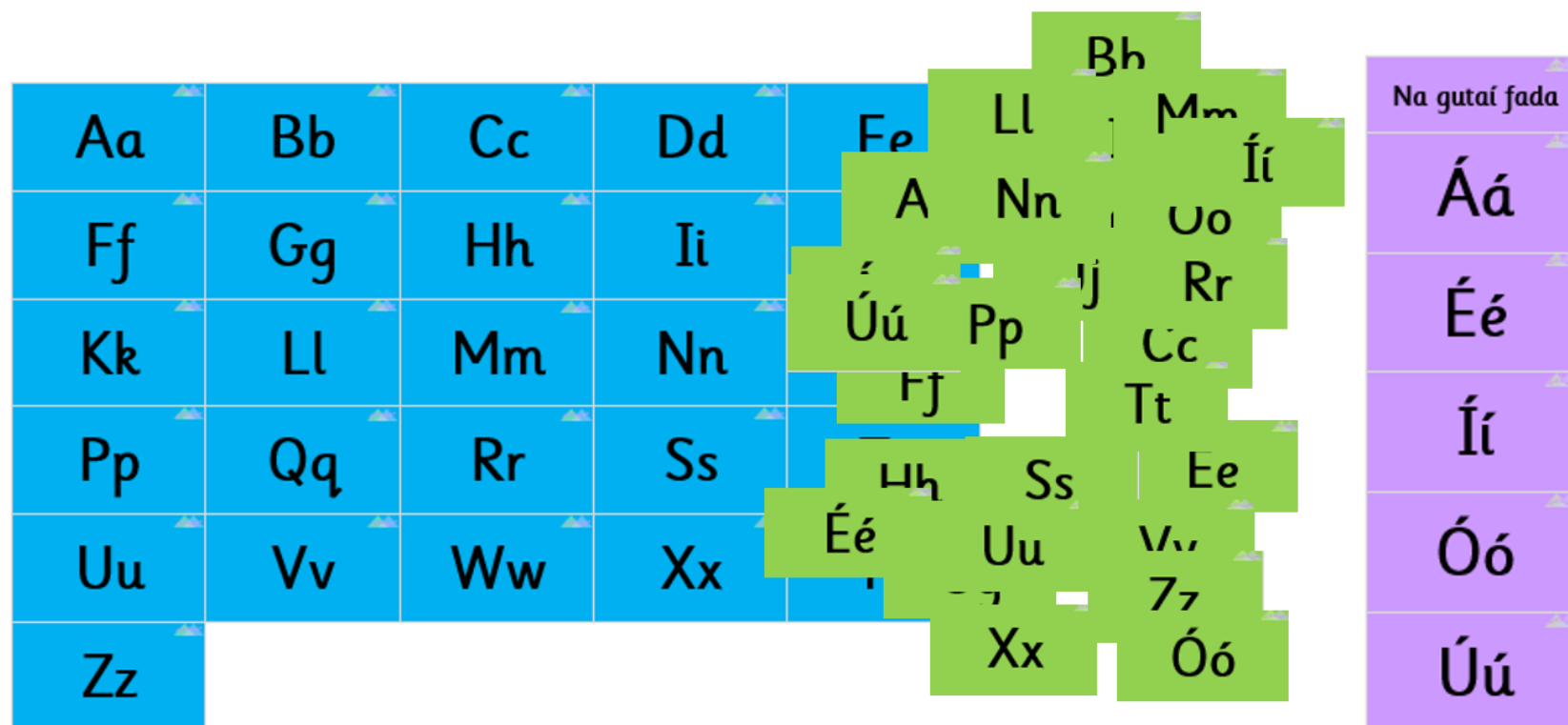
During the activity, I noticed that teachers were not only learning how to teach (Shulman, 1987) for ToS, but also learning about (Andrews, 2003) the similarities and differences between the languages (Ó Duibhir & Cummins, 2012; Thomas & Mady, 2014) (researcher reflective journal). During the classroom observations that followed, I supported the teachers in implementing the alphabet learning activity in their classrooms (researcher reflective journal). Attention was drawn to the length mark (Hickey & Stenson, 2011) as a difference between the languages and some letters were present in English but not in Irish (Cummins, 1979, 1981). Mairéad commented on the importance for the children to "see the alphabet *as Gaeilge* [in Irish] and in English" (post-PL interview). As highlighted by Hickey and Stenson (2011), all teachers reflected on the need for children and teachers, to learn about the alphabet associated with the languages they are learning and teaching (Andrews, 2003; Shulman, 1987) (professional learning community sessions). During initial classroom observations, I did not observe the Irish alphabet in the classroom environment (classroom observations). Teachers recognised that analysing the English and Irish alphabets (Ó Duibhir & Cummins, 2012) provided teachers with the opportunity to teach for ToS. Recognising the potential for ToS in relation to teaching languages generally, Áine suggested, "You could look at the similarities and differences between the two alphabets … and identify the letters that they have or don't have" (post-PL interview) (Bialystok et al., 2005; Thomas & Mady, 2014).

4.1.2.1.3   *Teaching Irish Phonics.* All teachers were enthused by the explicit focus on teaching Irish phonics and recognised its capacity to support teachers to take action to promote teaching for ToS. During classroom observations at the outset of the study, I recorded one incidental example of a teacher teaching Irish phonics (classroom observations). Tomás taught the children the broad consonant sound /d/ in Irish and referred to this as the "/d/ *leathan* [broad]" in his teaching. He encouraged the children to think of other words with the same sound. The children shared words such as "*dún* [to close]" and "dinner" (in English) (classroom observations). Tomás explained to the children that /d/ *leathan* [broad] is different in Irish and English (Hickey & Stenson, 2011). The approach to teaching Irish phonics was based on the content of the Irish workbook and the teacher's knowledge (classroom observations; researcher reflective journal). Despite the recommendation to plan for transfer (Cummins, 2017; Ó Duibhir & Cummins, 2012; Thomas & Mady, 2012), Tomás noted during post-PL interviews that his planning would not "have reflected the detail of this [teaching /d/ *leathan* [broad]" (post-PL interview) prior to the present study.

Throughout the study, I coached the teachers in teaching Irish phonics as an explicit difference between the English and Irish languages (Hickey & Stenson, 2011) (professional learning community sessions). The Programme of PL (Appendix A5)

incorporated modelled lessons on the ten Irish vowel sounds (Hickey & Stenson, 2011) and teachers were provided with resources I designed to support them in implementing the learning activities in their classrooms (Ó Duibhir, 2016; Schwinge, 2017). For example, during a modelled shared Irish writing lesson, I drew the children's (and teacher's) attention to the length mark used over the *'í'* as an example of another difference between English and Irish (Hickey & Stenson, 2011). Reflecting the work of Thomas and Mady (2014) and the recommendations by Ó Duibhir and Cummins (2012), the children became confident in identifying similarities and differences between English and Irish in another Irish picture book *Cinnín Óir agus na Trí Bhéar* [Goldilocks and the Three Bears] using the *Charmander Cosúlacht* [Similarity Charmander] and *Dexter Difríocht* [Difference Dexter] identification cards (Appendix F1).

In the following example, I share how I coached the teachers through active learning during professional learning community session #3 using a learning activity (Figure 12) which teachers then implemented in their classrooms. Active learning is noted as key for effective PL (Ciesielski & Creaghead, 2020, Desimone & Pak, 2017; Kraft et al., 2018). The children decoded consonant-vowel-consonant words using Elkonin boxes (Clay, 1993; Elkonin, 1963). Reflecting research conducted by Ross and Joseph (2018), the children listened to the teacher dictating and decoding a word using flashcards. Teachers were surprised to see how readily the children drew on their prior decoding skills (Melby-Lervåg and Lervåg, 2011; Thomas & Mady; 2014) in English to complete the task for words in Irish (Ó Duibhir & Cummins, 2012). Children identified the order in which the sounds could be represented in the Elkonin boxes (researcher reflective journal). Again, teachers expressed that they had not seen or considered this type of activity in Irish prior to the research study (professional learning community sessions). Mairéad and Niamh were particularly surprised at how well the children 'took to' learning activity #3 – Elkonin boxes of consonant-vowel-consonant words in Irish (professional learning community sessions). During the following classroom observations, I supported the teachers in teaching using the Elkonin boxes activity in their classrooms as a facilitator/coach (Desimone & Pak, 2017; Kraft et al., 2018) (researcher reflective journal). Attention was drawn to the length mark (Hickey & Stenson, 2011) as a difference between the languages (Cummins, 1979, 1981) and some letters were present in English but not in Irish. Niamh noted:

> The biggest opportunity is that the entire skill set for sounding out words, writing words, building words, all of that is there from English and that we can just tap into it for Irish (post-PL interview).

Niamh recognised that the children already possessed "well-established" skills from learning English and that teachers could use this knowledge in teaching Irish phonics (post-PL interview). Noting that children initially learn English phonics when starting

school, Niamh referred to the feasibility of children learning Irish phonics sometime later. In speaking about the Elkonin boxes learning activity, Niamh recognised, "If you're going to do this [decoding in Irish] a year later, they know that inside out" (post-PL interview). During the Elkonin boxes learning activity (Figure 12), Niamh noticed and reported that following explicit teaching of Irish vowel sounds (Hickey & Stenson, 2011), "There was no explanation needed. They could just do it. Because they're so well practised at it [decoding]" (Niamh, post-PL interview).

Figure 12

Learning Activity #3 – Elkonin boxes
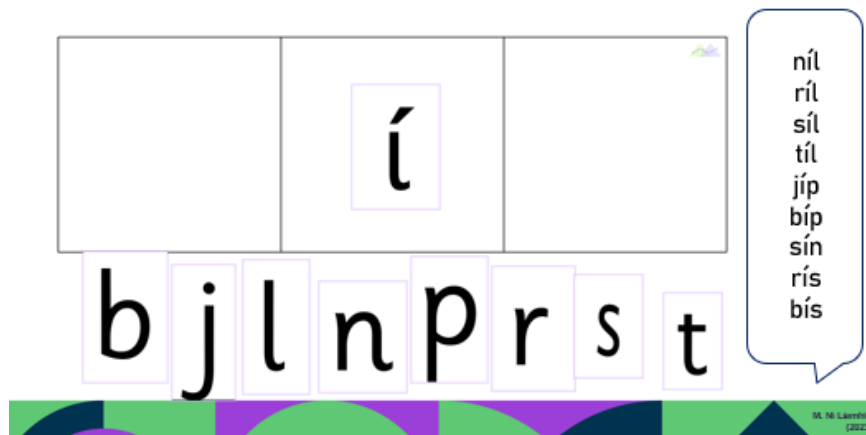
Slide 1 of 2
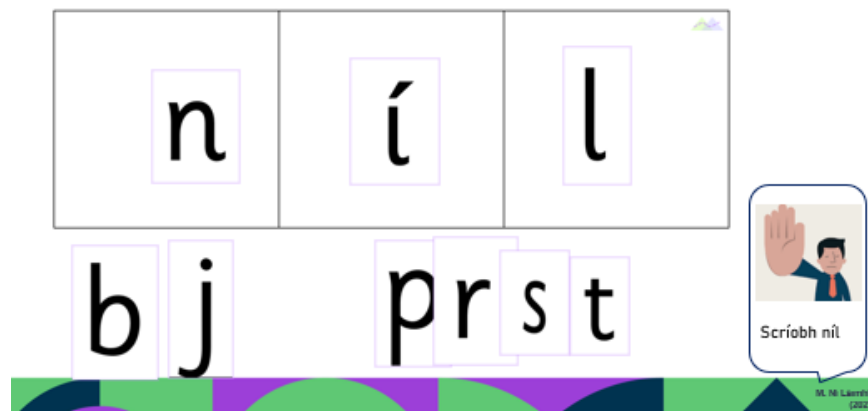
Slide 2 of 2

Throughout the study, all teachers incorporated teaching for ToS through teaching Irish phonics by using the strategies they already used (Thomas & Mady, 2014) to teach English phonics, to teach Irish phonics (Ó Duibhir & Cummins, 2012). In this way, teachers transferred their pedagogical approaches from English to Irish. For example, during post-PL interviews, Tomás commented on teacher PCK (Shulman, 1987) to teach Irish phonics as "crucial for further development" (post-PL interview) as reflected by Hickey and Stenson (2011). Tomás reflected on his lack of PCK (Shulman, 1987), despite determining his confidence in teaching Irish as extremely confident (5 on a five-point Likert scale in teaching Irish) at the beginning of the study (post PL-interview). He stated, "Before, I didn't know how many vowels [there were in Irish], I didn't know the story with the teaching the /i/ and /í/" (Tomás, post-PL interview). In his post-PL interview, Tomás expressed that he valued the explicit focus on teaching children to recognise the difference between Irish vowel sounds as a part of the study, " … recognising that /á/ and /a/ are separate, even though they can look similar. They are separate sounds" (Tomás, post-PL interview) as highlighted by Hickey and Stenson (2011).

Teaching Irish vowel sounds as the starting point for Irish phonics (Hickey & Stenson, 2011) was the 'main takeaway' of the collaborative inquiry approach for all teachers (researcher reflective journal). Teachers did not report on transferring pedagogical approaches from English to Irish prior to the study. Teachers confirmed the gap in knowledge that had existed for them at the outset of the study:

> None of us saw this gap … For all of us it was the same … Four of us had a gap and we didn't know we had it. The phonics gap was missing for all of us … The idea of, sounding it out and decoding it and applying the phonics processes in English directly to Irish ... none of us had been doing that [teaching Irish phonics] (Niamh, post-PL interview).

For Áine, despite determining her confidence in teaching Irish as quite confident (4 on a five-point Likert scale in teaching Irish) at the beginning of the study, like Tomás, she recognised that Irish phonics (Hickey & Stenson, 2011) was an important aspect of teaching Irish in addition to teaching Irish vocabulary that she had not considered prior the study. She stated:

> It's clearer to me that there's much more to [teaching Irish] … even the phonics and the sounds… it's more than just teaching the vocabulary to the topic that you are on. Phonics is more useful and helpful to them in the long run to actually start at the beginning from where you would in your English phonics … (Áine, post-PL interview).

Teaching Irish phonics was a key learning moment for all teachers in changing their classroom pedagogy to try new approaches and determine their effects (DeLuca et al., 2015). During post-PL interviews, teachers reflected on changes to their classroom pedagogy throughout the study from segregated teaching of languages to a more

integrated approach (Aldekoa et al., 2020; Cummins, 1979, 1981; DE, 2019b; Ó Duibhir & Cummins, 2012; Thomas & Mady, 2014). Mairéad stated, "I thought before I didn't see them [English and Irish] as two separate subjects, but I definitely don't now" (post-PL interview). Tomás echoed Mairéad's thinking and in reflecting on the 1999 Primary School Curriculum (DES, 1999) noted, "With the previous curriculum, it was two separate areas altogether. Whereas now, language is language" (Tomás, post-PL interview). Niamh shared similar reflections of changes in her thinking about pedagogical approaches to English and Irish that were more reflective of an integrated approach (Cummins, 1979, 1981; DE, 2019b; Ó Duibhir & Cummins, 2012).

> I taught in two very different ways. I taught English with decoding and phonological awareness. And my approach to Irish had been oral language and then building up the sight words … I had never ever approached decoding in phonics in Irish … And now I see that both of [the languages] can be taught with the same approach of decoding and phonological awareness (Niamh, post-PL interview).

Shifts in practice such as changes in classroom pedagogy are deemed most likely to occur when teachers engage in PL and coaching that involves practice-level inquiry (Butler & Schnellert, 2012; Darling-Hammond et al., 2017; Desimone, 2009; Labone & Long, 2016). As teachers reported the "phonics gap was a gap for all of us" (Niamh, post-PL interview) and welcomed the explicit focus on "*gutaí fada* [long vowels] and the *gutaí gearra* [shot vowels]" (Tomás, post PL-interview), teachers were motivated by their positive experiences of teaching for ToS through an explicit focus on teaching Irish phonics as a difference between English and Irish (Ó Duibhir & Cummins, 2012).

4.1.2.2 Teachers Working Together to Engage in the Action of Inquiry by Researching, Analysing and Consolidating their Learning. Findings from the research study show that teachers took action (DeLuca et al., 2015) by engaging with the relevant literature and implementing the learning activities in their classrooms.

4.1.2.2.1 Engaging with the Literature. As teachers expressed an interest in engaging with the curriculum and its support materials during pre-PL interviews, I incorporated opportunities for teachers to read, discuss and analyse relevant literature about ToS during the study (professional learning community sessions; Appendix G1). Taking action to promote teaching for ToS by engaging with the literature (DeLuca et al., 2015) supported teachers to consolidate their learning about ToS.

Teachers reported being unaware of the support materials, 'Teaching for Transfer of Skill Across Languages' and '*Fónaic'* [Phonics] prior to the research study (professional learning community sessions). All teachers engaged with the curriculum document and associated support materials on a weekly basis and linked theory to practice through the

collaborative inquiry approach. The approach reflected that of Golombek and Johnson's (2019) Vygotskian SCT where theory guides practice and practice shapes theory. At the outset of the study, I noticed that examples of pedagogical approaches for teaching for ToS were limited during classroom observations and that this may have been influenced by a lack of opportunity to engage with the literature (classroom observations). Of note, Cummins' (2017) insights were welcomed by Tomás. He said, "some of the studies you showed us … Cummins, yeah … I liked that piece from him and his influence throughout" (Tomás, post-PL interview). In the following example, Tomás explained that having the opportunity to engage with the research helped to validate his work. He shared:

> "[Cummins is] informing my view of the new curriculum and I feel like what I am doing is valuable … It's not just me doing it because I think it is important. It is important because it's recognised as important (Tomás, post-PL interview).

I reflected on the necessity for teachers to engage with the relevant literature (Kennedy, 2014; Kezar et al., 2018) as a means of rationalising their teaching for ToS (researcher reflective journal). Cochran-Smith and Lytle (2009) highlight the importance of constructing new knowledge by linking theory and practice. Engaging in practice of praxis (Ritchie, 2023) was a regular feature of this study. The role of teacher 'as researcher' consolidating their learning is recognised and encouraged by the Teaching Council of Ireland (Teaching Council, 2016).

4.1.2.2.2   ***Implementing the Learning Activity.*** Taking action to promote teaching for ToS by implementing the learning activities supported teachers to consolidate their learning about ToS by making connections between what teachers had observed during modelled lessons and explored during professional learning community sessions (professional learning community sessions). Through active learning, by implementing the learning activity, teachers were coached and provided with expert support by the researcher as facilitator/coach (Darling-Hammond et al., 2017; Desimone & Pak, 2017). Niamh identified that observing the modelled lesson meant that, "… You saw how it would work, and you got competent because you [the researcher] had already done it" (Niamh, post-PL interview). Teachers were surprised that the children were recognising the /í/ sound in Irish and using it to construct words (researcher reflective journal). Reflecting the core features of effective PL (Darling-Hammond et al., 2017; Desimone & Pak, 2017), for Tomás, the opportunity to teach the learning activity "in our own classroom is the part where we really assimilated it" (post-PL interview). The modelled lessons and coaching provided the teachers with the confidence to implement the learning activity (classroom observations). For both Mairéad and Tomás particularly, teaching the learning activity was a key moment in consolidating their learning about promoting teaching for ToS (post-PL interviews). Tomás said, "There was so much thought [in doing the activity], and you can take that idea of making hooks in your brain, connections in your brain, in getting to do it…" (Tomás, post-PL interview). The approach taken to implementing the learning activity in the present study is reflective of Darling-Hammond et al.'s (2017) and Desimone & Pak's (2017) core features of effective PL. Teachers valued PL and coaching that 'showed' them (Desimone & Pak, 2017) how to teach for ToS in their classrooms. Despite Irish being the subject that Niamh considered herself to be "least confident at teaching across the curriculum", she reported that "I would say out of the four of us [teachers], you probably changed my practice most" (post-PL interview). For Niamh, learning about teaching for ToS and the experience of learning that ToS 'works', changed her outlook on teaching for ToS. She expressed:

> I just feel more confident that yes, I have something here. I know this works. I know how to approach it. I even feel enthused and [am] confident [that] it's manageable … sometimes you can feel overwhelmed. But the way you have approached it … All of us have motivation and we feel it's doable (post-PL interview).

4.1.2.3 Discussing and Learning about Participants' Beliefs, Pedagogical Orientations and Practice. Findings from the research study show that teachers took action to promote teaching for ToS by discussing and learning about participants' beliefs, pedagogical orientations and practice (DeLuca et al., 2015).

While teachers were aware of one another's beliefs, pedagogical orientations and practices from working together prior to the study in relation to the teaching of English, this

was not the case in relation to the teaching of Irish (researcher reflective journal). Engaging in a collaborative inquiry approach (DeLuca et al., 2015) and applying a Vygotskian SCT lens (Golombek & Johnson, 2019), Áine reported that, "It was really useful to hear about other teachers' strategies and their teaching methods because it is not something that we would really discuss when we are planning" (post-PL interview). Teachers reported that professional learning community sessions where teachers discussed and learned about participants' beliefs, pedagogical orientations and practice, provided the "lightbulb moments" (Niamh, post-PL interview) of realisation that the children "had a better understanding" of languages as a result of promoting teaching for ToS in their classrooms (Áine, post-PL interview). Tomás shared an example of how he used an Irish poem to teach the children to learn some of the Irish sounds (classroom observations). This sharing of expertise amongst teachers is key to contemporary PL (Borg, 2015) and teacher belief about language teaching (Borg, 2017). The professional learning community sessions proved helpful for teachers to discuss how the children responded to the modelled lessons and learning activities (researcher reflective journal). All teachers acknowledged that the modelled lessons and implemented learning activities were not typical of their day-to-day teaching prior to the study. Áine noted, "the things that we were doing [prior to the study], weren't really things they had seen before in *Gaeilge* [Irish]" (post-PL interview).

Nelson et al. (2010) state that engaging in collegial conversations about beliefs, pedagogical orientations and practices is a key element of productive collaborative inquiry. Having collegial conversations about the modelled lessons and implemented learning activities during the professional learning community sessions provided the space for teachers to discuss and learn about one another's beliefs, pedagogical orientations and practices (DeLuca et al., 2015). Taking action in this way focuses on discussion over dialogue (Nelson et al., 2010). Teachers held discussions about their beliefs, pedagogical orientations and practice in the present study.

4.1.2.4 Discussing and Learning about the Developmental Complexities of Students. Findings from the research study show that teachers took action to promote teaching for ToS by discussing and learning about the developmental complexities of students (DeLuca et al., 2015).

Teachers referred to the way in which modelled lessons and implemented learning activities were received by the children in their classrooms and how this caused teachers to recognise and reconsider their expectations of the children's learning. Of note, teachers referred to underestimating the language ability of children (researcher reflective journal). For example, during modelled lessons and implemented learning activities where children looked to identify similarities and differences between the Irish and English alphabets

(Cummins 1979, 1981; Ó Duibhir & Cummins, 2012), Mairéad was surprised at "how naturally the children just adapt and take on that transfer. It's unbelievable" (post-PL interview). Áine was surprised at how the children were "able to identify the differences between the alphabets and the sounds" (post-PL interview). Áine shared:

> … there's so much more about it I think that is easy at the beginning, and that they're able to do, they understand the difference, and that there is a difference between the alphabets and the different sounds (post-PL interview).

Áine acknowledged that she "would have thought [identifying differences between the alphabets was] too difficult" prior to the research study (post-PL interview). This echoes the influence of teacher cognition (Borg, 2017) in that teacher beliefs relate to what teachers do. Teacher expectations of children's ability to "take on transfer" were misaligned with what the children were responsive to during modelled lessons (Mairéad, post-PL interview).

During the teaching of Irish phonics, Niamh began to realise that "when I was building awareness of the *gutaí* [vowels], they were … we were making connections to English and then some of the connections they've made have gone to lessons, English lessons we haven't even taught yet" (post-PL interview). Children's ability in both languages was strengthened as a result of promoting teaching for ToS (Aldekoa et al., 2020; Ó Duibhir & Cummins, 2012; Thomas & Mady, 2014), where Niamh acknowledged that teaching for ToS has "strengthened both" (post-PL interview). Niamh recognised that she had learned about her expectations of the children and the children's ability to engage with the learning and that, "They probably could have done it [decoded more complex words] today I just didn't see [to] push them enough on it. But they would be able to" (Niamh, post-PL interview).

Teachers also recognised that children who found Irish/English challenging were supported by promoting teaching for ToS as it offered an opportunity for further exploration and consolidation of the similarities and differences across languages (classroom observations). During professional learning community sessions and post-PL interviews, teachers shared examples of such learnings. Both Niamh and Mairéad were surprised at the children's receptiveness to teaching for ToS (researcher reflective journal). Niamh shared, "one of my students, who wouldn't be the most academically strong asked, 'Could we do the Irish words now?'" (Niamh, post-PL interview). Children for whom Irish/English was challenging expressed an interest in activities that they were familiar with in English, in Irish. In acknowledging learner diversity, teachers were encouraged to create new ways to engage students in their lessons (Messiou et al., 2016). Mairéad shared, "children who are weaker, or in languages, who are struggling a bit … they come on so much from having that natural progression [of transferring skills from one language to another] because [they are] so used to it in English" (Mairéad, post-PL interview). Building on the

children's prior knowledge of the skill of decoding in English provided children who found Irish/English challenging with the confidence and motivation to transfer their skills to learn Irish (Cummins 1979, 1981).

4.1.2.5 Discussing and Learning about the Written Word of the Curriculum Document. Findings from the research study show that teachers took action to promote teaching for ToS by discussing and learning about the written word of the curriculum document (DeLuca et al., 2015) (researcher reflective journal). As recommended by Cummins (2017) and Thomas & Mady (2014), engagement with curriculum documentation supported greater curriculum alignment with teaching for ToS. This was evident in relation to the teaching of Irish reading in particular for Tomás. He reported, "I like that the standard of reading is going to be more, a bit more structured now, from this piece of work … from our engagement with the curriculum" (post-PL interview). The prevalence of the curriculum document and its materials throughout the study helped teachers to validate their work in promoting teaching for ToS and value of ToS within the curriculum (researcher reflective journal). Tomás continued, "Now also I am recognising it more, as in … in the curriculum … [ToS] is valuable" (post-PL interview). Teachers worked with the learning outcomes of the Primary Language Curriculum (DE, 2019b) during each modelled lessons in their classrooms as shown in Figure 13.

Figure 13

Learning outcomes used during modelled lessons

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Mairéad, who wanted to learn more about how to use the curriculum (pre-PL interview), reflected on her engagement with the written word of the curriculum document as a result of participating in this study. She shared:

> … when I started, when we started this process, I remember in my initial interview … I just really did not know … I was trying my best to use the new curriculum and trying to integrate it … If there was one thing I could take from it, it would be to be able to do that" (post-PL interview).

Mairéad wanted to learn how to change her practice in teaching for ToS by placing the curriculum at the forefront of her planning for ToS (Cummins, 2017, Thomas & Mady, 2014). She noted that at the outset of the study:

> We were kind of using our lessons and then trying to find it in the curriculum, rather than, whereas now, we're using the curriculum first, which is just fantastic to be able to do that" (post-PL interview).

Familiarity with the curriculum document as a result of the collaborative inquiry approach enabled teachers to have greater curriculum alignment within and across grades (DeLuca et al., 2015) and supported teachers to promote teaching for ToS (Connaughton-Crean & Ó Duibhir, 2015; Ó Duibhir & Cummins, 2012). Mairéad noticed that, "… Because we're so much more familiar with the curriculum, I feel like we're starting to match that in … and I really feel that I'm using that now" (Mairéad, post-PL interview). Darling-Hammond et al. (2017) highlight the necessity for teachers to engage with the curriculum as part of PL. During professional learning community sessions, teachers took action to promote teaching for ToS by engaging with the specific links between the Irish and English curriculum documents (DE, 2019b) and this helped teachers to "really see where we were picking from, where we were getting whatever we were teaching, where it's from in the curriculum" (Mairéad, post-PL interview). Darling-Hammond et al. (2023) note that it is from an understanding of the curriculum document that teachers must then select materials and develop lessons that can achieve learning outcomes. Mairéad found that the approach used in the present study of beginning by developing an understanding of the Primary Language Curriculum (DE, 2019b) was " … almost an instruction to it … because with the little parts that you've been giving out [learning outcomes] … it was just the parts that we needed" (post-PL interview).

Prior to the study, Niamh commented on having "passively read the curriculum many, many times" and highlighted that "words are just words until you're looking for something" (post-PL interview). Using the curriculum to teach Irish phonics supported Niamh to engage with teaching for ToS. She shared:

> Now when I'm now looking at phonics and I'm trying to think, okay, how can I approach that? Now we're going back and I'm reading for purpose in the curriculum

versus just reading it and that's the difference. Every teacher has read the curriculum but the reading for purpose is really, how we get to learn from it" (post-PL interview).

Tomás recognised that the study provided an explicit focus on particular aspects of the Primary Language Curriculum (DE, 2019b) and noted, "I have a much better understanding of the curriculum now and what is going to be involved with it" (post-PL interview). This is echoed by Hammerness et al. (2005), who identify that an understanding of the subject matter and curriculum supports teachers to teach in ways that fosters deep learning.

4.1.2.6   Section Summary. Teachers changed their classroom pedagogy by trying new approaches such as the use of Irish picture books, teaching the Irish and English alphabets, and teaching Irish phonics. Teachers engaged with the literature and implemented learning activities provided to them by the facilitator/coach. Learning about one another's beliefs, pedagogical orientations and practice supported teachers to take action to promote teaching for ToS. Recognising that teacher expectation of children's learning plays a part in how and what happens in the classroom was key to this study. Engagement with the curriculum document provided a key focus for teachers to teach for ToS. Taking action by teaching for ToS provided teachers with the confidence to enact ToS in their classrooms. This enabled meaningful engagement and successful experiences of teaching for ToS.

4.1.3   Teachers' Reflecting on Teaching for ToS

This section presents the research findings and discussion for research Question 1 c) How does participation in a professional learning community with coaching support teachers' reflecting on teaching for ToS across English and Irish? The section is divided into two sub-sections to reflect DeLuca et al.'s (2015) definition of reflecting as shown in Table 20. As noted in Chapter Three, the study adopted the use of Schön's (1991) reflection model – 'reflection in action' and 'reflection on action'. This model is referred to in the literature on collaborative inquiry (DeLuca et al., 2015). 'Reflection in action' occurs as the event is happening. It involves making decisions about how to act at the time and involves immediate actions. 'Reflection on action' is thinking about an event that has happened and what might be done differently if it were to happen again. It considers the new information gained.

Table 20

Reflecting (adapted from DeLuca et al., 2015, p. 643-4)

Definition of reflecting (DeLuca et al., 2015)	Data sources within present study	Examples of findings from qualitative data analysis
Teacher reflection in action through participation	Post-PL interviews PLC sessions Classroom observations Researcher reflective journal	o) Importance of community in PL s) Importance of reflecting on practice p) PL as voluntary participation and openness l) Teaching in an integrated way e) One language as a springboard for another i. ToS as 'value-added' i) Pedagogical approaches for Irish iii. Teaching Irish phonics
Teacher reflection on action through reviewing previously established goals	Post-PL interviews PLC sessions Classroom observations Researcher reflective journal	l) Teaching in an integrated way e) One language as a springboard for another i. ToS as value added i) Pedagogical approaches for Irish iii. Teaching Irish phonics

‘Reflecting in action’ and ‘reflection on action’ (Schön, 1991) about teaching for ToS was evident in all of the data collection sources. For the teachers, ‘reflection in action’ (Schön, 1991) took the form of participation in professional learning community sessions, implementing learning activities, and observing modelled lessons in their classrooms. ‘Reflection on action’ (Schön, 1991) took the form of reviewing previously established goals at the end of the process during the post-PL interviews and the final professional learning community session. Teachers maintained individual notes. For the facilitator/coach, I engaged in individual ‘reflection in action’ while delivering the modelled lessons and professional learning community sessions, conducting classroom observations and coaching the teachers in implementing the learning activities in their classrooms. I also engaged in ‘reflection on action’ on a weekly basis as I was also the researcher undertaking the study. I documented my ‘reflection in action’ and ‘reflection on action’ (Schön, 1991) using a researcher reflective journal (Ortlipp, 2008). Table 21 illustrates the ways in which reflection was embedded within the study. Using Schön’s (1991) reflection model, examples of findings from the present study relating to DeLuca et al.’s (2015) definition of reflecting are presented and analysed.

Table 21

Reflection in and on action embedded within the study

Teachers (group and individual)	
Reflection in action	**Reflection on action**
Participation in: - professional learning community sessions - implementing learning activities - observing modelled lessons	Reviewing goals: - post-PL interviews - the final professional learning community session

4.1.3.1 Teacher Reflection in Action Through Participation. Participation in professional learning community sessions, observing modelled lessons and implementing learning activities about teaching for ToS provided teachers with an opportunity to reflect in action. In particular, the collaborative space of the professional learning community session each week was welcomed by the teachers to reflect in action with one another about ToS (professional learning community sessions) as recommended by Schnellert (2011). Teachers could ask questions as they arose without judgement in a safe space created by the facilitator/coach. Tomás noted that "it has been very easy to speak, and easy to be wrong and easy to ask questions without feeling judged" (post-PL interview). This echoes research by Holmlund et al. (2012) and Mcwayne et al. (2020).

Engaging in facilitated meetings (Borg, 2015) provided teachers with the opportunity to tease out interpretations, ideas and share "lightbulb moments" about teaching for ToS with one another (post-PL interview). For example, during professional learning community session #3, Tomás reflected on two sounds for the letter 's' in Irish. The other teachers were not aware that there was an 's' *leathan* [broad] and an 's' *caol* [slender] in Irish (professional learning community sessions). I was able to direct the teachers to a resource that could support them (Hickey & Stenson, 2011). Niamh noted that "this is where the collaborative space is really needed … We add value in different ways and that was clear during our professional learning community sessions" (post-PL interviews).

Through implementing the learning activities, as teachers reflected in action (Schön, 1991), they recognised that children were using skills learned during shared writing lessons in English to write in Irish (researcher reflective journal). Mairéad recognised that children were "drawing on their base language all the time" (post-PL interview). She noted, they "have such a good base of English that they are working from" and they also "use the base that they have of English" in learning new languages (Mairéad, post-PL interview). Echoing the research, Mairéad considered that the children "use their English as a base or a springboard for learning Irish because the language transfers over so well" (post-PL interview) (Cummins, 1979, 1981; Ó Duibhir & Cummins, 2012; Pinter, 2011). Teachers recognised that children were not "starting from scratch" with Irish as "they have so much prior knowledge already" (Mairéad, post-PL interview).

Examples from classroom observations showed Mairéad drawing the children's attention to vowels in Irish (*'ó', 'á'*) that did not exist in English (classroom observations). Mairéad's integrated teaching strategies in the classroom were reflective of Cummins' (1979, 1981) linguistic interdependence hypothesis where she drew the children's attention to aspects of Irish that were different from English. Teachers noticed the pace

and ease at which the children were using knowledge of one language to learn another (Cummins, 1979; 1981; Ní Dhiorbháin et al., 2024a; Thomas & Mady, 2014), and this was a significant moment of realisation for the teachers about the expectations set for children's language learning (researcher reflective journal). Mairéad referred to teaching for ToS as a "natural, smooth transition" and "not a forced approach" of teaching basic sounds in the English and Irish language in isolation (post-PL interview). Instead, "it's actually looking at what they're doing in English and being able to say, oh, actually, do you know what, they've already done that in English, let's transfer it over. Let's build on that" (Mairéad, post-PL interview).

Supporting linguistic diversity in the classroom (Dooly & Vallejo, 2020; Little & Kirwan, 2019; Ní Dhiorbháin et al., 2024a), Áine noticed that children in her classroom now voluntarily call out, "'In my language, we have that sound or that letter'" (post-PL interview). This was noted by the researcher in all of the classrooms during modelled lessons and classroom observations (classroom observations). Áine also reflected in action on the consonants that existed in English but not Irish, such as 'y'. She shared:

> I did learn about the similarities and the differences and began to learn the sounds that we have in English that we don't have in Irish or that we have in Irish that we don't have in English (post-PL interview).

Macias et al. (2021) highlight the opportunity presented by collaborative inquiry for teachers to learn from students. Observing modelled lessons and discussing them with one another (Holmlund et al., 2012; Desimone & Pak, 2017) supported teachers to reflect in action (Schön, 1991). Tomás considered reflection as a "huge piece of learning for everyone" (Tomás, post-PL interview). Tomás referred to reflection in the present study as having "three parts" (post-PL interview). He stated:

> We got the first part where it was like a feedback session where we heard you, your experience of teaching it … [then] we heard the teacher's observation of you teaching it … [and] then, modifications you were making in a professional context (Tomás, post-PL interview).

This act of continuous reflection during collaborative inquiry (Brown et al., 2021; DeLuca et al., 2015) supported teachers to reflect in action about teaching for ToS. Tomás shared, "I was taking down steps of what I would do first, second, third" (post-PL interview). This gave teachers "a common experience … with notes to go forward" along with "some of the language to start having professional conversations around very, very specific pieces of language" (Tomás, post-PL interview). The provision of expert support to teachers by the facilitator/coach is a key feature of effective PL (Darling-Hammond et al., 2017; Didion et al., 2020). This is reflective of a Vygotskian SCT approach to PL in that teachers worked out of their zone of proximal development (ZPD) through working with one another and with the facilitator/coach (Golombek & Johnson, 2019).

4.1.3.2   Teacher Reflection on Action Through Reviewing Previously Established Goals. During the post-PL interviews and final professional learning community session in particular, teachers reflected on action by considering the change in their understanding and teaching of ToS. Mairéad reflected on "how segregated" her teaching of Irish and English was prior to the study. Echoing Cummins' (2017) and research by Gallagher (2021) which discussed the multilingual turn, Mairéad recognised the change in her approach to language teaching. She shared, "I cannot believe how much my thinking has actually changed … now I just have such a different perspective of teaching the two languages" (Mairéad, post-PL interview). Reflecting on teaching for ToS, Mairéad added, "beforehand, I would have always seen ToS as the news and writing and your bit of the weather in Irish and English", however, she now recognised that "you can really teach what you're teaching in English in Irish" (post-PL interview).

Focusing on teaching the children about the language (Cummins, 2017; Ellis, 2015) instead of a sole focus on teaching vocabulary was a reflection point for Áine on how her practice had changed as a result of reflecting on teaching for ToS. The importance of learning vocabulary remained a key part of the teaching of Irish for Áine, but as noted by Melby-Lervåg & Lervåg (2013), she recognised that "to be able to understand the language and decode rather than just recognise a word is so useful for the children" (post-PL interview). In their research, Thomas & Mady (2014) identified that engaging children in activities that involved metalinguistic talk supported them to transfer skills. Áine noted that once vocabulary associated with a theme is taught and a new theme begins, there is little opportunity for application of what has been learned. She shared, "sometimes to be learning by themes, there is lots of vocabulary but then it is the application … when they go on to the next theme, that's it, the last theme is gone" (Áine, post-PL interview). For Kennedy et al. (2012), learning vocabulary is determined as an unconstrained skill that can be learned over a lifetime. However, as noted by de Brún (2022), a considerable amount of time is spent learning Irish vocabulary during Irish lessons.

As recognised by Thomas and Mady (2014), teachers are encouraged to support children in harnessing transfer through learners' activities. Reflecting on how connecting literacy practices across languages can support transfer was highlighted by Mairéad. Mairéad noticed that she now had "so many ways to integrate the languages" whereas "before I had one or two small things" (post-PL interview). For example, Mairéad reported that prior to the study, she was teaching for ToS by having classroom displays such as "the months in English and Irish on the walls in her classroom … and *Éadaí* [Clothes] with the Irish words" (post-PL interview). Reflecting the research, teachers in the study now

shared a very different understanding (Borg, 2015) of teaching for ToS (classroom observations) as "a whole new world has opened up" in that teachers were now equipped with the approaches and "ideas" (Desimone & Pak, 2017, Darling-Hammond et al, 2017) to teach for ToS (Mairéad, post-PL interview). As a result of "talking about languages" with other teachers, Mairéad began to think about language teaching and learning "as a whole" rather than "English, Irish, or another language that the children were learning at home" (post-PL interview). This supported teacher knowledge of ToS (researcher reflective journal).

Niamh reflected on the importance of reflecting (Darling-Hammond et al, 2017) on teaching for ToS (Ó Duibhir & Cummins, 2012) as a key moment for her to make connections (Nelson et al, 2010). Through reflecting on action, all teachers recognised teaching for ToS as 'value added' for the children (Cummins, 2017; Ó Duibhir & Cummins, 2012; Thomas & Mady, 2014). Reflection provided Niamh with the knowledge that the children in her class "could be spelling words in Irish" and she recognised that "that idea had never occurred to me … And they didn't have that before … And that was because I had never made that connection myself" (post-PL interview). Niamh's understanding of how to integrate the two languages had "widened exponentially" as a result of reflection (post-PL interview). Niamh's example is echoed by Macias et al. (2021) which showed that collaborative inquiry can be used as a means of illuminating barriers and ensuring enhanced learner experiences. Reflecting on teaching for ToS supported Tomás to recognise that "it is important" to teach for ToS (post-PL interview). As noted by Thomas and Mady (2014) and highlighted by Tómas, giving time to teaching for ToS was recognised as valuable for the children, as teaching for ToS supports the children in becoming more language aware (Ó Duibhir & Cummins, 2012). Tomás shared, "And if you give that time, it's really… it's valuable" (Tomás, post-PL interview). This is reflected in DeLuca et al. (2015) and Macias et al. (2021) in that collaborative inquiry supports teachers to shift their attitudes regarding an aspect of education.

4.1.3.3   Section Summary. Findings show that participation in professional learning community sessions, observing modelled lessons and implementing learning activities about ToS provided teachers with an opportunity to reflect in action. Collaborative inquiry enabled teachers to ask questions, tease out their understanding and bridge the gap between theory and practice. Teachers began to understand the meaning of the linguistic interdependence hypothesis in their classrooms by observing modelled lessons and through practical engagement in learning activities that supported teachers to teach for ToS. From reflecting in action, teachers recognised that children were using one language to learn another language in their classrooms.

Post-PL interviews and the final professional learning community session provided teachers with the opportunity to reflect on action by reviewing previously established goals at the outset of the study. At the end of the study, through reflection on action, teachers reflected on conceptions and misconceptions and the changes in understanding and practice that had occurred throughout the process. Reflecting on action provided teachers with the space to recognise the capacity of the children to transfer their skills. Teachers also recognised that although learning vocabulary is an important part of learning a new language, ToS can be used in teaching children to decode the new language. Thinking about teaching in an integrated way was also noted. Reflecting on action provided teachers with the opportunity to recognise the value-added dimension of teaching for ToS as a tool for increasing language awareness. I will continue to section two of the chapter by addressing Question 2 a) What are the other factors that, a) support, and/or b) hinder teaching for ToS across English and Irish?

4.2   Section 2 – Question 2

Extending on the findings presented for Question 1, how does participation in a professional learning community with coaching support teachers', a) dialogical sharing, b) taking action to promote, and c) reflecting on teaching for ToS across English and Irish?, this section presents the other factors that, a) support, and/or b) hinder teaching for ToS across English and Irish, and is therefore divided into two sub-sections in response to research Question 2.

4.2.1   *Other Factors that Support Teaching for ToS*

Template analysis was used to generated two other factors that supported teaching for ToS across English and Irish. The data sources I drew upon and the examples of findings from qualitative data analysis are displayed in Table 22.

Table 22

Other factors that support teaching for ToS

Other factors that support teaching for ToS	Data sources within present study	Examples of findings from qualitative data analysis
Teacher pedagogical content knowledge	Post-PL interviews Pre-PL interviews PLC sessions Classroom observations Researcher reflective journal	b) TLC&C in English c) TLC&C in Irish e) One language as a springboard for another i. ToS as 'value-added' l) Teaching in an integrated way iii. From language segregation to integration k) Missed opportunities
Professional learning communities and coaching about teaching for ToS	Post-PL interviews PLC sessions Researcher reflective journal	t) Focused, structured approach n) PL with coaching as beneficial i. Continuing, recc PL ii. Modelling of lessons/coaching iii. Learning from the researcher/coaching iv. On-site delivery vi. Sustained delivery vii. Focused, structured viii. Directed by school leadership x. Context appropriate xi. Provision of resources/coaching xii. Time assigned to PL t) Focused, structured approach

4.2.1.1 Teacher Pedagogical Content Knowledge. Teacher PCK was identified as a factor that supported teaching for ToS across English and Irish. This section presents examples relating to teacher PCK.

4.2.1.1.1 Language Users of English and Irish. All teachers recognised themselves as language users of English and Irish and reported a high level of competence and confidence in their use of the English language (professional learning community sessions). During post-PL interviews, Tomás reflected on the "extremely high level of competency among teachers in their [use of their] primary language … English, and very high also in Irish" (post-PL interview). This was also noted in classroom observations (classroom observations). Teachers in the present study recognised that they required language proficiency in English and Irish to teach for ToS. Mairéad shared, "I obviously have a great level of English and Irish so I feel I use that in my teaching" (post-PL interview). Mairéad remarked on having spent "many years learning English thoroughly, learning Irish, thoroughly" (post-PL interview). Reflecting Andrews (2007), knowledge of language (i.e. language proficiency) is one of three interrelated knowledge bases of teacher language awareness. This refers to language user proficiency, which was an important feature in supporting teachers in this study to teach for ToS. Mairéad recognised this in highlighting that language competency is linked to teacher use of the language in their teaching. However, teachers described their competence and confidence in using the Irish language to be between 3 and 5, determined as somewhat confident, quite confident and extremely confident respectively, on a five-point Likert-scale at the outset of the study (pre-PL interviews). Despite reporting much self-consciousness in her ability to use Irish (pre-PL interview), Niamh enjoyed learning through the medium of the Irish language and especially, in the company of other teachers as learning through the medium of Irish together supported teacher competence and confidence in the use of Irish (researcher reflective journal). Niamh reported that there is limited time and space for teachers to talk in Irish in general and she benefitted from "exposure to adult conversation in Irish" (post-PL interview). The professional learning community gave her the opportunity to "[speak] in Irish with adults, and 'take in' Irish in an adult conversation, without feeling any pressure" (post-PL interview).

Teachers in the present study were supported to improve their use of the Irish language to some extent in a non-judgemental professional environment (researcher reflective journal). The professional learning community provided a space for teachers (Kezar et al., 2018) to engage in PL and coaching through the medium of both the English and Irish languages which supported them as language users (Andrews, 2007; Wright & Bolitho, 1993) of English and Irish. All teachers reported that their confidence and competence in using the Irish language had increased having engaged with the study

(post-PL interviews). Niamh described herself as being "less intimidated now in professional learning around Irish" (post-PL interview). As recommended by Wright and Bolitho (1993), supporting teachers as language users increases their teacher language awareness. Teachers reported that increased teacher language awareness in Irish supported them to teach for ToS.

    4.2.1.1.2   Language Analysts of English and Irish. All teachers reported that the focus on explicit knowledge (EK) (Ní Dhiorbháin, 2022) of similarities and differences between Irish and English supported teacher language awareness (Andrews, 2003) to teach for ToS. Niamh recognised that her increased EK of Irish also supported the children's language awareness in the classroom. For Tomás, increased teacher language awareness of Irish was linked to improved quality of teaching by Tomás (post-PL interview). He shared:

> …if you were to compare my quality of teaching from them to now, in both languages, I feel like there is another layer or depth and quality to it because I am more aware and I am giving more time to the *bunleibhéal* [basic level] now" (Tomás, post-PL interview).

This is reflected by Andrews and Lin (2017) who note a greater significance of teacher language awareness in teaching language lessons. Knowledge about language (i.e. EK) is one of three interrelated knowledge bases of teacher language awareness (Andrews, 2007). As noted by Ní Dhiorbháin (2022), knowledge about language is key for teachers in their work as language analysts and as language teachers. Through observing modelled lessons and implementing the learning activities in their classrooms with support from the facilitator/coach, teachers' EK of English and Irish was increased (classroom observations). Using the *Charmander Cosúlacht* [Similarity Charmander] and *Dexter Difríocht* [Difference Dexter] identification cards with the children, also drew the teachers' language awareness to aspects of Irish that are different from the English language (researcher reflective journal). This reflects recommendations in the literature (Ó Duibhir & Cummins, 2012; Thomas and Mady, 2014) in that the present study incorporated the teaching of Irish phonics (Hickey & Stenson, 2011) which also supported teachers' own knowledge about the Irish language (professional learning community sessions). EK of the similarities and differences between English and Irish was an important feature in supporting the teachers in this study to teach for ToS.

4.2.1.1.3   *Language Teachers of English and Irish.* All teachers recognised themselves as language teachers and reported increased levels of confidence and competence in teaching for ToS across languages in the context of English and Irish. This was due to increased teacher language awareness of PCK about teaching for ToS (post-PL interviews; professional learning communities). All teachers reported that they learned how to create opportunities for language learning (i.e. pedagogical skills) (Andrews, 2003) which supported their PCK (Shulman, 1987) to teach for ToS.

Niamh shared that although teaching languages would not have been her strength prior to the study, she was already "very, very confident" in teaching the English language (post-PL interview). Her confidence and competence in teaching English prior to the research study was at 5, determined as extremely confident. However, Niamh stated that this was only in relation to the junior classes because the English curriculum in junior classes was "so phonics based" (post-PL interview). While teachers acknowledged their established pedagogical skills in English, they recognised how such pedagogical skills could support teaching for ToS across languages (Cummins, 2017; Ó Duibhir & Cummins, 2012; Thomas & Mady, 2014). Niamh recognised that, "my competence in teaching English absolutely has increased because [of] the connections we are now making to the Irish, which I wouldn't have done before" (post-PL interview).

Niamh recognised that skills learned in English could support the teaching of Irish, particularly Irish reading and writing, as recommended in the Primary Language Curriculum support material (DE, 2019b) (Connaughton-Crean & Ó Duibhir, 2015). Niamh acknowledged that children's English reading and writing skills were developed to a more advanced level than in Irish, and that teachers were not using or building on established English language skills for teaching another language (i.e. Irish) (Cummins, 1979, 1981; Pinter, 2011). For Niamh, the "huge wealth of skills" possessed by children in approaching English phonics was not being maximised to teach Irish phonics (post, PL-interview). Prior to the study, teachers reported having focused on teaching sight words in Irish in junior classes in particular as opposed to recognising the opportunity to teach for ToS (researcher reflective journal). Niamh highlighted that PCK to teach for ToS across languages "made a massive impact on the children's reading and writing in Irish" (Niamh, post-PL interview) as is also noted by Hickey and Stenson (2011).

Despite Irish phonics featuring as a learning outcome in the Primary Language Curriculum (DE, 2019b), Mairéad reported that teaching Irish phonics was "not even on my radar in Irish to target" (post-PL interview). Her teacher language awareness (Andrews, 2003) of teaching Irish phonics was limited prior to the study. She shared that she "would have never thought of approaching teaching [Irish phonics] that way" (Mairéad, post-PL interview). At the outset of the study, Áine considered herself as competent and

confident in teaching Irish but, having engaged in the study, she recognised that her competence and confidence in teaching Irish "was more so in teaching vocabulary associated with Irish topics and not about the language" (post-PL interview). Mairéad noticed that she was much more competent and confident in teaching Irish sounds and using Irish picture books (classroom observations) to teach for ToS having engaged in the study:

> My confidence in teaching would really have improved in that before, [the Irish workbook] would [have been] our starting point for *Sa Bhaile* [At home] … Whereas now I'd have so much more confidence. I would say, well we're actually learning about this sound … And there is this sound here in *Cinnín Óir* [Goldilocks] (Mairéad, post-PL interview).

During classroom observations, throughout the study there was an increase in the prevalence of teaching for ToS in the classrooms (classroom observations). Teachers required PL and coaching that supported their teacher language awareness (Borg, 2017; Wright & Bolitho, 1993) to teach for ToS.

4.2.1.1.4   *Section Summary.* Teaching children about the similarities and differences across languages is a key feature of the Primary Language Curriculum (DE, 2019b). Despite varied understandings and practice of ToS at the outset of the study (classroom observations; pre-PL interviews), teachers developed PCK of teacher language awareness of ToS across English and Irish by participating in the study (classroom observations; post-PL interviews; professional learning communities; researcher reflective journal). Teachers were enabled to recognise missed opportunities and make connections through increased teacher language awareness (Andrews, 2003) of teacher PCK (Shulman, 1987) to teach for ToS.

4.2.1.2 Professional Learning Communities and Coaching about Teaching for ToS.

Participation in PL and coaching about teaching for ToS was identified as a factor that supported teaching for ToS. All teachers valued the focused and structured, context-specific on-site approach of the study (Darling-Hammond et al., 2017; Kezar et al., 2018). The sustained model of PL with coaching supported by school leadership enabled teachers to engage in the study. Teachers also commended coaching (Desimone & Pak, 2017; Kraft et al., 2018) through modelled lessons and the provision of tailor-made resources as factors that supported teaching for ToS.

4.2.1.2.1 A Focused and Structured Approach. The focused and structured approach to professional learning communities with coaching was a key factor in supporting teachers to teach for ToS. It is recommended as a core feature of effective PL (Darling-Hammond et al., 2017; Desimone & Pak, 2017) and a research-based principle of teacher learning (Desimone & Pak, 2017). Mairéad found that "having a structured approach that every Wednesday, this is what we chat about, and this is what we're going to do, and this is what we are …" supported her to teach for ToS in her classroom (post-PL interview). Having a "real, directed focus" on learning outcomes and sharing "common aims … with the same people with a specific focus and progression" supported teachers to teach for ToS (Tomás, post-PL interview). The content focused approach (Darling-Hammond et al., 2017; Desimone & Pak, 2017) provided "motivation" for teachers to consider "how [ToS] could be expanded and developed and progressed" (Niamh, post-PL interview). Niamh explained, "… because of the bite-sized amount, it was manageable and doable for our practice and it works" (post-PL interview). In the following example, Niamh described how the content focused approach supported her to teach for ToS:

> One … [is] that we were given [the idea] … the idea was clearly set out and clearly explained, how to do it and then we had to do it ourselves. So, there was nothing that could impede us from delivering it. What you gave us was bite-sized and it was enough to kind of go, oh gosh, I can do this. They're taking it well. This is great. This is the starting stone. This has clear points of development and this works (Niamh, post-PL interview).

4.2.1.2.2   ***On-site, Context-specific Style.*** PL and coaching for the present study took place at the school site. Teachers found that this supported them to teach for ToS. Facilitating/coaching the teachers (Desimone & Pak, 2017; Kraft et al., 2018) in their classrooms provided me with an awareness of the school context. I recognised my role was to link theory and practice by making ToS make sense in the classroom (researcher reflective journal) (Golombek & Johnson, 2019; Ritchie, 2023). I did this by facilitating/ coaching and providing expert support (Darling-Hammond et al., 2017; Didion et al., 2020) for the teachers. Some teachers had previously engaged in PL that occurred at "another base", however, the approach taken in the present study was deemed by the teachers as "more positive because we are in the current, the right environment" (Tomás, post-PL interview).

Teachers also commented on previous PL that took place online and found it "did not compare at all … [to] … this learning community that we have here with the four of us and you" (Tomás, post-PL interview). When engaging with other online PL, teachers reported that they were shown video recordings of classroom contexts that were not reflective of the teacher's own classroom context. Tomás recalled an example of online PL that "was more focused on the learning support context where teachers only worked with two or three [students]" (post-PL interview). However, the context-specific style of the present study was commended as it was designed for "a whole-class level which was much more relevant to us" (Tomás, post-PL interview). Tomás also shared, "the online part means that you have so much less to hook on to … [and] … you cannot talk when you are looking at a screen watching a video" (post-PL interview). The lack of active learning and provision of expert advice in prior online PL as described by Tomás resulted in diminished engagement. Darling-Hammond et al. (2017) and Labone and Long (2016) advocate for active learning as part of effective PL to maximise teacher responsibility for their own learning. The Teaching Council (2016) encourages this approach with regard to embedding continued learning in the profession of teaching.

Niamh found that there was increased investment in having "a real person coming in" to facilitate and coach teachers in how to teach for ToS (post-PL interview). She shared, "It made me sit down and prioritise the time … because you were coming in" (Niamh, post-PL interview). In the following quote, Tomás shared the benefits of on-site, context-specific PL and coaching:

> It was for you a person, in our room … It is just so much better when you have a real person. We were hooked into you as a person. The engagement is way different (post-PL interview).

In the present study, I understood my role as facilitator/coach by responding to the needs of the teachers by providing a tailored approach (Kraft et al., 2018) by sharing

expertise about teaching for ToS through evidence-based practices using tailor-made resources that could be applied in their classrooms (Darling-Hammond et al., 2017).

4.2.1.2.3 *Sustained Model as Key.*

Teachers commented the sustained model of the study as key for teaching for ToS. All teachers stated that they would highly recommend professional learning communities with coaching in supporting teachers to teach for ToS. Niamh was particularly complimentary of the collaborative inquiry approach as a means of supporting schools with the Primary Language Curriculum (DE, 2019b). She shared, "I think this would be an excellent model for all schools to be using for engaging in the Primary Language Curriculum" (Niamh, post-PL interview). Tomás, who would have regularly engaged in PL prior to this study on behalf of the school shared, "I have never participated in collaborative inquiry to this level" (post-PL interview). The sustained model was favoured over a "short CPD (continuing professional development) input" and considered as "100% more beneficial than a webinar or presentation" (Niamh, post-PL interview). Sustained models of PL are recommended (Darling-Hammond et al., 2017; Desimone, 2009; Lave & Wenger, 1991). Niamh shared:

> Personally, I find this model better, because the shorter inputs don't give you that active part. But the actual sustained nature of this model means that whatever kind of shock or wire connection you did make, you then are forced no matter how busy you are, to actually apply it, and this model is really good for pushing you to actually do it (post-PL interview).

Teachers expressed an interest in continuing to engage in the collaborative inquiry approach (Kennedy, 2019; Labone & Long, 2016; Teaching Council, 2016) to promote teaching for ToS beyond the study (professional learning community sessions). Teachers recognised that, "We have some of the language now to start having professional conversations around very, very specific pieces of language and we have a hook to connect that on to now" (Tomás, post-PL interview). Tomás commented on the repeated nature of the sessions as being beneficial for teachers in promoting teaching ToS:

> … we have done so many sessions with you so we can say, can you remember when we did something like that? … we have a common experience that we are talking about. We have notes to go forward now (Tomás, post-PL interview).

Sustained learning activities are key to PL (Darling-Hammond et al., 2017; Opfer & Pedder, 2011). The sustained model provided Niamh with a basis of how to promote teaching for ToS beyond the study. Reflecting the vision for PL held by the DEI (DEI, 2022), Niamh shared that she could see "how it could be expanded and developed and progressed (post-PL interview). She recognised that "without that sustained [part] or without that conversation … It's just, the impact on your practice is minimal compared to a model like this" (post-PL interview). This is also reflected in research conducted by King (2014) which shows that PL must be sustained in nature for effects to become evident in practice.

4.2.1.2.4   ***Modelled Lessons.*** Each modelled lesson was based on specific learning outcomes from the Primary Language Curriculum (DE, 2019b) and incorporated teaching for ToS (Ó Duibhir & Cummins, 2012; Thomas & Mady, 2014). Some teachers commented on the value of observing modelled lessons in their classrooms in supporting them to teach for ToS, as recommended by Desimone and Pak (2017). The benefit of "watching other teacher's work, particularly in Irish" gave teachers an opportunity to "see it work", see how the lesson was conducted, understand the resources and their intended use, and an awareness of how the children received it (Niamh, post-PL interview). Reflecting research by Brisk and Zisselberger (2011), the modelled lessons supported teacher PCK of Irish to the degree that teachers could observe the children in their own classrooms responding to "different, engaging activities with the different vowel sounds" (Áine, post-PL interview). Teachers could recognise that the children in their classes could successfully engage with modelled lessons about ToS (classroom observations; researcher reflective journal). Niamh shared, "I've seen it work with you, and then I found it to work in my own practice, since" (post-PL interview). Áine noticed during the modelled lessons that the children "could pronounce [the vowel sounds] and say them along with [the video] (post-PL interview).

The opportunity for teachers to observe modelled lessons was considered the "missing piece" from their own preparation as teachers (Niamh, post-PL interview). Kraft et al. (2018) note the challenge of adequate resourcing to provide coaching. Niamh (post-PL interview) noted the lack of opportunities for teachers to observe other teachers work "when you are 'out' for as long as we are … and I am out nearly twenty years now". Niamh particularly enjoyed watching the modelled lesson in her classroom as it was context-specific to her students' needs (Brisk & Zisselberger, 2011). The modelled lesson provided the space for the teacher to 'take in' the lessons and see it take place with children with whom she would be familiar with in terms of participation and language ability. Niamh shared:

> I really enjoyed the opportunity to watch you engage with them and see ... the day you were in, how well they did with the writing; they were sounding out the words that day. The *bíp* [beep] and the *jíp* [jeep]. And that was, that was like a wow, lightbulb moment right there. And because somebody else was managing the class, I could actually sit there and take it in … and it wasn't strange kids. It was [my] own kids. So, it wasn't like, okay maybe they might be 'good' kids … You were seeing how the kids that you know well were engaging with this (Niamh, post-PL interview).

Tomás also commended the modelled lessons as it provided the teachers with a real and recognisable context for PL (Darling-Hammond et al., 2017; Kraft et al., 2018). Tomás found it meaningful that, "We got to see the activities in our classrooms, real life, with our challenges in our classrooms rather than a nice vignette …" (post-PL interview).

4.2.1.2.5 ***Provision of Resources.*** Teachers reported that the provision of resources was instrumental in supporting teachers to teach for ToS. Acknowledging the issue of limited availability of resources in Irish (Ó Duibhir, 2016; Schwinge, 2017), I designed and provided the teachers with all resources throughout the study. As recommended by Concannon-Gibney et al. (2022), I created education digital resources with clear language learning intentions to support teachers to teach for ToS in the context of English and Irish in their classrooms. Teachers expressed much satisfaction and assurance in the predictability of resources being provided to them every week to support them in teaching for ToS in their classrooms (researcher-reflective journal). Niamh and Tomás shared:

> … every week it was another set of resources ready to go … it was the bite-sized resources ready to go … were probably the most, effective for us as a group (Niamh, post-PL interview); and all of the materials were ready for us so I knew what was going to be in the folder (Tomás, post-PL interview).

Teachers reported that the use of the resources with the support of the facilitator/coach in their classrooms was key for teacher learning (Darling-Hammond et al., 2017; Didion et al., 2020; Golombek & Johnson, 2019; Kraft et al., 2018). Reflecting a Vygotskian SCT approach to PL, Tomás shared, "we got to do it in our own classroom so that's the part where we really assimilated it" (post-PL interview). The provision of resources enabled teachers to teach for ToS as they were prepared in advance, had a clear purpose, and teachers were coached in how to use them. Niamh shared:

> It wasn't that you got so busy that you forgot to prep X, Y, and Z, or you got so busy you reduced it to such, because you had the resources you did it the way it was intended, and in doing it so, you, you developed an awareness of how the kids received it. You saw how it would work; you got competent because you [the facilitator/coach] had already done it (post-PL interview).

4.2.1.2.6   *Time Approved by Leadership.* A key factor that supported teachers to promote teaching for ToS was the time and space dedicated facilitated by school leadership to engaging in the collaborative inquiry approach (DeLuca et al., 2015). During initial professional learning community sessions, the School Principal engaged in open dialogue about supporting timetabling schedules to ensure that those who volunteered to partake in the study were supported to do so. I also received a request from the School Principal for further support for other classroom teachers at the school site (researcher-reflective journal). Teachers highlighted the School Principal's support of PL and coaching as recommended by Kennedy (2014), and this was reflected in the teachers' participation in the study (researcher reflective journal). Recognition of support from leadership to enable teachers to fully engage in the entire study was noted by Tomás who shared, "the Principal is facilitating it [teachers' participation in the study] all throughout … It is excellent … We truly had time to assimilate the task at hand" (post-PL interview). Support from leadership to provide time for engaging in PL encourages development and diffusion of the learning amongst other teachers beyond the life-cycle of the study (King, 2014, 2016).

4.2.1.2.7   **Section Summary.** Findings show that that teacher PCK and PL and coaching about teaching for ToS were other factors that support teaching for ToS across English and Irish. Increased teacher language awareness and recognising missed opportunities supported the development of teacher PCK. For the teachers, focusing on teaching similarities and differences, and recognising opportunities to maximise on skills learned in English to learn Irish, such as writing and decoding, enhanced teacher PCK of teaching for ToS. Teacher language competence and confidence played a part in supporting teachers to teach for ToS. Teachers recognised the importance of their language use, in both English and Irish. From engaging in the professional learning community sessions, teachers reported an increase in their confidence and competence in the use of the Irish language, which in turn supported teaching for ToS. Engaging in PL and coaching about teaching for ToS was considered a key element of supporting teachers to teach for ToS. The on-site context-specific style adopted in the study provided teachers with focused and relevant content with which to engage. Provision of resources, and modelled lessons delivered in a sustained manner by the facilitator/coach with support from school leadership was a key factor in supporting the teachers to teach for ToS. Next, I present factors that hindered teaching for ToS.

4.2.2   Factors that Hinder Teaching for ToS

Template analysis was used to generated two factors that hindered teaching for ToS across English and Irish. The data sources I drew upon and the examples of findings from qualitative data analysis are displayed in Table 23.

Table 23

Factors that hinder teaching for ToS

Factors that hinder teaching for ToS	Data sources within present study	Examples of findings from qualitative data analysis
Lack of teacher competence and confidence in using and teaching Irish	Post-PL interviews Pre-PL interviews PLC sessions Researcher reflective journal	i) Pedagogical approaches for Irish vi. Overreliance on workbook h) Pedagogical approaches for English i. Using picture books as a resource
Time constraints	Post-PL interviews PLC sessions Researcher reflective journal	i) Pedagogical approaches for Irish iii. Teaching Irish phonics iv. Language-specific resources h) Pedagogical approaches for English i. Using picture books as a resource l) Teaching in an integrated way

4.2.2.1 Lack of Teacher Competence and Confidence in Using and Teaching Irish.

A lack of teacher competence and confidence in using Irish presented as a factor that hindered teaching for ToS. Tomás suggested in pre-PL interviews that teachers needed a "refresher course in Irish" to support their competence and confidence in using Irish (pre-PL interview). Supporting teacher language proficiency in Irish was recognised by Tomás as a means of supporting him to teach for ToS, as echoed by Andrews (2003). It was noted that particular class levels, for example junior classes and senior classes, required varying levels of teacher competence and confidence in the use of Irish. As Niamh reflected on junior class levels being so "phonics focused" in English, Mairéad recognised that teaching Irish at senior class levels demanded a greater fluency, use, and knowledge of the Irish language than teaching Irish at junior class levels. More preparation time for teaching Irish at senior class levels was deemed necessary for Mairéad. She shared, "If I was to go back up to sixth [class], I would need to do that layer of preparation again" (Mairéad, post-PL interview). Teachers require knowledge of the language (i.e. language proficiency) (Andrews, 2007) to support them in teaching for ToS.

A lack of teacher competence and confidence in teaching Irish presented as a factor that hindered teaching for ToS. Teachers commented on the prescriptiveness of the use of the Irish workbook as part of their teaching of Irish (professional learning community sessions). Mairéad shared, "We would have been very heavily reliant [on Irish workbooks]" (post-PL interview). As teachers require pedagogical skills to teach a language (Andrews, 2003; Shulman, 1987), it was noted that Irish workbooks supported teacher competence and confidence to teach Irish. Although Tomás found that the workbook restricted him in his teaching of the Irish sounds, he recognised that the workbook was needed for teaching vocabulary and themes (post-PL interview). He noted, "there's not a lot of hooks in it [Irish workbook]" (Tomás, post-PL interview). Irish workbooks were linked to diminished engagement. More opportunities for children to engage in enjoyable language learning experiences in Irish was highlighted by the Chief Inspector's Report 2016-2020 (DEI, 2022), as 24% of announced inspections evaluated were less than good.

Prior to the study, the school had removed the use of English workbooks from the classrooms in favour of teaching genre, and as a result teachers reported their teaching of English at 4 or 5, determined as quite confident and extremely confident respectively (post-PL interviews). Teachers commented positively on the work of a colleague who guided them through the process of teaching through genre in English and moving away from overreliance on English workbooks (researcher reflective journal). As limited

opportunities for children to engage in genre writing in Irish was noted in the Chief Inspector's Report 2016-2020 (DEI, 2022), and teachers recognised the potential of ToS in teaching genre writing in Irish, a move towards less reliance on Irish workbooks was expressed by all teachers in the study.

4.2.2.2   Time Constraints. Teachers identified time constraints as a factor that hindered teaching for ToS. Examples include, curriculum overload and planning time.

4.2.2.2.1   Curriculum Overload. Limited opportunities to learn about language prior to this study was noted by the teachers as a hindrance in teaching for ToS. The "massive focus on oral language, while crucial" (Tomás, post-PL interview) hindered teaching for ToS. The particular focus on oral language at the outset of the implementation of the Primary Language Curriculum (DE, 2019b) did not contribute towards learning about language (Andrews, 2007) in a way that supported teacher EK of the similarities and differences between English and Irish. Niamh's teaching of English and Irish was influenced by the significant focus on oral language at the introduction of the Primary Language Curriculum (DE, 2019b) therefore, teaching vocabulary in Irish became a priority for her. For the teachers in the present study, teaching Irish oral language was considered to support Irish language learning to a degree, however, reflecting Andrews (2007), teachers recognised that knowledge of the features of the language were necessary to teach for ToS (professional learning community sessions). Niamh shared:

> My approach to Irish had been oral language and then building up the sight words and everything related to the oral language, I had never ever approached decoding in phonics in Irish … Now I see that both of them can be taught with the same approach of decoding and phonological awareness (post-PL interview).

4.2.2.2.2   Planning Time. Teachers commented on the lack of planning time as a hindrance to teaching for ToS. Although teachers were fully supported to engage in this study, more time to engage in working collaboratively was noted. As part of teachers everyday practice, aside from and prior to this study, teachers commented on time spent reviewing workbooks in order to find the 'best fit' for the students within their classrooms (professional learning community sessions). As noted by Schnellert (2011), having the opportunity to engage in collaborative inquiry about ToS supported teachers to consider what worked best for their school type and context (researcher reflective journal). Taking the necessary time to consider workbooks and adapt them to suit the needs of the children was considered "a time-consuming process" which teachers "would need more time" to do together (Niamh, post-PL interview).

During each week, I ensured that the teachers were receiving instruction on one learning activity to implement in their classroom (researcher reflective journal). This was recognised and commended by the teachers in that the activities were clearly set out each

week which supported their implementation in the classrooms. This reflects effective coaching as described by Desimone and Pak (2017) where teachers are offered support and guidance during collective participation.

Teachers in the study commented on the time that was taken by the facilitator/coach to prepare resources and plan for their use each week. Teachers welcomed the provision of resources throughout the study and commented favourably on the school-specific approach (Darling-Hammond et al, 2017; Kraft et al, 2018). It was noted that, in the final week of classroom observation, where teachers were given the opportunity to use a resource provided or create a resource to teach for ToS, that "building up an appropriate bank of [classroom-specific Irish language resources]" was a challenge in teaching for ToS (Niamh, post-PL interview). Taking time to review appropriate words "at the level" of the children in the class that are "relevant to our work and our school [took] a surprising amount of time" (Niamh, post-PL interview). The collaborative inquiry approach was considered a support for teachers (Nelson, 2005) as it ensured "shared workload, interpretations, ideas, and lightbulbs [with] one another" (Niamh, post-PL interview). This type of work was reported to require considerable time, in that "you don't just produce it on the spot, there's a lot of conversation that we are having around it" (Niamh, post-PL interview).

4.2.3 Conclusion

Chapter Four provided a discussion and analysis of the research findings. Using template analysis based on DeLuca et al.'s (2015) collaborative inquiry approach as a structure for PL, I presented examples of findings in response to the research questions in the context of ToS.

Section 1 focused on how participation in professional learning community with coaching supported teachers' a) dialogical sharing, b) taking action to promote, and c) reflecting on teaching for ToS across English and Irish? Findings show that participation in PL with coaching supported teachers' dialogical sharing about teaching for ToS through shared participation, leadership and responsibility in the professional learning community. Teachers constructed a shared vision for ToS in their classrooms and negotiated shared values and goals for the research study by identifying that they wanted to focus on engaging with the Primary Language Curriculum (DE, 2019b). Teachers recognised the significance of personal and experiential knowledge in co-constructing meaning about ToS by exploring their conceptions and misconceptions. Teachers used their individual knowledge as a basis for co-constructing deeper, shared knowledge in learning about the linguistic interdependence hypothesis (Cummins, 1979, 1981).

Findings show that participation in PL with coaching supported teachers' taking action to promote teaching for ToS through teachers changing their classroom pedagogy to using Irish picture books, teaching the Irish and English alphabets, and teaching Irish phonics. Teachers worked together to engage in the action of inquiry by engaging with relevant literature, Primary Language Curriculum (DE, 2019b) curriculum document and support materials. Teachers took action to promote teaching for ToS by implementing learning activities with the support of a facilitator/coach. Teachers discussed and learned about one another's beliefs, pedagogical orientations, practice and developmental complexities of students and underestimating the language ability of children to transfer skills.

Reflection in action enabled teachers to experience 'lightbulb moments', to recognise the value of supporting linguistic diversity, and think about teaching in an integrated way. Reflection on action enabled teachers to recognise the change in their understanding about teaching for ToS, the value of metalinguistic talk, and the importance of reflecting on teaching for ToS.

Section 2 focused on the other factors that, a) supported, and/or b) hindered teaching for ToS across English and Irish? Findings show that teacher pedagogical knowledge supported teaching for ToS. Teachers recognised themselves as language users, language analysts and language teachers of English and Irish. The focused, structured, sustained approach employed in the study to include modelled lessons and provision of resources designed and implemented by the facilitator/coach, supported teachers to teach for ToS. Teachers were supported by time approved by leadership to engage in the study. Teachers identified factors that hindered teaching for ToS which included lack of teacher competence and confidence in using and teaching Irish and time constraints such as curriculum overload and planning time. In Chapter Five, I will draw recommendations from the key findings in response to the research questions.

5 Chapter Five: Conclusion and Recommendations

This chapter presents a summary of the research approach and conclusions arising from the study. This is followed by a summary of the key findings in response to the research questions. Limitations of the study are presented. Recommendations for future practice, policy and research are identified with reference to the evidence gathered from analysis of the findings. A final concluding statement elucidates the contribution to knowledge of this study.

5.1 Overview of the Research Study

The context and rationale for the study was presented in Chapter One. It introduced teacher pedagogical content knowledge (PCK), transfer of skills (ToS), professional learning and coaching, and collaborative inquiry as the key concepts underpinning the study. The researcher's positionality was stated and the two research questions to be addressed by the study were presented. The study explored how participation in professional learning communities and coaching supported teachers', a) dialogical sharing, b) taking action to promote, and c) reflecting on teaching for ToS across English and Irish. It also explored the other factors that, a) support, and/or b) hinder teaching for ToS across English and Irish.

Chapter Two provided a review of the literature guided by the research questions. The literature was presented in four main sections to include, theoretical concepts of language learning, PCK and teacher language awareness, ToS across languages, and professional learning communities and coaching. The conceptual framework for the study was also presented.

The research design was outlined in in Chapter Three. The methodological paradigm of interpretivism was identified and literature pertaining to qualitative research was detailed. Case study was adopted as a suitable approach. Sampling procedures and methods of data collection were outlined. Template analysis was used to analyse the data. Strengths and limitations of the research design were discussed. Ethical considerations were addressed and a timetable for the study was outlined.

Chapter Four focused on the findings and analysis of the findings in response to the two research questions. Informed by literature pertaining to collaborative inquiry as a structure for professional learning (PL) (DeLuca et al., 2015), I used template analysis to analyse the data. This was supported by triangulation of findings.

Conclusions are drawn from the data and recommendations for practice, policy and future research in Chapter Five. An evaluation of the research design is offered and the contribution to knowledge of this study concludes this thesis.

5.2   Summary of the Research Approach

The aim of this study was to explore teacher PCK of ToS across English and Irish through PL and coaching using a collaborative inquiry approach. It addressed a gap in the research in relation to how teachers could be supported to teach for ToS across English and Irish in a primary school. The conceptual framework for the study was informed by the relevant literature, to include, collaborative inquiry as a PL structure (DeLuca et al., 2015), teacher PCK (Shulman, 1987) of teacher language awareness (Andrews, 2003) to teach for ToS (Ó Duibhir & Cummins, 2012; Thomas & Mady, 2014), and research on professional learning communities (Kezar et al., 2018; Stoll et al., 2006) and coaching (Desimone & Pak, 2017; Kraft et al., 2018).

The conceptual framework guided the design and implementation of the study. A single-site exploratory case study design (Cohen et al., 2018) was adopted involving four mainstream class teachers and myself as facilitator/coach, over an eight-week period in one English-medium primary school. Qualitative research methods were used to gather and analyse findings. The methodological approach included four pre-professional learning (pre-PL) interviews and four post-professional learning (post-PL) interviews, six professional learning community sessions, four modelled lessons, thirty-two observations of classroom practice, and a researcher-reflective journal. While a predominant focus was placed on the post-PL interviews in the data analysis, rich descriptive data (Geertz, 1973) were gathered using all research instruments and findings were analysed using template analysis (King & Brooks, 2018) and supported by triangulation of data (Robson, 2011).

While teaching for ToS across languages is a feature of the Primary Language Curriculum (Department of Education (DE), 2019b), it remains in the early stages of being embedded in primary schools (Department of Education & Inspectorate (DEI), 2022; Mac Domhnaill & Nic an Bhaird, 2022). Much of the literature pertaining to ToS across languages describes theoretical underpinnings for teaching for ToS (Cummins 1979, 1981). International studies about ToS are of contextualised settings which provide some detail of varying practices, experiences and approaches to teaching for ToS (Aldekoa et al., 2020; Feinauer et al., 2013; Kim & Piper, 2019; Melby-Lervåg & Lervåg, 2013; Siu & Ho, 2015; Thomas & Mady, 2014). Literature pertaining to PL and coaching provides insight into the value that is placed on its effective use to improve student outcomes (Darling-Hammond et al, 2017; King, 2014 Ventista & Brown, 2023). At the time of conducting this study, I was unaware of any other study with a particular focus on exploring teacher PCK of teaching for ToS across English and Irish. Based on the PCK of teacher language awareness (Andrews, 2003; Wright & Bolitho, 1993), I sought to explore how participation in professional learning communities with coaching could support teachers' PCK of ToS across languages. This involved, teachers as language users,

language analysts, and language teachers. As language users in this study, teachers required procedural knowledge of English and Irish. As language analysts, teachers required explicit knowledge (EK) of the similarities and differences between English and Irish. As language teachers, teachers required pedagogical skills to teach for ToS across languages in the context of English and Irish.

5.3   Summary of the Key Findings in Relation to the Research Questions

Using DeLuca et al.'s (2015) collaborative inquiry approach as a PL structure, teachers participated in a professional learning community with coaching that supported, a) dialogical sharing, b) taking action to promote, and c) reflecting on teaching for ToS across English and Irish. All teachers observed, engaged with, and implemented learning activities that promoted teaching for ToS. Teachers expressed that the collaborative inquiry approach (DeLuca et al., 2015) provided them with a PL space with a facilitator/coach to support and guide their understanding of and teaching for ToS across languages.

In response to research question one, findings suggest that participation in PL with coaching supported teachers' dialogical sharing, taking action to promote, and reflecting on teaching for ToS. Participation in professional learning communities with coaching can support teachers to teach for ToS. While teachers were familiar with engaging in dialogical sharing and taking action about other aspects of their work prior to the research study, teachers reported spending limited time engaging in dialogical sharing and taking action about promoting teaching for ToS. Regarding reflecting, and in particular reflecting collaboratively about any aspect of their work prior to the study, teachers reported that time to do so had been limited. Findings showed that reflecting collaboratively provided teachers the opportunity to engage with and learn from one another about teaching for ToS in a collaborative space.

In response to research question two, other factors that supported teaching for ToS include supporting teacher PCK of ToS across English and Irish, and provision of professional learning communities and coaching about teaching for ToS. Teachers reported development of their PCK of ToS. At the outset of the study, teachers reported limited awareness of how to teach for ToS. However, at the end of the study, teachers reported a deeper knowledge and awareness of how to teach for ToS having engaged with PL and coaching. Reporting on teacher confidence and competence, teachers described an increase in confidence and competence in the use of English, and teaching of English and in the use of Irish, and teaching of Irish having engaged with the study. Teachers expressed much satisfaction with PL and coaching about teaching for ToS across English and Irish. Lack of teacher competence and confidence in using and

teaching Irish, and time constraints were identified as factors that hindered teaching for ToS. Curriculum overload and lack of planning time required to prepare Irish resources was noted.

5.4   Synthesis of Findings

This study presents key research findings that contribute to new knowledge, a synthesis of which is provided in this section.

5.4.1   Pedagogical Content Knowledge and Teacher Language Awareness about ToS

Varied PCK and teacher language awareness about ToS existed amongst the teachers prior to the study. Some uncertainty about how to teach for ToS across English and Irish in accordance with the Primary Language Curriculum (DE, 2019b) was evidenced. Teachers recognised themselves as language users, language analysts and language teachers. Teachers required procedural knowledge of English and Irish, EK of the similarities and differences between English and Irish, and pedagogical skills to teach for ToS across languages in the context of English and Irish.

Teacher PCK of ToS across languages and teacher language awareness are inextricably linked with teaching for ToS. Teachers changed their classroom pedagogy to try new approaches of teaching for ToS by using Irish picture books, teaching the Irish and English alphabets, and teaching Irish phonics. Teachers underestimated the ability of the children in their classrooms to transfer skills. Teachers were motivated by their own teaching of, and the children's receptiveness to and success in ToS. This also motivated teachers to change their practice, develop their competence and confidence, and place increased value on professional learning with coaching.

Teacher PCK of ToS across languages is also inextricably linked to teacher language competence and confidence in English and Irish. Although teachers recognised that PCK of ToS applies to English and Irish, a lack of teacher competence and confidence in the use of Irish and teaching of Irish remained. Teachers recognised the importance of language competence and confidence to support them in teaching for ToS.

5.4.2   Professional Learning and Coaching about Teaching for ToS

PL and coaching about teaching for ToS supported teachers to teach for ToS. Time approved by leadership to engage in sustained PL with coaching provided teachers with a collaborative space for inquiry. Teachers benefitted from the focused and structured, context-specific on-site approach of the study in supporting their PCK of ToS across English and Irish. Teachers reported that the provision of resources and modelled lessons supported them in their teaching for ToS.

5.5   Limitations of the Research Study

Three limitations are presented in light of the research questions. They include, the choice of a single-site case study, small sample size, and the limited duration.

As this was a single-site case study, findings are reflective of one English-medium primary school and therefore are not generalisable to all schools. However, some findings may be transferable (Lincoln & Guba, 1985; Pring, 2015). The sample size was small, focusing on four mainstream class teachers of first and second classes. This was because the present study focused on ToS in a whole-class setting and represented the teachers who agreed to participate in the study. It therefore does not represent all class levels, special education teachers, and/or school management. However, despite this limitation, the School Principal and teacher participants reported an interest shown by other teachers in learning about teaching for ToS during the course of the study. Further research could extend this study. Teachers responded positively to the provision of the PL and coaching about teaching for ToS across English and Irish and discussed how it could be further embedded in their classrooms and shared with other teachers in the school.

The duration of the study was an eight-week period. Teachers were provided with time approved by school leadership to engage in the study. Arrangements were put in place each week for teachers to engage in interviews, professional learning community sessions, observe modelled lessons in their classrooms, and implement learning activities observed by the facilitator/coach. Overall, teachers were well-supported to engage in the study for its duration. Further studies could extend the research over a longer period of time.

5.6   Recommendations for Practice, Policy, and Future Research

The research study presents recommendations for practice, policy and future research.

5.6.1   Recommendations for Practice

Findings from the research study present recommendations for practice. The approach used in the study could be used to support teachers to teach for ToS in other primary schools. The implementation of the Primary Language Curriculum (DE, 2019b) was mandated in schools since the publication of Circular letter 0045/2019 (DE, 2015), however, as noted in the Chief Inspector's Report 2016-2020 (DEI, 2022), significant difficulties and challenges in understanding and implementing the Primary Language Curriculum (DE, 2019b) remain. The approach used in this study could support other schools through participation in PL with coaching in the context of ToS. Other schools could use the framework of a) dialogical sharing, b) taking action to promote, and c)

reflecting on teaching for ToS across English and Irish if they had access to a facilitator/coach. With this support, teachers could explore and develop PCK and language awareness about ToS to support their implementation of the Primary Language Curriculum (DE, 2019b). Teachers in the present study recognised that PCK of ToS across languages is inextricably linked to practice and also competence and confidence in the use of English, the use of Irish, and teaching of the English and Irish languages. It is recommended that teachers engage in PL with coaching in the Irish language and pedagogy to support their language competence and confidence in the use of Irish, and teaching of Irish. This will not happen without adequate supports.

Teachers are required to "ensure that the focus of planning is on the provision of rich and authentic language learning experiences for children which will support their achievement of the outcomes set out in the Primary Language Curriculum/*Curaclam Teanga na Bunscoile*" (DE, 2019b, p. 7). The present study evidences an exploration of teacher PCK of ToS that supports teachers to teach for ToS. Teachers could adopt such an approach to support their implementation of further aspects of the Primary Language Curriculum (DE, 2019b) in their classrooms.

School leadership teams are required to support teachers by "leading whole-school staff discussions and collaborative reflection and learning and planning to ensure that the Primary Language Curriculum/*Curaclam Teanga na Bunscoile* is put into practice in an incremental way" (DE, 2019b, p. 7). As the present study evidences the use of a collaborative inquiry approach to support teachers', a) dialogical sharing, b) taking action to promote, and c) reflecting on teaching for ToS across English and Irish, and in particular, highlights the limited opportunities for teacher reflection and shared reflection, school leadership could promote a collaborative inquiry approach to support teachers in their implementation of the Primary Language Curriculum (DE, 2019b).

5.6.2 Recommendations for Policy

The recommendations for policy arising from the research findings are outlined in this section. The *Cosán* Framework (Teaching Council, 2016) provides an opportunity for schools to engage in PL and coaching on an elective basis. Findings showed that when teachers in the present study were supported by school leadership to engage in PL and coaching, they were enabled to engage with and benefit from its provision. While dedicated time and space for individual and collaborative learning and reflection is noted in the *Cosán* Framework (Teaching Council, 2016), and as teaching for ToS is a core underpinning concept of the Primary Language Curriculum (DE, 2019b), it is recommended that further PL with coaching be made available for all teachers particularly in the context of Irish. The National Literacy, Numeracy and Digital Literacy Strategy 2024-2033 (DE, 2024a) presents five pillars of the education system. Findings from the present

study relate particularly to Pillar Two of the Strategy. *Pillar Two: Supporting the professional practice of early years educators, childminders and teachers* states that continuous professional learning and robust support will be provided to enhance skills, knowledge, and pedagogical approaches (DE, 2024a). Furthermore, the Strategy 2024-2033 (DE, 2024a) states that supports will be provided to enhance the Irish language competence of early years educators, childminders and teachers through tailored professional learning opportunities, coaching, mentoring, resources and supports (DE, 2024a). The present study suggests that part of this PL and coaching should adopt a collaborative inquiry approach that focuses on supporting teacher PCK of ToS across languages and that adequate time is provided for schools to do so.

The Primary Framework (DE, 2023a) sets out new time allocations for subject areas at primary level, one of which is English, Irish and Modern Foreign Languages (MFL). Findings showed that teaching for ToS is linked to PCK, teacher language awareness, and teacher language competence and confidence in English and Irish. It is also recommended that teachers be provided with access to PL with coaching in the Irish language to support teacher language competence and confidence in Irish. While the Primary Framework (DE, 2023a, p. 8) presents key competencies, one of which describes '*Being a communicator and using language*', the time allocated to teach Irish was reduced by thirty minutes per week in senior primary classrooms. This means that children from third to sixth class will receive less time engaging with the Irish language. While plurilingual and pluricultural practices are welcomed (DE, 2024a), reducing time allocation for teaching Irish is not supported (Ó Duibhir & Harris, 2023). The present study recommends that time allocation for teaching Irish is maximised, and teachers are provided with the appropriate supports to develop teacher PCK of ToS across languages. A key aspect of the ToS is that students must have adequate input and motivation if transfer is to happen. As ToS is dependent on adequate input, reduction in time allocated to Irish compromises the potential for ToS across languages on which the Primary Language Curriculum (DE, 2019b) is based.

5.6.3 Recommendations for Research

The present study focused on a single-site case study; therefore, it is recommended that future research is conducted using the same approach in other contexts. A pilot study to include the provision of coaches for schools would enable the expansion of the sample size to include other teachers from the same class level in other schools, and also to include teachers of other class levels. This may support teaching for ToS on a whole-school basis.

Andrews and Lin (2017) determine that further analysis and understanding of the knowledge about language needed by L2 teachers is required. They highlight that

improved understanding of the impact of teacher language awareness on pedagogical practice and student learning, and refining approaches to support teachers' language awareness is necessary. Further research in the area of PCK and teacher language awareness in the context of ToS in English and Irish would provide additional insights.

Despite the present study providing rich, qualitative data analysis, it is recommended that future research incorporates the use of quantitative research methods to garner quantitative data about teacher PCK of ToS across languages. As noted in Chapter Two, in line with research by Kennedy (2014), it is recommended that transmissive models of PL about ToS are not adopted. However, as teachers in the present study welcomed the availability of PL with coaching about ToS, future research to include quantitative research methods could ascertain the potential interest of a wider population.

5.7   Concluding Statement

This study showed that PL and coaching using a collaborative inquiry approach supports teacher PCK of ToS across English and Irish in a primary school. The rationale for this study was that difficulties and challenges experienced by teachers in implementing the Primary Language Curriculum (DE, 2019b) were highlighted in the Chief Inspector's Report 2016-2022 (DEI, 2022). Despite provision of PL about the Primary Language Curriculum (DE, 2019b), teachers reported challenges with implementing the Primary Language Curriculum (DE, 2019b) (Mac Domhnaill & Nic an Bhaird, 2022). PL was identified as an opportunity to build on teacher PCK throughout a teacher's career (Giblin et al., 2022). Collaborative inquiry as a PL structure (DeLuca et al., 2015) supports teachers to engage in dialogical sharing, taking action and reflecting. Therefore, the present study sought to support teacher PCK of ToS across languages for the teaching of ToS through PL and coaching using a collaborative inquiry approach.

With plurilingual and pluricultural developments in Irish policy (DE, 2024a), the role of PCK of ToS across languages is pertinent to teaching of English, the teaching of Irish and also to Modern Foreign Languages. Teacher PCK, teacher language awareness, and teacher language competence and confidence were linked to teaching for ToS. While there is much need for further practice, policy and research to explore how to support teachers to teach for ToS across languages, the present study shows that opportunities to engage in professional learning communities and coaching using a collaborative inquiry approach can support teacher PCK of ToS across languages.

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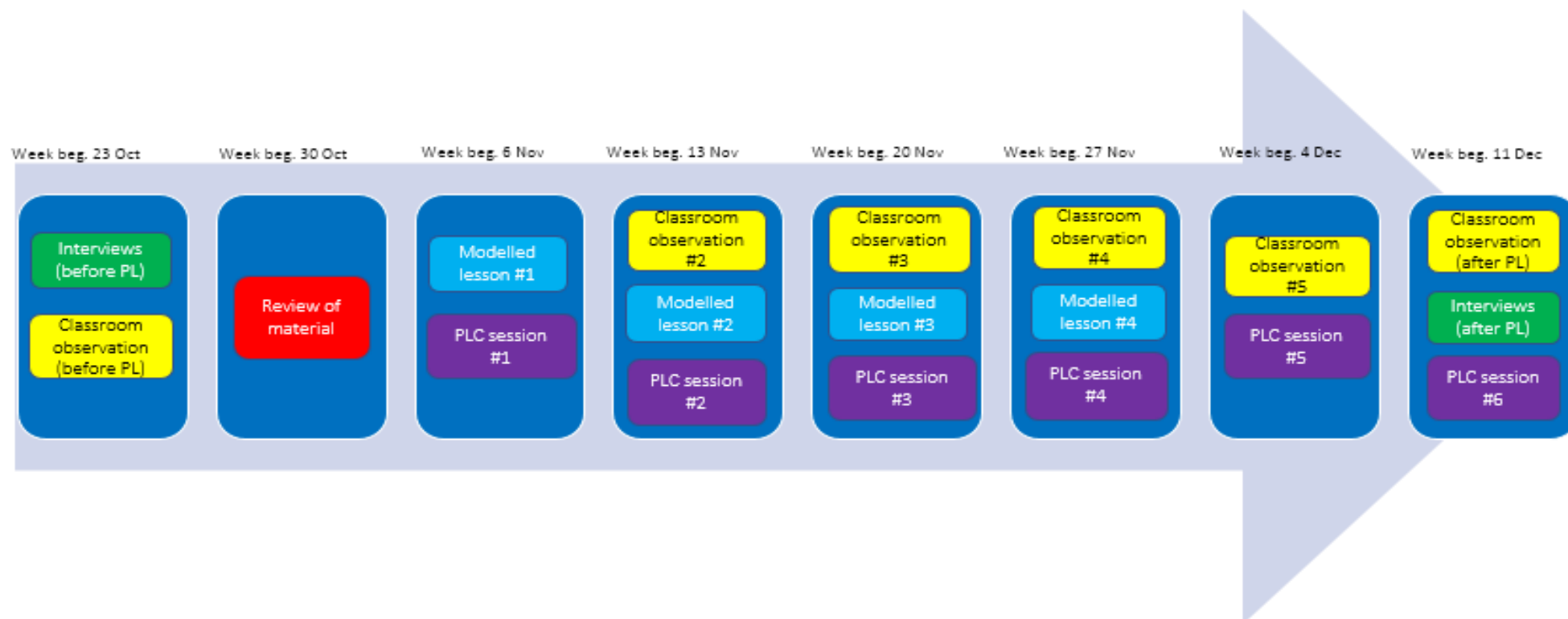
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7   Appendices

Appendix A1

Data Schedule

Week-by-week Data Schedule

Week beg.	Action
09 October 2023	☐Pilot interview schedule ☐Pilot professional learning community ☐Pilot classroom observation schedule ☐Review responses to the pilot study
16 October 2023	☐Preparation of materials
23 October 2023	☐Conduct pre-PL interviews ☐Conduct classroom observation #1 ☐Review classroom observation #1 ☐Review pre-PL interview responses ☐Review post-PL interview schedule
30 October 2023	☐Preparation of materials ☐Finalise modelled lesson #1 ☐Finalise PLC session #1
06 November 2023	☐Deliver modelled lesson #1 ☐Deliver PLC session #1 ☐Review modelled lesson #1 ☐Review PLC session #1 ☐Finalise modelled lesson #2 ☐Finalise PLC session #2
13 November 2023	☐Conduct classroom observation #2 ☐Deliver modelled lesson #2 ☐Deliver PLC session #2 ☐Review classroom observation #2 ☐Review modelled lesson #2 ☐Review PLC session # 2 ☐Finalise modelled lesson #3 ☐Finalise PLC session #3
20 November 2023	☐Conduct classroom observation #3 ☐Deliver modelled lesson #3 ☐Deliver PLC session #3 ☐Review classroom observation #3 ☐Review modelled lesson #3 ☐Review PLC session #3 ☐Finalise modelled lesson #4 ☐Finalise PLC session #4
27 November 2023	☐Conduct classroom observation #4 ☐Deliver modelled lesson #4

	☐Deliver PLC session #4
	☐Review classroom observation #4
	☐Review modelled lesson #4
	☐Review PLC session #4
	☐Finalise PLC session #5
04 December 2023	☐Conduct classroom observation #5
	☐Deliver PLC session #5
	☐Review classroom observation #5
	☐Review PLC session #5
	☐Finalise PLC session #6
	☐Finalise post-PL interview schedule
11 December 2023	☐Conduct classroom observation #6
	☐Deliver PLC session #6
	☐Conduct post-PL interviews
	☐Review classroom observation #6
	☐Review PLC session #6
	☐Review post-PL interview responses

Interview Schedule for Teachers Pre-Professional Learning

This is a semi-structured interview schedule. Questions will not necessarily be asked in the order that they are presented. There are three sections. Part I is about you, part II is about the transfer of skills and part III is about professional learning communities.

It is envisaged that you and/or I may steer the conversation at times and many of the proposed items on the schedule for discussion may be indirectly approached in this way.

This is a menu of questions to cover various levels of linguistic awareness backgrounds.

Introduction of Researcher

My name is Máire and I want to learn about your experiences of teaching Irish and English in primary school. I would like to talk to you about your thoughts about the transfer of skills across Irish, English and home languages other than English or Irish and your experiences of participating in a professional learning community. I will ask questions but you don't have to answer all questions. When I am writing about this research, in order to support anonymity your name will not be used at any stage.

PART I Background information

1. What languages do you know/use?
2. What is your level of qualification – graduate or postgraduate?
3. Have you ever taught in another school context? For example, Irish-medium schools?

School

1. Could you tell me about your school?
2. How many years have you been teaching?

Class

1. What class level do you teach?
2. How many children speak a language other than English or Irish in your class?

PART II Teachers' perceptions of the transfer of skills across languages

Curriculum

1. The Primary Language Curriculum for Irish and English is now in our schools and I am interested to hear what you think about it. What do you think about the integrated language curriculum?
2. Do you find the PLC document helpful? Something you can draw upon?
3. There is a focus on the transfer of skills across languages in the document. What does that mean for you? Why?

Pedagogy

1. What do you think about the teaching of Irish in general? Strengths? Challenges? Why?
2. What do you think about the teaching of English in general? Strengths? Challenges? Why?
3. What do you think about the teaching of home languages other than English or Irish in general? Strengths? Challenges? Why?
4. Do you have an opportunity to identify similarities and/or differences between the languages to the children in your class? How?
5. What do you think are the benefits of identifying similarities and/or differences between the languages? Why?
6. Do you encourage children to transfer skills from one language to another (English/Irish/home language other than English or Irish) in your class? How so? Why?
7. Do you encourage children to use their home language (other than English or Irish)? How? Why?

Teacher confidence

1. On a scale of 1 to 5, 1 being not confident at all, 5 being extremely confident, how confident are you at teaching Irish? Why do you think so?
2. On a scale of 1 to 5, 1 being not confident at all, 5 being extremely confident, how confident are you teaching English? Why do you think so?
3. On a scale of 1 to 5, 1 being not confident at all, 5 being extremely confident, how confident would you be at teaching languages other than English or Irish? Why do you think so?

Teacher Professional Learning

1. Do you have opportunities to engage in professional learning?
2. Have you engaged in professional learning about the Primary Language Curriculum?

PART III Teachers' perceptions of participating in a professional learning community

Professional learning communities

1. Have you heard about professional learning communities?
2. Have you participated in a professional learning community before?
3. Do you think professional learning is important? Why do you think so?

Collaborative inquiry

1. Do you talk to other teachers (i.e. dialogic sharing) about how you teach Irish, about how you teach English?
2. Tell me about some of the teaching strategies (i.e. taking action) you use to teach Irish, to teach English?
3. Do you reflect on your own teaching (i.e. reflection) of Irish, of English? On your own i.e. self-reflection? With other teachers?

Opportunities/Challenges

1. What opportunities and/or challenges are there to teach for the transfer of skills across Irish and English?
2. What would help you to teach for the transfer of skills across Irish and English?

Appendix A4

Interview Schedule for Teachers Post-Professional Learning

Thank you for your participation in the research project to date. Your insights have been instrumental in the process.

This is a semi-structured interview schedule. Questions will not necessarily be asked in the order that they are presented. There are two sections. Part I is about the transfer of skills and part II is about professional learning communities.

It is envisaged that you and/or I may steer the conversation at times and many of the proposed items on the schedule for discussion may be indirectly approached in this way.

This is a menu of questions to cover various levels of linguistic awareness backgrounds.

Introduction of Researcher

To recap, I want to learn about your experiences of teaching for the transfer of skills across Irish, English and home languages other than English or Irish and also your experiences of participating in a professional learning community having engaged in six weeks of professional learning. I will ask questions but you don't have to answer all questions. When I am writing about this research, in order to support anonymity your name will not be used at any stage.

PART I Teachers' perceptions of the transfer of skills across languages

Curriculum

Having engaged in six weeks of professional learning:

1. Has your perception of the integrated language curriculum changed? If so, how?
2. Do you find the PLC document helpful? Something you can draw upon?
3. What does the transfer of skills across languages mean for you now? Why?

Pedagogy

Having engaged in six weeks of professional learning:

1. Has your perception of the teaching of Irish changed and how? Strengths? Challenges? Why?
2. Has your perception of the teaching of English changed and how? Strengths? Challenges? Why?
3. Has your perception of the teaching of home languages other than English or Irish changed and how? Strengths? Challenges? Why?

4. What does identifying similarities and/or differences between the languages to the children in your class mean for you now? Why?

5. What do you now consider to be the benefits of identifying similarities and/or differences between the languages? Why?

6. Has your approach to encouraging children to transfer skills from one language to another (English/Irish/home language other than English or Irish) in your class changed? How so? Why?

7. Has your approach to encouraging children to use their home language (other than English or Irish)? changed? How so? Why?

Teacher confidence

Having engaged in six weeks of professional learning:

1. On a scale of 1 to 5, 1 being not confident at all, 5 being extremely confident, has your confidence towards teaching Irish changed? How so? Why do you think so?

2. On a scale of 1 to 5, 1 being not confident at all, 5 being extremely confident, has your confidence towards teaching English changed? How so? Why do you think so?

3. On a scale of 1 to 5, 1 being not confident at all, 5 being extremely confident, has your confidence towards teaching languages other than English or Irish changed? Why do you think so? How so?

Teacher Professional Learning

Having engaged in six weeks of professional learning:

1. Has your perception of engaging in professional learning changed? How so? Why?

2. Do you think you will continue to engage in professional learning about the Primary Language Curriculum? Why?

3. Would you recommend this type of professional learning to other teachers? Why? Why not?

4. Could the professional learning community continue into the future?

PART II Teachers' perceptions of participating in a professional learning community

Professional learning communities

Having engaged in six weeks of professional learning:

1. Has your opinion of professional learning communities changed?

2. Would you participate in a professional learning community again? Why?

3. Has your viewpoint of professional learning changed? How so? Why?

Collaborative inquiry

1. How did you find talking to other teachers (i.e. dialogic sharing) about how you teach Irish and English? Will you continue to do this? Why?
2. Tell me about some of the teaching strategies (i.e. taking action) you now use to teach Irish and English that might be different to the strategies you used before the six-week period.
3. Will you continue to use these strategies? If so, which strategies? Why? Why not?
4. How did you find reflecting on your own teaching (i.e. reflection) of Irish and English? On your own i.e. self-reflection? With other teachers? Will you continue to do this? Why?

Opportunities/Challenges

Having engaged in six weeks of professional learning:

1. What do you now recognise as opportunities and/or challenges to teaching for the transfer of skills across Irish and English? Why?
2. What has helped you to teach for the transfer of skills across Irish and English? How? Why?

Appendix A5

Programme of Professional Learning

Seachtain dar tús...	Fócas	Ionchur ranga	Ionchur PL	Tasc do na múinteoirí
23 D. Fómhair	Réamhrá	❏ Breathnóireacht ranga (roimh PL)	❏ N/A	❏ Agallamh (roimh PL)
30 D. Fómhair		Ullmhúchán don ionchur PL		
6 Samhain	Gaeilge NF	❏ Múnlú #1 den Ghaeilge neamhfhoirmiúil sa seomra ranga	❏ PLC Comhthéacs maidir leis an PLC/CTB, Gaeilge Neamhfhoirmiúil a úsáid i gcomhthéacs ilteangach	❏ PDST Gaeilge Neamhfhoirmiúil ❏ Little and Kirwan Engaging with Linguistic Diversity
13 Samhain	Teanga Ó Bhéal	❏ Breathnóireacht ranga (Gaeilge neamhfhoirmiúil) ❏ Múnlú #2 den Teanga Ó Bhéal sa seomra ranga	❏ PLC Múineadh le Scileanna a Aistriú idir Teangacha (a) Scéalaíocht agus (b) Amhráin/Dánta	❏ TF#1 Rannpháirtíocht, éisteacht agus aird ❏ TF#10 Teanga a úsáid go spraíúil agus go cruthaitheach
20 Samhain	Léitheoireacht	❏ Breathnóireacht ranga (Teanga Ó Bhéal) ❏ Múnlú #3 den Léitheoireacht sa seomra ranga	❏ PLC Múineadh le Scileanna a Aistriú idir Teangacha: Clár fónaice	❏ TF#4 Feasacht fhóineolaíoch agus fhóinéimeach ❏ TF#5 Fónaic, aithint focal agus staidéar ar fhocail
27 Samhain	Scríbhneoireacht	❏ Breathnóireacht ranga (Léitheoireacht) ❏ Múnlú #4 den Scríbhneoireacht sa seomra ranga	❏ PLC Múineadh le Scileanna a Aistriú idir Teangacha Scríbhneoireacht i gcomhpháirt	❏ TF#3 Struchtúr abairte agus gnásanna cló ❏ TF#7 Próiseas na scríbhneoireachta agus ag cruthú téacs
4 Nollaig	Pleanáil	❏ Breathnóireacht ranga (Scríbhneoireacht)	❏ PLC Pleanáil do thraschur scileanna idir teangacha	❏ CNCM Seo Linn Leabhrán Ullmhúcháin i gcomhair Teagaisc agus Foghlama ❏ Samplaí do thraschur scileanna a aimsiú sa phleanáil agus ullmhúchán
11 Nollaig	Críoch	❏ Breathnóireacht ranga (tar éis PL)	❏ PLC Teacht le chéile	❏ Agallamh (tar éis PL)

Appendix A6

Modelled Lessons

Modelled lesson #1
• Gaeilge NF

Modelled lesson #2
• Teanga Ó Bhéal

Modelled lesson #3
• Léitheoireacht

Modelled lesson #4
• Scríbhneoireacht

Transfer of skills across languages in the primary school

Appendix A7

Plean ceachta

Snáith	*Léitheoireacht*
Torthaí foghlama	*#3 Gnásanna cló agus struchtúr abairte [Conventions of print and sentence structure],* *#5 Fónaic, aithint focal agus staidéar ar fhocail [Phonics, word recognition, and word study]*
Fócás ar leith	*Cosúlacht: ceannlitreacha agus lánstad* *Difríocht: gutaí fada 'ó'*
Acmhainní	*An Tornapa Mór*
Tréimhse réamhchumarsáide	*Cuireann an páiste aithne ar Charmander Cosúlacht agus Dexter Difríocht.*
Tréimhse cumarsáide	*Éisteann an páiste leis an scéal An Tornapa Mór á léamh ag an múinteoir.* *Díríonn an múinteoir aird na bpáistí ar na ceannlitreacha A, T, M agus an lánstad sa scéal. Cuireann an múinteoir in iúl don pháiste gur cosúlacht iad na ceannlitreacha agus na lánstadanna i nGaeilge agus i mBéarla. Úsáideann an páiste Charmander Cosúlacht chun ceannlitreacha agus lánstadanna a léiriú sa scéal.* *Díríonn an múinteoir aird na bpáistí ar an guta fada 'ó' sa scéal. Cuireann an múinteoir in iúl don pháiste gur difríocht iad na gutaí fada i nGaeilge agus i mBéarla. Úsáideann an páiste Dexter Difríocht chun an guta fada 'ó' a léiriú sa scéal.* *Cleachtaíonn an páiste trí abairtí ón scéal ina bhfuil an guta fada 'ó'.* • *Tá sé mór.* • *Tá sé an-mhór.* • *Tá sé rómhór.* *Léigheann an páiste na habairtí.* *Meaitseálann an páiste na habairtí leis an bpictiúr ceart.*
Tréimhse iarchumarsáide	*Aithníonn an páiste ceannlitreacha agus lánstadanna mar chosúlachtaí idir Gaeilge agus Béarla.* *Aithníonn an páiste an guta fada 'ó' mar dhifríochtaí idir Gaeilge agus Béarla.*

Lesson plan

Strand	Reading
Learning outcomes	#3 Conventions of print and sentence structure #5 Phonics, word recognition, and word study
Particular focus	Similarity: capital letters and full stop Difference: long vowel sound 'ó'
Resources	The Enormous Turnip
Introduction	The child is introduced to Similarity Charmander and Difference Dexter.
Development	The child listens to the story of the Enormous Turnip read by the teacher. The teacher draws the child's attention to the capital letters A, T, M and the full stops in the story. The teacher highlights to the child that the capital letters A, T, M and full stops are similarities between the English and Irish languages. The child uses the Similarity Charmander identification card to highlight capital letters and full stops in the story. The teacher draws the child's attention to the long vowel sound 'ó' in the story. The teacher highlights to the child that the long vowel sounds are a difference between the English and Irish languages. The child uses the Dexter Difference identification card to highlight long vowel sound 'ó' in the story. The child practices three sentences from the story that include the long vowel sound 'ó'. *Tá sé mór.* [It is big] *Tá sé an-mhór.* [It is very big] *Tá sé rómhór.* [It is too big] The child reads the sentences. The child matches the sentences to the correct picture.
Closure	The child recognises capital letters and full stops as similarities between the Irish and English languages. The child recognises the long vowel sound 'ó' as a difference between the Irish and English languages.

Appendix A8

Notes on Modelled Lessons - Excerpt from Researcher Reflective Journal

	Researcher reflective journal		
	Notes on modelled lessons		
Description	Preparation (Reflection in action - RIA)	Delivery (Reflection in action - RIA)	Response (Reflection on action ROA)
Lesson 1 Predominant focus (Oral Language) ➢ Charmander Cosúlacht and Dexter Difríocht ➢ Song An Litir is Fearr Liom ➢ Taispeáin dom	• Thinking about how to engage the children in the lesson (LO Engagement) • Would be useful to ascertain level of competence of children so as to pitch future lessons appropriately • Oral language, reading and writing, primary focus of each modelled lesson on each strand (link to Primary Language Curriculum – relevance for teachers) • Identify a poem/song that focuses on similarities and differences • Review of books with poems and songs • Suitable to gather a few for the teachers and discuss during the professional learning community session • What are the sounds in Irish? • Positive language experiences • Children learning the song "An Litir is Fearr Liom" ó Ící Pící – why? This song has examples of letters that are similar and letters that are different – is this a concept of print or phonics lesson? Both. • Letters chosen are D, M, B, Á.	• This was a positive learning experience. The children were engaged in the lesson. Introducing Charmander Cosúlacht and Dexter Difríocht was fun but took the children some time to catch on. • The phrase "mar an gcéanna" was used by some of the children when describing Charmander Cosúlacht as I was using that term in showing similar examples. • Some of the children made an X with their arms when they saw they saw the gutaí fada… perhaps something to do with Dexter Difríocht. I noticed I had been shaking my head from left to right (indicating no) when introducing Difríocht Dexter. Thinking about language learning, children love when the language is active and they can respond using actions. • Loved listening to the recording of the song. Perhaps too many new words. However, the children knew some of them with one indicating, 'they are the same' when pointing to the picture of the monkey. I am not sure if this meant that they words	• The introduction of the characters worked well. I hope I can carry this through the remainder of the study. I will use the actions with the children to indicate a similarity and a difference. • I found the children to be active in translating for one another as I was using Irish to conduct the lesson. This was happening in languages other than Irish and English. I encouraged this when I recognised that the children were helping one another. • As the lesson was developing, I was asking questions of my understanding of the transfer of skills. Was the transfer of skills happening as the children translated for one another? Was ToS happening as the children started to use actions to show similarities and differences? Identifying when ToS was and was not happening during the delivery of the lesson was not clear cut. The lines are blurred and it seemed although I had planned for the children to recognise that D, M, B were the same letters in the English

		sounded the same as in monkey in English and moncaí in Irish or if this meant that moncaí has the same starting sound as the other 'm' images on the slide.	and Irish language and Á was not the same in the English and Irish language, I needed to simplify my focus. Was I looking to teach concepts of print OR phonics? I think I need to go back to the learning outcomes and see where the similarities and differences are for myself.
	• Need a symbol that signifies a similarity and a difference. • Signs around the classroom		• I didn't have the knowledge of LOTEI when children were making connections to their home LOTEI. Some children recognised that that the /s/ sound in English was pronounced as an /sh/ sound in their LOTEI.

| Lesson 2 Predominant focus (Reading) ó sound ➢ Alphabet matching game ➢ Shared reading An Tornapa Mór ➢ Sentences Tá sé mór. Tá sé an-mhór. Tá sé rómhór. | • Sounds and letters. Phonics and orthography. Concepts of print. I returned to the literature on interdependence hypothesis and similarities and differences. Stenson and Hickey (2011, 2019), detail the Irish and English alphabets and their consonant phonemes and vowel sounds, respectively. This took so much time.
• Need to engage the children in a fun activity that teaches them about the differences. Learning about the differences make the difference. Back to Charmander Cosúlacht and Dexter Difríocht.
• Incorporate a picture book. Detective Dexter.
• Need to be clear on my learning outcomes. Aspect that is similar and aspect that is different.
• Made iterations of alphabet matching games. Colour used to ensure the differences stood out (purple). Green for Gaeilge, blue for Béarla (English) to help the children who have LOTEI.
• Follow-up activity to reinforce the reading of the sound (ó). Tá sé mór. Tá sé an-mhór. Tá sé rómhór. | • Another positive experience today. The children really enjoyed this lesson. They linked across English and Irish and to LOTEI.
• I was surprised as to how well the children interacted with the alphabet matching game. I noticed that the teachers were curious and wanted to learn too, and get involved.
• The children were learning very clear differences between English and Irish. The ó sound in the word 'mór' (big).
• I chose 'An Tornapa Mór' as a shared reading activity and the children acted out the parts. It was interactive and the children were using the language (spoken and read).
• The laminated sentences I used as teacher modelling the lesson were very useful in pointing out the ó in the written text.
• A child noticed the síneadh fada in my name on my nametag and the children talked to one another about how they spell their names. This included examples of letter symbols I did not know but the children shared them with the class.
• I noticed that the teachers were interested in the alphabet matching game and were surprised to see that some consonants do not exist in the Irish language.
• Teachers were surprised that the children could read the Irish sentences – using their knowledge of their L1 to read the L2 (Irish).
• Completing a matching alphabet game, explicit teaching of the ó sound and | • My learning outcomes were clear for this lesson. I am going to continue this approach in looking for the similarities and differences in the curriculum document basing my knowledge on the interdependence hypothesis. This takes time and I am unsure if the 'tréithe breise' (additional features) are known to the teachers i.e. where to locate them and what they mean. I noticed that the curriculum doesn't specify the sounds in the Irish language. This was frustrating as I needed to consult many other programmes to be able to work them out myself. No two set of programme specified the same set of sounds.
• Despite the alphabet activity taking many iterations to develop, it was a worthwhile activity for the classroom. The children were in no doubt as to what sounds were similar and different in the Irish and English languages. I would like to encourage the children to extend the activity building on LOTEI as I don't possess that knowledge.
• It would have nee useful to locate an alphabet as Gaeilge. The best I could find was in Mar a Déarfá but is designed for cainteoirí dúchais (native speakers).
• The lesson was successful in teaching children to transfer skills across Irish and English while recognising LOTEI. It enabled them (and the teachers) to make connections building on their prior language knowledge. I found myself using the term "mar an gcéanna" (the same) instead of "cosúlachtaí" |

		engaging in a shared reading activity enabled the children to read Irish sentences.	(similarities) and wondered about this. I also noticed the children using both terms. • Despite the lesson being focused on the sound ó in Irish, the alphabet activity represented written letters which brings up the point raised by Stenson and Hickey (2019): Discussions of language by nonlinguists often confuse sounds and spellings, especially when talking about Irish, where letters of the alphabet can be ambiguous in the ways they are pronounced, and where both sounds and spellings differ so much from those of English, despite using a similar alphabet (p. 31). If I am teaching the differences which are the vowels in Irish, (there are also consonants in Irish that sound different but look the same as they are written in English (orthographically)– d caol (slender)/ d leathan (broad) etc), as in d looks like d in English and Irish but has different sounds in English and Irish. I think this confusion occurs because I/we are operating in the context of using skills in L1 (English, predominantly) and transferring knowledge from L1 to L2. Children are familiar with English sounds and their orthographic representation. • I think this comes back to lesson one, once I am clear on the learning outcomes, what am I teaching that is similar, what am I teaching that is different, it makes the process of teaching it straightforward.
Lesson 3 Predominant focus	• Choose another picture book. The children enjoyed the picture books. The teachers reflected on how this was their practice in	• This was a noisy lesson. The children loved making the i sound as we read the story and wrote the sentence. I extended it by going	• Children need to learn Irish phonics and teachers are unsure of how to make the sounds in Irish and therefore only teach it

(Writing) í sound ➢ Charmander Cosúlacht and Dexter Difríocht ➢ Shared reading and writing Cinnín Óir agus na Trí Bhéar ➢ Elkonin boxes	English teaching and could see how their pedagogical skills were being transferred – a valuable, unexpected gain. • Be clear on learning outcomes – cosúlacht and difríocht. Cosúlacht are the capital letters a difríocht is the í sound. • Assessing the knowledge, check with children "An bhfuil litir b againn sa Bhéarla?" (Is there a letter b in English?) "An bhfuil litir b againn sa Ghaeilge?" (Is there a letter b in Irish?) Same activity re: í sound in Irish. • Children to write a sentence using the í sound. "Tá Daidí Béar, Mamaí Béar agus Baibín Béar sa scéal Cinnín Óir agus na Trí Bhéar". (Daddy Bear, Mammy Bear and Baby Bear are in the story of Goldilocks and the Three Bears). • I am using the terminology letter b and the sound í with the children to help me in being clear about similarities and differences. Reflect on this following the next lesson.	back to the sentences that the children read last week. Tá sé mór. Tá sé an-mhór and tá sé rómhór. I asked them to identify the í sound and the children did not locate the í sound but showed me the ó sound. One child noticed the é sound in mé as another difference. I am not sure about the terminology of difference. É was different from ó and í but they were all also different from the English language. I may be overthinking it but I am trying to make it as clear as possible. • I know that the children are succeeding at seeing and hearing these differences between English and Irish. Is this the language analyst part? I think so. I am concerned with their knowledge whereas I am actually also teaching them the skill to identify similarities and differences regardless of what language is being taught. And they are succeeding. • The Elkonin boxes were brilliant today and I was surprised at how well the children engaged with them. I noticed the teachers were very interested again and wanted to play the game too. They were interested in the s sound in Irish. I was careful to select s (caol) sín in all sets of words.	when it appears in the workbooks. Teacher confidence is low when it comes to phonics. I shared the phonics support material with the teachers on week one but assimilating it seemed a large task. • Attitude to the language was more obvious in this lesson as teachers had not engaged children in writing of Irish. However, the children wrote the Irish sentence with the same enthusiasm as they would an English sentence. I modelled sounding out the í sound each time I came to it and the children loved vocalising and lengthening out the sound as they wrote it. The positive atmosphere in the classroom was notable with children recognising – I can write Irish. • The Elkonin boxes worked really well and teachers were intrigued that games had been developed in the Irish language to teach the children the Irish sounds. I would add 4 and 5 letter words to the next set.
Lesson 4 ➢ TG4 Gutaí Fada ➢ Bingo ➢ Language Awareness	• Trying to draw the learning together. Other sounds that have come up incidentally, é, á, and ú. Children are succeeding and most of the children have not engaged in activities like this prior to the study.	• The TG4 video of the gutaí fada was effective. It provided me (and the teachers) with the opportunity to see the children engage in learning about all the gutaí fada. • The pace at which the children engaged with this was surprising. Some activities in the video asked the children to select the correct	• I am looking forward to seeing the activities in the classrooms particularly next week. Up until now, teachers have been provided with modelled lessons incorporating the implemented learning tasks each week and accompanying resources. Next week teachers are

| Languages Connect | I think I am learning so much about how possible transfer is but how impossible it seems to those who do not have the time to engage with it. I can see how the interdependence hypothesis is being enacted in classrooms through the activities, but I have to be sure of my PCK to be able to do it. I also need the resources. Need to incorporate digital resources. TG4 sounds Gutaí Fada. Cód na Gaeilge etc. Teachers are unaware of what is available to them in terms of Irish resources. Thinking about the final lessons next week that I will observe. I have provided the teachers with an array of activities that they can implement. It is not a guided observation next week (i.e. the teachers will not have observed the activity being implemented in advance of them implementing it). Detective work, cluiche biongó, language awareness | sound as it was being said and the children responded well. The teachers were surprised at how easily the children picked up the other vowels as all Irish vowels were included in the lesson. The children loved the detective work. I placed picture books around the classroom and gave the children Dexter cards to stick on the difríochtaí. Children moved around the classroom from book to book and engaged with the Irish picture books. I noticed that this was an easy task for the children as they were now so familiar with the gutaí fada. Bingo is a completely underestimated game to develop and the websites I found did not incorporate síneadh fada's so I made the sets of games by hand (lesson in chance!) It took a week to develop. The children were brilliant at playing it and quickly learned the sounds without any difficulty. | choosing their own task to complete the study. I think that there are two major parts to teaching for transfer. First, teacher need knowledge of the language and teachers need knowledge about the language. Second, teachers need to skills to teach it. A stand out for the teachers in this study has been that they realise how pedagogies used to teach English can support them in teaching Irish. There were many connections made to the approach the school is taking to the reaching of English which supported teacher transfer of teaching pedagogies, which was an additional benefit of the study. The children enjoyed the lesson and succeeded to transfer their skills across languages. The resources were a great help but consumed a huge amount of time to develop. |

Appendix B1

Statements of Practice (Thomas & Mady, 2014)

As the researcher has not located a standard observation schedule for teaching for the transfer of skills across languages in the primary school in the Irish context, and due to the developmental nature of the project, minor amendments to the schedule may be made as the research project progresses. Under the 'count' section, a tally mark will be made for each reference to a core concept relevant to the transfer of skills across languages.

Date:	Class level:	Teacher ID:	Lesson observed:	No. of children present:

		Count	Notes
Learning Children's use:	Core concept 1: Bilingual classroom activities	Count:	Notes:
	Core concept 2: Metalinguistic talk (e.g. analysing similarities/differences across languages)	Count:	Notes:
	Core concept 3: Literacy practices that are familiar to students from their home or school literacy experiences	Count:	Notes:
	Core concept 4: Bilingual co-construction of text	Count:	Notes:
	Core concept 5: Use of L1 or common familiar language with peers by moving a task along	Count:	Notes:
Teaching Teacher's use:	Core concept 1: Analysing curriculum documents to find connections	Count:	Notes:
	Core concept 2: Incorporating similar attention to learning strategies	Count:	Notes:
	Core concept 3: Teacher use of code-switching	Count:	Notes:
	Core concept 4: Teacher use of metalinguistic talk	Count:	Notes:
	Core concept 5: Highlighting something learned in another context	Count:	Notes:
	Core concept 6: Using bilingual or multilingual resources	Count:	Notes:
	Core concept 7: Use of teaching strategies that draw on two or more languages	Count:	Notes:
	Core concept 8: Classroom culture that promotes transfer	Count:	Notes:
	Core concept 9: (Re)position students as competent contributors to (multilingual) learning groups	Count:	Notes:
	Core concept 10: Establish classroom language(s) practices collaboratively to promote L2 learning in L2 classroom	Count:	Notes:
	Core concept 11: Familiar literacy practices	Count:	Notes:
	Core concept 13: Activating and developing familiar prior (literacy) knowledge	Count:	Notes:

Adapted from Thomas and Mady (2014)

Appendix B2

Observation Schedule

As the researcher has not located a standard observation schedule for teaching for the transfer of skills across languages in the primary school in the Irish context, and due to the developmental nature of the project, minor amendments to the schedule may be made as the study progresses.

Lesson:			Date:	
Scheme:			Class (ID):	
Start time:			Teacher (ID):	
Finish time:			# children:	

Lesson content:

Teaching strategies:	Learning strategies:	Role of the teacher:	Role of the children:

Use of English:

Teacher language use:	Childrens' language use:

Structure of lesson (Learning activities):

Introduction:	Development:	Conclusion

Teaching and learning resources:	Classroom environment:

Link with other languages/ contexts:	Similarities:	Differences:

Strengths:	Areas for development:

Notes:

Appendix B3

Sceideal Breathnóireachta

As the researcher has not located a standard observation schedule for teaching for the transfer of skills across languages in the primary school in the Irish context, and due to the developmental nature of the project, minor amendments to the schedule may be made as the study progresses.

Ceacht:		Dáta:	
Scéim:		Rang (ID):	
Am tosaithe:		Múinteoir (ID):	
Am críochnaithe:		Méid páistí:	

Ábhar an cheachta:

Straitéisí teagaisc:	Straitéisí foghlama:	Ról an mhúinteora:	Ról na bpáistí:

Úsáid na Gaeilge:

Teanga an mhúinteora:	Teanga na bpáistí:

Struchtúr an cheachta (Gníomhaíochtaí foghlama):

Tréimhse réamhchumarsáide:	Tréimhse chumarsáide:	Tréimhse iarchumarsáide:

Áiseanna teagaisc agus foghlama:		Timpeallacht an tseomra ranga:	

Nasc le teangacha/ comhthéacsanna eile:	Cosúlachtaí:	Difríochtaí:

Buanna an cheachta:	Gnéithe le forbairt:

Nótaí:

Pilot Feedback on Observation Schedule

Pilot Feedback on Interview Schedule and Professional Learning Session

Feedback on Interview + PLC

Int ✓ - Worried only a few questions answered
✓ - Liked the beginning closed → open ended questions
✓ - Thinking about own classroom and how this study would impact the work they are doing
 - feeling of support + encouragement "
✓ - Hadn't heard of collaborative inquiry ✱
✓ - Three three parts - to be very clear ✱
✓ - Liked the reassurance of knowing "we are coming up to the end of part 2"

PLC ✓ - Wondering about use of English in task — what is expected of me? - check in supervisors ✓
✓ - Recalled the mionannlacht choiteann teanga but unsure if teachers now are familiar with it in the context of Primary Lang Curr ✱
✓ - Suggested including some English on lipéad le cuidiú leis na múinteoirí ✓ YES
✓ - Did not know go raibh ábhar tacaíochta ann maidir le trasghur scileanna - AM ✱
✓ - Liked go raibh modelled lessons le breith an
✓ - Suggestion - task in pairs for bun. choit ? YES ✱

Summary:
INTERVIEW	PLC
• reassurance of progress	• modelled lessons ✓✓✓
• context of study	• bun. choiteann in PLC ✓✓
• collab inquiry + 3 parts NEW	• ábhar tac. ToS ✓✓✓
• Relate back to classroom	• task in pairs ✓

Appendix C1

Familiarisation with Data - Excerpt from Researcher Reflective Journal

Post-PL Interview Teacher 3 – interesting points	
Initial trends	My thoughts/feelings
Teacher displays awareness of using one language to support the learning of another and links this to having worked in EAL context	Noticing that the teacher sees learning how to teach Irish is also teaching the teacher how to teach LOTE!
Teacher considered themselves as confident from pre-PL interviews, but now sees that competence has further increased that confidence	Recalling examples from observation schedule for this teacher – teaching slender and broad consonant sounds
Complimentary of the style of PL – focused sustained – compared to Incredible Years programme but preferred that this was based on-site	Competence and confidence linked
Valued on-site delivery compared to zoom	Operating in a vacuum – didn't know all they didn't know
Taking action supported teacher learning despite some examples of ToS in pre-observation	More knowledgeable now but in this area – needing and wanting to learn more

Appendix C2

A Priori Themes

Transfer of skills across languages	Professional learning communities and coaching
• Change in thinking	• Already engaged in meeting as a band
• Change in thinking about similarities and differences	• Planning is considered as professional learning
• Change in practice	• New approach to planning for Irish
• Change of practice in teaching of Irish	• Learning from researcher
• Writing sentences in English and Irish as example of transfer	• Learning from colleagues
• Children 'taking on' transfer naturally	• Learning from modelled lesson and implementing activity
• Benefit of the ToS	• Learning from repetition
• Chn learning to transfer by listening	• PL with coaching as beneficial
• Chn 'taking on' Irish phonics	• Language integration
• Chn as 'language aware'	• Teacher competence in speaking about languages in an integrated way
• ToS as a natural process	• Continuing the PL process beyond the study
• Teaching of English is done 'so well'	• Recommending the PL process
• Teaching of Irish 'not on radar'	• PL supported by school leader
• Teaching in an integrated way	• Structured approach to PL
• Reflection on use of curriculum document	• Importance of community in PL
• Goal was to learn how to use curriculum document	• PL requires voluntary participation
• Gained knowledge in how to use curriculum document	• PL provides confidence
• What is taught 'so well' in English should be done in Irish	• PL involves risk
• Language segregation	• Taking part influenced by stage in career
• Importance of Irish vowels	• Taking part requires openness
• Importance of seeing the alphabet in Irish and English	• PL is rewarding
• Gain in knowledge and improvement	• PL is considered as improving
• Phonics and alphabet work support spelling	• Improvement in PL is the reward
• Supporting children who found Irish/English challenging	• Established as working collaboratively
• Disbelief at positive practice of ToS	• Teachers working collaboratively supports children to learn collaboratively
• Variety of home languages is huge	• PL requires openness
• Parents who do not speak English	• Profession of teaching linked to adapting and changing (PL)
• Increased teacher language awareness	• PL enabling enjoyment
• Biggest learning was transfer	• Belief in the PLCommunity
• Reflection on prior understanding of languages segregation and integration	• Comfortable speaking with one another (discussing and adaptable)

• Teaching LOEI would require 'big' learning	• Influence of NQT on sharing of knowledge
• Teaching LOEI lack of confidence	• Learning in implementing activity
• Skills, resources in LOEI but still need base level in native lang (Indian)	• Lack of opportunity to reflect
• Teacher language competence to teach language	• Observing one another (lesson study)
• Chn use of prior language knowledge	• Suggesting to continue with a focused approach
• English as base for Irish versus LOEI as basis for Irish	• Missed opportunities to teach for transfer
• Phonics, strategies, games, activities	• Alphabet as a springboard activity
• English as a springboard to learn Irish	• Improvement in Irish
• English as a springboard for Irish and Irish as a springboard for something else	• Thinking in an integrated teaching way
• Change in confidence in teaching of Irish	• Removal of workbooks in teaching of English
• Change in practice about similarities and differences	• Increased confidence in the teaching of Irish
• Use of picture books for teaching of Irish	• Deeper appreciation for language learning
• Use of picture books for teaching of English	• One language as springboard for learning another
• Scale question confidence	• PLComm as most beneficial part of process
• Amount of prep required to teach LOEI	
• Teaching LOEI confidence	
• Language competence in Irish	
• Language competence in English	
• Language competence in LOEI	

Appendix C3

Clustering of A Priori Themes

Name	Files	References
a) Increased teacher language awareness	1	2
b) Teacher language competence in English	1	3
c) Teacher language competence (and confidence) in Irish	1	6
d) Teacher language competence in LOEI	1	3
e) One language as a springboard for learning another	1	9
f) Recognising the child as language aware	1	5
g) Variety of home languages	1	2
h) Pedagogical approaches for English	1	4
i. Using text as resource	1	3
ii. Teaching English alphabetic code	1	1
i) Pedagogical approaches for Irish	1	9
i. Using text as a resource	1	1
ii. Teaching Irish alphabetic code	1	1
iii. Teaching Irish phonics	1	3
iv. Language-specific resources	1	2
v. Teacher confidence in teaching Irish	1	2
j) Teaching LOEI	1	11
i. Language-specific resources	1	3
ii. Teacher language competence in LOEI	1	8
k) Missed opportunities	1	3
l) Teaching in an integrated way	1	16
m) Established as working collaboratively (we dialogically share already)	1	6
n) PL as beneficial	1	12
o) Importance of community in PL	1	6
p) PL requires voluntary participation and openness	1	12
q) Use of curriuclum document	1	5
r) Taking action supported teacher learning	1	2
s) Importance of reflecting on practice	1	2
t) Focused, structured approach to PL	1	5
u) Struggling learners supported by transfer	1	1

Appendix C4

Initial Template

Definition of dialogical sharing (DeLuca et al., 2015)	Examples of findings from qualitative data analysis
Acts of shared participation	o) Importance of community in PL
Shared leadership and shared responsibility	o) Importance of community in PL s) Importance of reflecting
Constructing a shared vision and negotiating shared values and goals	m) Experience of planning together
The significance of personal and experiential knowledge in co-construction of meaning	x) Misconceptions of ToS i. Translating considered as ToS l) Teaching in an integrated way i. ToS as concepts of print v. The writing process vi. Etymology of language v) Difficulty of putting ToS into practice
Using individual knowledge as basis for co-constructing deeper, shared knowledge	h) Pedagogical approaches for English i. Using picture books as a resource e) One language as a springboard for another iii. Using pedagogical knowledge of teaching Irish to teach LOTEI
Definition of taking action (DeLuca et al., 2015)	**Examples of findings from qualitative data analysis**
Teachers changing classroom pedagogy to try new approaches and determine their effects	i) Pedagogical approaches for Irish i. Using picture books as a resource ii. Teaching Irish alphabet iii. Teaching Irish phonics iv. Language specific resources e) One language as springboard for another ii. Drawing on home language (LOTEI)
Teachers working together to engage in the action of inquiry by researching, analysing and consolidating their learning	n) PL with coaching as beneficial iv. Learning from research r) Taking action supported teacher learning
Jointly analysing student data to determine trends and changes in performance as a result of teacher practice	*Did not occur as student data was not collected as part of the study*
Discussing and learning about participants' beliefs, pedagogical orientations and practices	n) PL with coaching as beneficial ii. Modelling of lessons ix. Learning from colleagues r) Taking action supported teacher learning

	o) Importance of community in PL
	h) Pedagogical approaches for English i. Using picture books as a resource
Discussing and learning about the developmental complexities of students	w) Underestimating language capacity of children u) Children who found Irish/English challenging supported by ToS l) Teaching in an integrated way f) Recognising the child as language aware
Discussing and learning about the written word of the curriculum document	q) Use of curriculum document i) Pedagogical approaches for Irish l) Teaching in an integrated way ii. Change in teacher understanding of ToS – Gaeilge as focus
Definition of reflecting (DeLuca et al., 2015)	**Examples of findings from qualitative data analysis**
Provoking learning that will change practice	s) Importance of reflecting l) Teaching in an integrated way
Reviewing previously established goals at the end of the process or the act of continuous reflection during the CI cycle through the use of a journal (individual level)	l) Teaching in an integrated way ii. Change in teacher understanding of ToS – Gaeilge as focus e) One language as a springboard for another i. ToS as 'value-added' s) Importance of reflecting
Engaging in facilitated meetings (group level)	o) Importance of community in PL l) Teaching in an integrated way iv. Similarities and differences n) PL with coaching as beneficial iii. Learning from the researcher
Factors that support CI	**Examples of findings from qualitative data analysis**
Supportive leadership -facilitators	n) PL with coaching as beneficial

-school leadership	ii. Modelling of lessons iii. Learning from the researcher n) PL with coaching as beneficial viii. Directed by school leadership
-teacher-leaders	In Q1 – dialogical sharing – shared leadership and shared responsibility
Supportive environmental structures -time and space	n) PL with coaching as beneficial xii. Time assigned to PL n) PL with coaching as beneficial vi. Sustained delivery
-culture	m) Experience in planning together
Supportive practices -group membership	m) Experience in planning together o) Importance of community in PL s) Importance of reflecting on practice
-collegial dialogue	In Q1 - dialogical sharing - acts of shared participation
-norms, protocols and resources	n) PL with coaching as beneficial xi. Provision of resources
Benefits of CI	**Examples of findings from qualitative data analysis**
Benefits to teachers -development of content and pedagogical knowledge and skills to enhance teaching and student learning	a) Increased teacher language awareness k) Missed opportunities b) TLC&C in English c) TLC&C in Irish d) TLC&C in LOTEI
-development of a learning community amongst teachers	In Q1 - dialogical sharing – acts of shared participation
-opportunities for teacher leadership	In Q1 – dialogical sharing - shared leadership and shared responsibility
Benefits of CI to students -improved student learning and achievement	f) Recognising the child as language aware/transfer capable e) One language a springboard for another i. ToS as 'value-added'
Benefits of CI to schools	

	In Q1 - taking action - discussing and learning about the written word of the curriculum document
-greater curriculum alignment within and across grade levels	
-introduction of new ideas that can be incorporated into school improvement goals	n) PL with coaching as beneficial ii. Modelling of lessons xi. Provision of resources In Q2 – supportive environmental structures – time and space But these are new items
-professional development targeted to teachers' needs	n) PL with coaching as beneficial iv. On-site delivery x. Context appropriate i. Continuing, recc PL In Q1 - taking action - teachers working together to engage in the action of inquiry by researching, analysing and consolidating their learning
-shifts to collaborative school cultures that can support inquiry into student success	n) PL with coaching as beneficial i. Continuing, recc PL vi. Sustained delivery n) PL with coaching as beneficial xii. Time assigned to PL viii. Directed by school leadership
-access to universities as sources of knowledge and information	In Q1 - taking action - teachers working together to engage in the action of inquiry by researching, analysing and consolidating their learning n) PL with coaching as beneficial iii. Learning from the researcher e) One language a springboard for another i. ToS as 'value-added' f) Recognising the child as language aware/transfer capable
Factors that hinder CI	**Examples of findings from qualitative data analysis**
Buying into the culture of collaborative inquiry	p) PL requires voluntary participation
Leadership	v) Difficulty of putting ToS into practice (Already named DS4) LACK OF b) TLC&C in English LACK OF c) TLC&C in Irish LACK OF d) TLC&C in LOTEI
Temporal constraints	LACK OF n) AGAIN PL with coaching as beneficial xii. Time assigned to PL

Data literacy	*Did not occur as student data was not collected as part of the study*
Other codes:	g) Variety of home languages – context h) Pedagogical approaches for English ii. Teaching English alphabet i) Pedagogical approaches for Irish v. Teacher confidence vi. Overreliance on workbook j) Teaching LOTEI i. Language-specific resources ii. Techer language competence iii. Teaching LOTEI phonics iv. Teaching alphabetic LOTEI l) Teaching in an integrated way iii. From language segregation to integration n) PL with coaching as beneficial i. Continuing, recc PL iv. On-site delivery x. Context appropriate vii. Focused, structured t) Focused, structured

Appendix C5

Applying and Developing the Template - Excerpt from Audit Trail

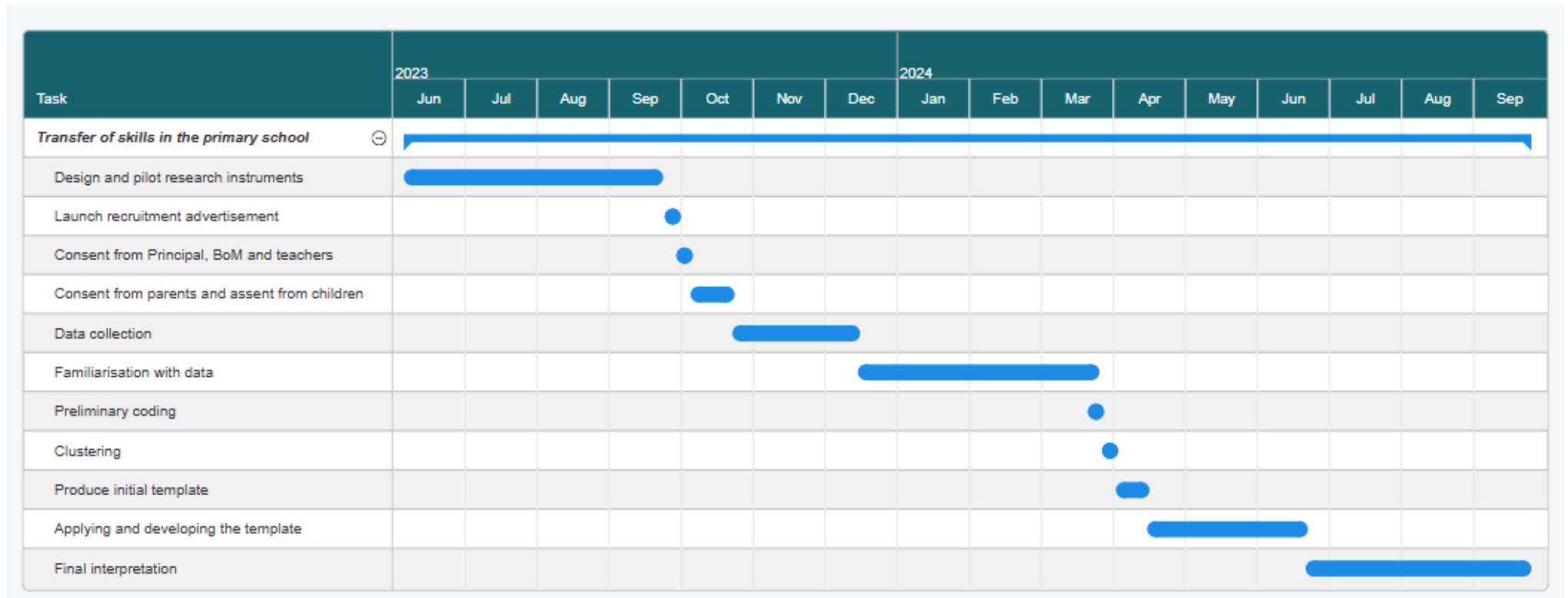| Transfer of skills across languages in the primary school (third iteration)							
DeLuca et al. (2015)	**My study**						Final iteration
Question 1. How does participation in a professional learning community with coaching support teachers', a) dialogical sharing, b) taking action to promote, and c) reflecting on teaching for ToS across English and Irish?							
Dialogical sharing	**Dialogical sharing**						
• DS1 acts of shared participation	• acts of shared participation	o) Importance of community in PL				development of a learning community amongst teachers **8AGAIN o) Importance of community in PL (DS1)**	o) Importance of community in PL
• DS2 shared leadership and shared responsibility	• shared leadership and shared responsibility	o) Importance of community in PL s) Importance of reflecting				opportunities for teacher leadership **9AGAIN o) Importance of community in PL (DS2)**	o) Importance of community in PL s) Importance of reflecting
• DS3 the construction of a shared vision and negotiating of shared values and goals for the inquiry	• the construction of a shared vision and negotiating of shared values and goals for the inquiry	m) Experience of planning together				greater curriculum alignment within and across grade levels **q) AGAIN Use of curriculum document (DS3)**	m) Experience of planning together q) Use of curriculum document
• DS4 significance of personal and experiential knowledge in the co-construction of meaning	• significance of personal and experiential knowledge in the co-construction of meaning	x) Misconceptions of ToS i. Translating considered as ToS l) Teaching in an integrated way i. ToS as concepts of print v. The writing process					x) Misconceptions of ToS i. Translating considered as ToS l) Teaching in an integrated way

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Final Interpretation

Definition of dialogical sharing (DeLuca et al., 2015)	Examples of findings from qualitative data analysis
Acts of shared participation	o) Importance of community in PL
Shared leadership and shared responsibility	o) Importance of community in PL s) Importance of reflecting
Constructing a shared vision and negotiating shared values and goals	m) Experience of planning together q) Use of curriculum document
The significance of personal and experiential knowledge in co-construction of meaning	x) Misconceptions of ToS i. Translating considered as ToS l) Teaching in an integrated way i. ToS as concepts of print v. The writing process vi. Etymology of language v) Difficulty of putting ToS into practice
Using individual knowledge as basis for co-constructing deeper, shared knowledge	h) Pedagogical approaches for English i. Using picture books as a resource e) One language as a springboard for another iii. Using pedagogical knowledge of teaching Irish to teach LOTEI
Definition of taking action (DeLuca et al., 2015)	**Examples of findings from qualitative data analysis**
Teachers changing classroom pedagogy to try new approaches and determine their effects	i) Pedagogical approaches for Irish i. Using picture books as a resource ii. Teaching Irish alphabet iii. Teaching Irish phonics iv. Language specific resources e) One language as springboard for another ii. Drawing on home language (LOTEI) l) Teaching in an integrated way iii. From language segregation to integration h) Pedagogical approaches for English i. Using picture books as a resource ii. Teaching English alphabet
Teachers working together to engage in the action of inquiry by researching, analysing and consolidating their learning	n) PL with coaching as beneficial iv. Learning from research r) Taking action supported teacher learning

Discussing and learning about participants' beliefs, pedagogical orientations and practices	n) PL with coaching as beneficial ii. Modelling of lessons ix. Learning from colleagues r) Taking action supported teacher learning o) Importance of community in PL h) Pedagogical approaches for English i. Using picture books as a resource
Discussing and learning about the developmental complexities of students	w) Underestimating language capacity of children u) Children who found Irish/English challenging supported by ToS l) Teaching in an integrated way f) Recognising the child as language aware
Discussing and learning about the written word of the curriculum document	q) Use of curriculum document i) Pedagogical approaches for Irish l) Teaching in an integrated way ii. Change in teacher understanding of ToS – Gaeilge as focus
Definition of reflecting (DeLuca et al., 2015)	**Examples of findings from qualitative data analysis**
Teacher reflection in action through participation	o) Importance of community in PL s) Importance of reflecting on practice p) PL as voluntary participation and openness l) Teaching in an integrated way e) One language as a springboard for another i. ToS as 'value-added' i) Pedagogical approaches for Irish iii. Teaching Irish phonics
Teacher reflection on action through reviewing previously established goals	l) Teaching in an integrated way e) One language as a springboard for another i. ToS as value added i) Pedagogical approaches for Irish iii. Teaching Irish phonics
Other factors that support teaching for ToS	**Examples of findings from qualitative data analysis**

Teacher pedagogical content knowledge	b) TLC&C in English
	c) TLC&C in Irish
	e) One language as a springboard for another i. ToS as 'value-added'
	l) Teaching in an integrated way iii. From language segregation to integration
	k) Missed opportunities
Professional learning communities and coaching about teaching for ToS	t) Focused, structured approach
	n) PL as beneficial i. Continuing, recc PL ii. Modelling of lessons/coaching iii. Learning from the researcher/coaching iv. On-site delivery vi. Sustained delivery vii. Focused, structured viii. Directed by school leadership x. Context appropriate xi. Provision of resources/coaching xii. Time assigned to PL
	t) Focused, structured approach
Factors that hinder teaching for ToS	**Examples of findings from qualitative data analysis**
Lack of teacher competence and confidence in using and teaching Irish	i) Pedagogical approaches for Irish vi. Overreliance on workbook
	h) Pedagogical approaches for English i. Using picture books as a resource
Time constraints	i) Pedagogical approaches for Irish iii. Teaching Irish phonics iv. Language-specific resources
	h) Pedagogical approaches for English i. Using picture books as a resource
	l) Teaching in an integrated way

Appendix D1

Gannt Chart

Task	2023							2024								
	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Transfer of skills in the primary school ⊖	██															
Design and pilot research instruments	██████████████															
Launch recruitment advertisement				●												
Consent from Principal, BoM and teachers				●												
Consent from parents and assent from children					●											
Data collection					██											
Familiarisation with data							████									
Preliminary coding										●						
Clustering										●						
Produce initial template										●						
Applying and developing the template											███					
Final interpretation														███		

Appendix E1

DCU Research Ethics Committee (REC) Ethical Approval awarded 25/09/2023

Ollscoil Chathair Bhaile Átha Cliath
Dublin City University

Ms Máire Ní Láimhín
School of Language, Literacy and Early Childhood Education (LLECE)

25th September 2023

REC Reference: DCUREC/2023/179 (Expedited Review)

Proposal Title: Supporting the transfer of skills across languages through teacher professional development in professional learning communities

Applicant(s): Ms Máire Ní Láimhín, Dr Aisling Ní Dhiorbháin, Professor Pádraig Ó Duibhir

Dear Colleague(s),

Thank you for your application to DCU Research Ethics Committee (REC). Further to its review by the committee and resting on the assumption of information accuracy and completeness, DCU REC is pleased to issue ethical approval for this research project. Please include reference to this approval in all materials used to recruit research participants.

Researchers are responsible for ensuring that the research project to which this ethical approval refers is carried out as specifically described in the application form. Should modifications to the research project be required at a later stage, researchers must submit a research amendment application form to REC for approval, prior to the implementation of modifications.

Please note that it is the responsibility of the PI to ensure that any other DCU compliance requirements relevant to the research project, such as those related to data protection, insurance, health and safety, or legal issues, are fully met in advance of initiating the project.

As part of DCU REC's ongoing monitoring process, a research progress report may be required. DCU REC will request this report from the PI as appropriate.

DCU REC wishes you every success in your research.

Yours sincerely,

Dr. Melrona Kirrane
Chairperson
DCU Research Ethics Committee

DCU
Research & Innovation

Taighde & Nuálaíocht Tacaíocht
Ollscoil Chathair Bhaile Átha Cliath,
Baile Átha Cliath, Éire

Research & Innovation Support
Dublin City University,
Dublin 9, Ireland

T +353 1 700 8000
F +353 1 700 8002
E research@dcu.ie
www.dcu.ie

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Appendix E2

Recruitment Advertisement

A chara,

I write to invite you to seek expressions of interest in taking part in a research project on the teaching for transfer of skills across languages in primary schools.

My name is Máire Ní Láimhín (maire.nilaimhin@dcu.ie) and I am an assistant professor in Teagasc na Gaeilge in the School of Language, Literacy and Early Childhood Education, Dublin City University. I am currently undertaking a Doctorate in Education under the supervision of Dr Aisling Ní Dhiorbháin and Prof. Padraig Ó Duibhir at DCU, about the 'Transfer of skills across languages in the primary school'. The research project aims to support teachers of first and second classes to teach for the transfer of skills across languages. Teachers working in support roles associated with first and second classes are also invited to participate in particular stages of the study.

While full detail is provided in the attached/enclosed plain language statement, some of the key features of this project include:

- **Collaboration** between the researcher and the teachers
- Professional learning for teachers about teaching for transfer across languages through participation in **audio recorded professional learning communities**
- Support for teachers in the classroom through **classroom observation** and **modelling of lessons** delivered by the researcher, with **resources** provided to the teachers
- An opportunity for teachers to share perceptions about the transfer of skills and their experiences of participating in professional learning communities through **interviews** at the beginning and end of the six-week period

Given the challenges encountered by teachers in teaching for the transfer of skills across languages, the proposed research project presents a unique opportunity for teachers to participate in professional learning in a supportive way. This study will support teachers in reinforcing their linguistic awareness and knowledge of Irish and English, and show how knowledge of one language can help in learning another. It is hoped that data gathered during this study will enable researchers and teachers to gain knowledge of how to support the transfer of skills across Irish and English while also acknowledging the diversity of languages spoken in the primary school. It Is anticipated that the project will help to develop and refine teaching resources used in the primary classroom.

Participation in this research project will involve providing ongoing feedback from teachers through interviews, classroom observation, audio recorded professional learning communities and modelling of lessons.

I am more than happy to provide further information on the project at any time. You will also find the full detail in the attached/enclosed plain language statement.

I would really appreciate your support with this project.

Ag súil go mór le cloisteáil uait.

Le dea-ghuí,

Máire Ní Láimhín	Dr Aisling Ní Dhiorbháin	Prof. Pádraig Ó Duibhir
(Researcher)	(Supervisor)	(Supervisor)
Maire.nilaimhin@dcu.ie	aisling.nidhiorbhain@dcu.ie	padraig.oduibhir@dcu.ie

Appendix E3

Plain Language Statement for Principal and/or Board of Management

A Phríomhoide agus/nó a Chathaoirligh, a chara/chairde,

Introduction to the Research Study

My name is Máire Ní Láimhín (maire.nilaimhin@dcu.ie) and I am an assistant professor in Teagasc na Gaeilge in the School of Language, Literacy and Early Childhood Education, Dublin City University (DCU) where I am also undertaking a Doctorate in Education. I am conducting research about teaching for the transfer of skills across languages under the supervision of Dr Aisling Ní Dhiorbháin (aisling.nidhiorbhain@dcu.ie) and Prof. Pádraig Ó Duibhir (padraig.oduibhir@dcu.ie), School of Language, Literacy and Early Childhood Education, DCU.

Data Privacy Notice

This study will be conducted in compliance with the General Data Protection Regulation (GDPR), and if you have any concerns regarding how your data in this study has been handled, you can contact: DCU Data Protection Officer, Mr. Martin Ward – (data.protection@dcu.ie Tel: 01-7005118/01-7008257) who will handle any data protection concerns arising from this research. An individual also has the right to report a complaint concerning the use of personal data to the Irish Data Protection Commission: Data Protection Commissioner.

Data will be collected on the basis of the consent of the participants and any queries participants may have in relation to how data will be used and managed can in the first instance be directed to Máire Ní Láimhín (maire.nilaimhin@dcu.ie). Where relevant, any personal data provided in the course of this research will be managed in accordance with the DCU Data Protection Unit policy. Data that could potentially lead to identification of the school/teachers/children involved will be omitted or anonymised. Participants can access their data by contacting Máire Ní Láimhín (maire.nilaimhin@dcu.ie) up until 30 June 2024 after which time it will be fully anonymised. Your name, the name of any child or teacher or the school will not be reported in any publications on the study.

Statement as to whether or not the research data is to be destroyed after a minimum period

Pseudo-anonymity will be provided to participants up until 30/06/2024. Following this date, identifiers which were stored separately to the data on the DCU Google Drive or other platform that is compliant with DCU DPU which is password protected and encrypted, will be destroyed by the researcher. This will enable fully anonymity of the participants after the 30/06/2024. Anonymised data will be destroyed on 30/06/2029. All records and data will be disposed of appropriately, in accordance with DCU Data Protection Policy.

Details of what participant involvement in the Research Study will require

The project, entitled 'The transfer of skills across languages in the primary school', will provide teachers in your school with an opportunity to engage in professional learning about how to teach for the transfer of skills across English and Irish through professional learning communities (PLC) sessions. Teachers are invited to participate in this study which will run in your school for a six-week period from 6th November 2023 – 15th December 2023.

Teachers are invited to participate in an audio recorded PLC session (one hour per week over a six-week period) and also an audio recorded interview at both the beginning (approx. 40 min) and the end (approx. 40 min) of the research. If teachers would like to see the questions, I can share them with teachers in advance. The PLC sessions and interviews will take place during Croke Park hours in a mutually agreed classroom on the school premises. Where necessary, interviews may be held

via DCU zoom and will be audio recorded. Teachers will be given a copy of the DCU protocol for using zoom https://www.dcu.ie/sites/default/files/inline-files/zoom-data-protection-guidance-for-dcu-staff-v2_1.pd and this will be adhered to at all times. Teachers will be asked to share their thoughts about the transfer of skills across English and Irish and their experiences of participating in a PLC.

PLC sessions and interviews that take place on the school premises will be audio recorded on a Dictaphone. Interviews that take place on Zoom will be recorded via the Zoom platform. PLC sessions and interviews will be conducted in accordance with all ethical guidelines at all times. The researcher will begin all PLC sessions and interviews by explaining and establishing agreed protocols. Agreed start, finish and break times will be confirmed at the outset. Participants will be invited to take breaks at regular intervals. Following each PLC session and interview, the researcher will immediately transfer all audio/Zoom recordings to the researcher's DCU Google Drive or other platform that is compliant with DCU Data Protection Unit, where they will be stored electronically and the researcher will delete all audio/Zoom recordings from the Dictaphone/Zoom platform within two hours of recording. All audio/Zoom recordings will be transcribed by the researcher and deleted within 6 months.

I will visit the classrooms during school hours to support teachers through modelling of lessons and I will observe teachers teaching to see how the children engage with this approach. I will provide the teachers with all of the materials: lesson plans and classroom resources. I will talk with teachers about the lessons they teach and take notes on our conversations following classroom observation and modelling of lessons. Following each PLC session, interview, classroom observation and modelling of lesson, the researcher will immediately convert notes to a digital format and upload to the researcher's DCU Google Drive or other platform that is compliant with DCU DPU. All paper data will be scanned and saved to the DCU Google Drive. Hard copies will then be shredded. Identifiers will not be linked with these data and will be stored separately to the data on DCU Google Drive.

Potential risks to participants from involvement in the Research Study

There are no risks associated with the project greater than those encountered in everyday practice.

Any benefits (direct or indirect) to participants from involvement in the Research Study

This study will support teachers in reinforcing their linguistic awareness and knowledge of English and Irish, and show how knowledge of one language can help in learning another. It will provide a unique opportunity for teachers to participate in professional learning about the transfer of skills in a supportive way. Teachers will be provided with resources and supported to teach for the transfer of skills across English and Irish. It is hoped that data gathered during this study will enable researchers and teachers to gain knowledge of how to support the transfer of skills across English and Irish and develop and refine teaching resources used in the primary classroom.

Advice as to arrangements to be made to protect confidentiality of data, including that confidentiality of information provided is subject to legal limitations

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. Please note that it may not be possible to ensure confidentiality/anonymity to others that are familiar with the setting due to the small size of the setting.

Statement that involvement in the Research Study is voluntary

Participation in this study is voluntary. You are invited to give permission for the study to take place in your school. Participants (i.e. teachers) will then be invited to consent to participate in the study. Whilst the data remains in a pseudo-anonymised state, it is possible for the researcher to reverse engineer the data to establish who contributed each piece of data. Therefore, the researcher is able to retrieve and remove an individual's contribution should the need arise. Teachers may withdraw their data from the research up until 30/06/2024 by contacting Máire Ní Láimhín (maire.nilaimhin@dcu.ie). Teachers'

participation in the project will end at the point of withdrawal and data will be managed in accordance with the DCU Data Protection Unit policy.

Further information and Research Findings

If you give your permission for this research to take place in your school, anonymised findings of this research will appear in a thesis as partial fulfilment of the Doctor of Education degree programme at DCU Institute of Education and may be published in academic journals and may be presented at conferences. The research may inform the ongoing design and implementation of an integrated curriculum within the primary school classroom. Participants may contact the researcher Máire Ní Láimhín (maire.nilaimhin@dcu.ie) for a copy of the thesis. I will provide Plain Language Statements and Informed Consent forms for teachers and parents/guardians. Having gained consent from parents/guardians I will provide plain language statements and assent forms for children. Should you have any questions, queries and/or concerns, please contact Máire Ní Láimhín (maire.nilaimhin@dcu.ie).

If participants have concerns about this study and wish to contact an independent person, please contact: The Secretary, Dublin City University Research Ethics Committee, c/o Research and Innovation Support, Dublin City University, Dublin 9. Tel 01-7008000, e-mail rec@dcu.ie.

I would really appreciate your support with this project.

Le dea-ghuí,

Máire Ní Láimhín (Researcher)	Dr Aisling Ní Dhiorbháin (Supervisor)	Prof. Pádraig Ó Duibhir (Supervisor)
Maire.nilaimhin@dcu.ie		
	aisling.nidhiorbhain@dcu.ie	padraig.oduibhir@dcu.ie

Appendix E4

Informed Consent Form for Principal and/or Board of Management

Máire Ní Láimhín (Researcher)

Dr Aisling Ní Dhiorbháin and Prof. Pádraig Ó Duibhir (Supervisors)

Clarification of the purpose of the research

The purpose of this research is to support and inform teaching for the transfer of skills across English and Irish in the primary classroom through professional learning communities (PLC). This study will support teachers in reinforcing their linguistic awareness and knowledge of English and Irish, and show how knowledge of one language can help in learning another. Teachers at my school are invited to participate in this study which will run in my school for a six-week period from 6th November 2023 – 15th December 2023. The name of any child or teacher or the school will not be reported in any publications on the study.

Confirmation of particular requirements as highlighted in the Plain Language Statement

In order to partake in this study, teachers will:

- Engage in professional learning through participation in audio recorded PLC sessions (c. one hour per week over a six-week period)
- Support the researcher in gaining teacher views and knowledge through an audio recorded interview at both the beginning (approx. 40 min) and the end (approx. 40 min) of the six-week period
- Allow the researcher to visit classrooms at mutually agreed times to observe teachers teaching lessons to see how the children engage with this approach
- Provide the researcher with the opportunity to model lessons in classrooms at a mutually agreed time
- Teach language tasks weekly for the duration of the study with the use of resources provided by the researcher, as modelled by the researcher

Confirmation that involvement in the Research Study is voluntary

I am aware that involvement in this research study is voluntary. I am invited to give permission for the study to take place in my school.

Please complete the following (Circle Yes or No for each question)

I have read the Plain Language Statement (or had it read to me)	*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 this study	*Yes/No*
I have received satisfactory answers to all my questions	*Yes/No*
I am aware that teacher interviews will be audio recorded	*Yes/No*
I understand that the PLC sessions will be audio recorded	*Yes/No*
I understand that anonymised findings arising from the study may be published	*Yes/No*
I understand that the data I provide will be protected within the legal limitations of data confidentiality	*Yes/No*
I am aware that data will be managed in accordance with the DCU Data Protection Unit policy	*Yes/No*
I am aware that it may not be possible to ensure confidentiality/anonymity to others that are familiar with the setting due to the small size of the setting	*Yes/No*

I have read and understood the information in this form. My questions and concerns have been answered by the researchers, and I have a copy of this consent form. Therefore, I consent to take part in this research project. I give permission for the research to take place in the school.

Participants Signature: _____

Name in Block Capitals: _____

Witness: _____

Date: _____

Appendix E5

Plain Language Statement for Teachers

A mhúinteoir, a chara,

Introduction to the Research Study

My name is Máire Ní Láimhín (maire.nilaimhin@dcu.ie) and I am an assistant professor in Teagasc na Gaeilge in the School of Language, Literacy and Early Childhood Education, Dublin City University (DCU) where I am also undertaking a Doctorate in Education. I am conducting research about teaching for the transfer of skills across languages under the supervision of Dr Aisling Ní Dhiorbháin (aisling.nidhiorbhain@dcu.ie) and Prof. Pádraig Ó Duibhir (padraig.oduibhir@dcu.ie), School of Language Literacy and Early Childhood Education, DCU.

Data Privacy Notice

This study will be conducted in compliance with the General Data Protection Regulation (GDPR), and if you have any concerns regarding how your data in this study has been handled, you can contact: DCU Data Protection Officer, Mr. Martin Ward – (data.protection@dcu.ie Tel: 01-7005118/01-7008257) who will handle any data protection concerns arising from this research. An individual also has the right to report a complaint concerning the use of personal data to the Irish Data Protection Commission: Data Protection Commissioner.

Data will be collected on the basis of the consent of the participants and any queries participants may have in relation to how data will be used and managed can in the first instance be directed to Máire Ní Láimhín (maire.nilaimhin@dcu.ie). Where relevant, any personal data provided in the course of this research will be managed in accordance with the DCU Data Protection Unit. Data that could potentially lead to identification of the school/teachers/children involved will be omitted or anonymised. You can access your data by contacting Máire Ní Láimhín (maire.nilaimhin@dcu.ie) up until 30 June 2024 after which time it will be fully anonymised. Your name, the name of any child or teacher or the school will not be reported in any publications on the study.

Statement as to whether or not the research data is to be destroyed after a minimum period

Pseudo-anonymity will be provided to participants up until 30/06/2024. Following this date, identifiers which were stored separately to the data on the DCU Google Drive or other platform that is compliant with DCU DPU which is password protected and encrypted, will be destroyed by the researcher. This will enable fully anonymity of the participants after the 30/06/2024. Anonymised data will be destroyed on 30/06/2029. All records and data will be disposed of appropriately, in accordance with DCU Data Protection Policy.

Details of what participant involvement in the Research Study will require

The project, entitled 'The transfer of skills across languages in the primary school', will provide you with an opportunity to engage in professional learning about how to teach for the transfer of skills across English and Irish through professional learning communities (PLC) sessions. You are invited to participate in this study which will run in your school for a six-week period from 6th November 2023 – 15th December 2023.

You are invited to participate in an audio recorded PLC session (one hour per week over a six-week period) and also an audio recorded interview at both the beginning (approx. 40 min) and the end (approx. 40 min) of the research. If you would like to see the questions, I can share them with you in advance. The PLC sessions and interviews will take place during Croke Park hours in a mutually agreed classroom on the school premises. Where necessary, the interviews may be held via DCU

zoom and will be audio recorded. You will be given a copy of the DCU protocol for using zoom https://www.dcu.ie/sites/default/files/inline-files/zoom-data-protection-guidance-for-dcu-staff-v2_1.pd and this will be adhered to at all times. You will be asked to share your thoughts about the transfer of skills across English and Irish and your experiences of participating in a PLC.

PLC sessions and interviews that take place on the school premises will be audio recorded on a Dictaphone. Interviews that take place on Zoom will be recorded via the Zoom platform. PLC sessions and interviews will be conducted in accordance with all ethical guidelines adhered to at all times. The researcher will begin all PLC sessions and interviews by explaining and establishing agreed protocols. Agreed start, finish and break times will be confirmed at the outset. You will be invited to take breaks at regular intervals.

Following each PLC session and interview, the researcher will immediately transfer all audio/Zoom recordings to the researcher's DCU Google Drive or other platform that is compliant with DCU Data Protection Unit, where they will be stored electronically and the researcher will delete all audio/Zoom recordings from the Dictaphone/Zoom platform within two hours of recording. All audio/Zoom recordings will be transcribed by the researcher and deleted within 6 months.

I will visit your classroom during school hours to support you through modelling of lessons and I will observe your teaching to see how the children engage with this approach. I will provide you with all of the materials: lesson plans and classroom resources. I will talk to you about the lessons you teach and take notes on our conversations following classroom observation and modelling of lessons. Following each PLC session, interview, classroom observation and modelling of lesson, the researcher will immediately convert notes to a digital format and upload to the researcher's DCU Google Drive or other platform that is compliant with DCU DPU. All paper data will be scanned and saved to the DCU Google Drive. Hard copies will then be shredded. Identifiers will not be linked with these data and will be stored separately to the data on DCU Google Drive.

Potential risks to participants from involvement in the Research Study

There are no risks associated with the project greater than those encountered in everyday classroom practice.

Any benefits (direct or indirect) to participants from involvement in the Research Study

This study will support you in reinforcing your linguistic awareness and knowledge of English and Irish, and show how knowledge of one language can help in learning another. It will provide a unique opportunity for you to participate in professional learning about the transfer of skills in a supportive way. You will be provided with resources and support to teach for the transfer of skills across English and Irish. It is hoped that data gathered during this study will enable researchers and teachers to gain knowledge of how to support the transfer of skills across English and Irish and develop and refine teaching resources used in the primary classroom.

Advice as to arrangements to be made to protect confidentiality of data, including that confidentiality of information provided is subject to legal limitations

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. Please note that it may not be possible to ensure confidentiality/anonymity to others that are familiar with the setting due to the small size of the setting.

Statement that involvement in the Research Study is voluntary

Participation in this study is voluntary. Whilst the data remains in a pseudo-anonymised state, it is possible for the researcher to reverse engineer the data to establish who contributed each piece of data. Therefore, the researcher is able to retrieve and remove an individual's contribution should the need arise. You may withdraw your data from the research up until 30/06/2024 by contacting Máire Ní Láimhín (maire.nilaimhin@dcu.ie). Your participation in the project will end at the point of withdrawal and data will be managed in accordance with the DCU Data Protection Unit policy.

Further information and Research Findings

If you agree to participate in this study, findings of this research will appear in a thesis as partial fulfilment of the Doctor of Education degree programme at DCU Institute of Education and may be published in academic journals and may be presented at conferences. The research may inform the ongoing design and implementation of an integrated curriculum within the primary school classroom. You may contact the researcher Máire Ní Láimhín (maire.nilaimhin@dcu.ie) for a copy of the thesis. Should you have any questions, queries and/or concerns, please contact Máire Ní Láimhín (maire.nilaimhin@dcu.ie).

If participants have concerns about this study and wish to contact an independent person, please contact: The Secretary, Dublin City University Research Ethics Committee, c/o Research and Innovation Support, Dublin City University, Dublin 9. Tel 01-7008000, e-mail rec@dcu.ie.

Le dea-ghuí,

Máire Ní Láimhín (Researcher)	Dr Aisling Ní Dhiorbháin (Supervisor)	Prof. Pádraig Ó Duibhir (Supervisor)
Maire.nilaimhin@dcu.ie	aisling.nidhiorbhain@dcu.ie	padraig.oduibhir@dcu.ie

Informed Consent Form for Teachers

Máire Ní Láimhín (Researcher)

Dr Aisling Ní Dhiorbháin and Prof. Pádraig Ó Duibhir (Supervisors)

Clarification of the purpose of the research

The purpose of this research is to support and inform my teaching for the transfer of skills across English and Irish in the primary classroom through professional learning communities (PLC). This study will support me in reinforcing my linguistic awareness and knowledge of English and Irish, and show how knowledge of one language can help in learning another. I am invited to participate in this study which will run in my school for a six-week period from 6th November 2023 – 15th December 2023. The name of any child or teacher or the school will not be reported in any publications on the study.

Confirmation of particular requirements as highlighted in the Plain Language Statement

In order to partake in this study, I will:

- Engage in professional learning through participation in audio recorded PLC sessions (c. one hour per week over a six-week period)
- Support the researcher in gaining my views and knowledge through an audio recorded **interview** at both the beginning (approx. 40 min) and the end (approx. 40 min) of the six-week period
- Allow the researcher to visit my classroom at mutually agreed times to observe me teaching lessons to see how the children engage with this approach
- Provide the researcher with the opportunity to model lessons in my classroom at a mutually agreed time
- Teach language tasks weekly for the duration of the study with the use of resources provided by the researcher, as modelled by the researcher

 Confirmation that involvement in the Research Study is voluntary

I am aware that if I agree to participate in this study that I can withdraw my data up until 30/06/24. I can access my data by contacting Máire Ní Láimhín (maire.nilaimhin@dcu.ie) up until 30/06/2024 after which time it will be fully anonymised.

Please complete the following (Circle Yes or No for each question)

I have read the Plain Language Statement (or had it read to me)	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 this study	Yes/No
I have received satisfactory answers to all my questions	Yes/No
I am aware that teacher interviews will be audio recorded	Yes/No
I understand that the PLC sessions will be audio recorded	Yes/No
I understand that anonymised findings arising from the study may be published	Yes/No
I understand that the data I provide will be protected within the legal limitations of data confidentiality	Yes/No
I am aware that data will be managed in accordance with the DCU Data Protection Unit policy	Yes/No
I am aware that it may not be possible to ensure confidentiality/anonymity to others that are familiar with the setting due to the small size of the setting	Yes/No

I have read and understood the information in this form. My questions and concerns have been answered by the researchers, and I have a copy of this consent form. Therefore, I consent to take part in this research project. I give permission for the research to take place in the school.

Participants Signature: _____

Name in Block Capitals: _____

Witness: _____

Date: _____

Plain Language Statement for Parents/Guardians

A chara,

Introduction to the Research Study

My name is Máire Ní Láimhín (maire.nilaimhin@dcu.ie) and I am an assistant professor in Teagasc na Gaeilge in the School of Language, Literacy and Early Childhood Education, Dublin City University (DCU) where I am also undertaking a Doctorate in Education. I am conducting research about teaching for the transfer of skills across languages under the supervision of Dr Aisling Ní Dhiorbháin (aisling.nidhiorbhain@dcu.ie) and Prof. Pádraig Ó Duibhir (padraig.oduibhir@dcu,ie), School of Language, Literacy and Early Childhood Education, DCU.

Data Privacy Notice

This study will be conducted in compliance with the General Data Protection Regulation (GDPR), and if you have any concerns regarding how your data in this study has been handled, you can contact: DCU Data Protection Officer, Mr. Martin Ward – (data.protection@dcu.ie Tel: 01-7005118/01-7008257) who will handle any data protection concerns arising from this research. An individual also has the right to report a complaint concerning the use of personal data to the Irish Data Protection Commission: Data Protection Commissioner.

Data will be collected on the basis of the consent of the participants and any queries participants may have in relation to how data will be used and managed can in the first instance be directed to Máire Ní Láimhín (maire.nilaimhin@dcu.ie). Where relevant, any personal data provided in the course of this research will be managed in accordance with the DCU Data Protection Unit policy. Data that could potentially lead to identification of the school/teachers/children involved will be omitted or anonymised. You can access your data/your child's data by contacting Máire Ní Láimhín (maire.nilaimhin@dcu.ie) up until 30 June 2024 after which time it will be fully anonymised. Whilst the data remains in a pseudo-anonymised state, it is possible for the researcher to reverse engineer the data to establish who contributed each piece of data. Therefore, the researcher is able to retrieve and remove an individual's contribution should the need arise. Your name, the name of any child or teacher or the school will not be reported in any publications on the study.

What happens to the information?

If you agree for your child to participate in this study, findings of this research will appear in a thesis as partial fulfilment of the Doctor of Education degree programme at DCU Institute of Education and may be published in academic journals and may be presented at conferences. The research may inform the ongoing design and implementation of an integrated curriculum within the primary school classroom. You may contact the researcher Máire Ní Láimhín (maire.nilaimhin@dcu.ie) for a copy of the thesis. Any personal identification will be anonymised so that your child will not be identifiable in any published report.

Details of what participant involvement in the Research Study will require

The project, entitled 'The transfer of skills across languages in the primary school', will provide teachers with an opportunity to engage in professional learning about how to teach for the transfer of skills across English and Irish. Your child's teacher is invited to participate in this study which will run in your child's school for a six-week period from 6th November 2023 – 15th December 2023.

What will you have to do?

If you agree for your child to participate in this study, they will be involved in the following:

- Language lessons in their classroom for a six-week period some of which will be observed by the researcher, Máire Ní Láimhín. I will take notes on children's general engagement with lessons – what children find interesting/challenging etc. I may write down some statements children say during the lesson. The name of any child or the school will not be reported in any publications on the study.
- I may also model some lessons in your child's classroom.

What are the risks?

There are no risks associated with this research greater than those involved in everyday classroom practice.

What are the benefits?

Your child will have the opportunity to learn about how knowledge of one language can help in learning another. This study will support teachers in reinforcing their linguistic awareness and knowledge of English and Irish, and show how knowledge of one language can help in learning another. It will provide an opportunity for your child to participate in language lessons in an engaging way. These lessons are typical of everyday classroom practice. It is hoped that data gathered during this study will help researchers and teachers to gain knowledge of how to support the transfer of skills across English and Irish and develop and refine teaching resources used in the primary classroom.

How is data stored and protected?

Pseudo-anonymity will be provided to participants up until 30/06/2024. Following this date, identifiers which were stored separately to the data on the DCU Google Drive or other platform that is compliant with DCU DPU which is password protected and encrypted, will be destroyed by the researcher. This will enable fully anonymity of the participants after the 30/06/2024. Anonymised data will be destroyed on 30/06/2029. All records and data will be disposed of appropriately, in accordance with DCU Data Protection Unit. 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.

What if I do not want to take part?

Participation in this study is voluntary. If you agree for your child to take part in this study, but later change your mind, you may withdraw your child's data from the research up until 30/06/2024 without penalty by contacting Máire Ní Láimhín (maire.nilaimhin@dcu.ie). Your child's participation in the project will end at the point of withdrawal and data will be managed in accordance with the DCU Data Protection Unit policy.

There are no consequences of any kind if you decide you do not want your child to participate. All activities will form a normal part of the school day. If you do not want your child to participate, I will not observe the classroom lessons and I will not model lessons in your child's class. Your child will still take part in the lessons as this is everyday classroom practice.

Please fill in the consent form attached if you wish your child to take part in the study.

Should you have any questions, queries and/or concerns, please contact Máire Ní Láimhín (maire.nilaimhin@dcu.ie).

If participants have concerns about this study and wish to contact an independent person, please contact: **The Secretary, Dublin City University Research Ethics Committee, c/o Research and Innovation Support, Dublin City University, Dublin 9. Tel 01-7008000, e-mail** rec@dcu.ie.

Le dea-ghuí,

Máire Ní Láimhín (Researcher)	Dr Aisling Ní Dhiorbháin (Supervisor)	Prof. Pádraig Ó Duibhir (Supervisor)
Maire.nilaimhin@dcu.ie	aisling.nidhiorbhain@dcu.ie	padraig.oduibhir@dcu.ie

Appendix E8

Informed Consent Form for Parents/Guardians

Máire Ní Láimhín (Researcher)

Dr Aisling Ní Dhiorbháin and Prof. Pádraig Ó Duibhir (Supervisors)

Clarification of the purpose of the research

The purpose of this research is to help teachers teach for the transfer of skills across English and Irish in the primary classroom through professional learning communities (PLC). This study will support teachers in developing their knowledge of English and Irish, and show how knowledge of one language can help in learning another. My child is invited to participate in this study which will run in their school for a six-week period from 6th November 2023 – 15th December 2023. It will provide an opportunity for my child to participate in language lessons in an engaging way. These lessons are based on/form part of everyday classroom practice. The researcher will take notes on children's general engagement with the lessons and she may write down some comments/ statements from children during the lesson – what children find interesting/challenging etc. The name of any child or teacher or the school will not be reported in any publications on the study.

Confirmation of particular requirements as highlighted in the Plain Language Statement

If you agree for your child to participate in this study, they will be involved in the following:

- Language lessons in their classroom for a six-week period
- Some of these lessons will be observed by the researcher in my child's classroom
- Some of these lessons will be taught by the researcher in my child's classroom

Confirmation that involvement in the Research Study is voluntary

I am aware that if I agree for my child to take part in this study that I can withdraw my child's data up until 30/06/24. I can access my child's data by contacting Máire Ní Láimhín (maire.nilaimhin@dcu.ie) up until 30/06/2024 after which time it will be fully anonymised.

Please complete the following (Circle Yes or No for each question)

I have read the Plain Language Statement (or had it read to me)	*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 this study	*Yes/No*
I have received satisfactory answers to all my questions	*Yes/No*
I understand that the researcher will observe and teach some lessons in my child's class	*Yes/No*
I understand that anonymised findings arising from the study may be published	*Yes/No*
I understand that the data I provide will be protected within the legal limitations of data confidentiality	*Yes/No*
I am aware that data will be managed in accordance with the DCU Data Protection Unit policy	*Yes/No*
I am aware that it may not be possible to ensure confidentiality/anonymity to others that are familiar with the setting due to the small size of the setting	*Yes/No*

I have read and understood the information in this form. My questions and concerns have been answered by the researchers, and I have a copy of this consent form. Therefore, I consent for my child to take part in this research project.

Participants Signature: _____
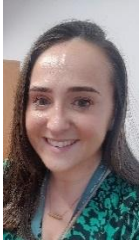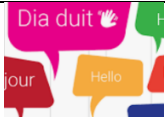
Name in Block Capitals: _____

Witness: _____

Date: _____
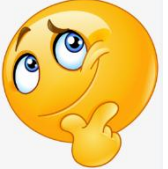
Appendix E9
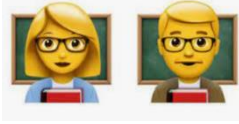
Plain Language Statement for Children

Dia duit! My name is Máire and I am a researcher. You and your classmates have been invited to take part in a project about how you learn English and Irish in school. I would love to get your help with this project please. Go raibh maith agat!	
	I am inviting you to take part in language lessons with your teacher and me. We will be working together. You will try out a new language task every week. I will visit your classroom to see how you are getting on and to show you some tasks and help your teacher.
Learning one language can help us learn more languages. Your teacher is learning about new ways to teach English and Irish.	
One task takes about half an hour once every week. I will be working with you and your teacher for about six weeks. That means there will be six tasks altogether.	
The tasks will begin after Halloween break and end before Christmas break.	
Each week, I will meet your teacher, along with some other teachers in the school, to talk about how the tasks went and learn about new tasks.	
I need to collect some information before, during and after the tasks. I will take some notes. I might write down what you say or how you are learning. This is to help me see if the tasks are helping you to learn English and Irish.	
I will ask you to take part in the tasks with me and with your teacher. These tasks are like tasks you do normally at school – listening to a story being read to you, making a poster, writing down what you would like for Christmas etc.	
I will talk to your parent/guardian to tell them about what your teacher is learning about and the tasks you are doing in school.	
If you do not feel comfortable taking part in the tasks, I will not teach or watch lessons in your class.	

I will keep all of the information in a safe folder on my laptop which no one else can open. I will write about the tasks in my project but I will never use your name, your school's name, your teacher's name or any of the other teacher's names or children's names or your parent's/guardian's names. If you want me to take out your information, I can do this for you up until the end of June 2024.	
I will keep the information for five years before I delete it in case I write other essays about the projects and your name will never be used. After this I will safely delete the information.	

Appendix E10

Assent Form for Children

I have had this research explained to me.	**I understand that I am being asked to take part in language tasks about the transfer of skills.**
I understand that my teacher will learn about how to do these tasks before they try them out in class. **I understand that Máire will teach some lessons too.**	**The tasks will take place in my classroom.** **My teacher and my classmates will be with me.**
If I do not want to take part, Máire will not teach or watch lessons in my class.	**I would be happy to talk to another person if I have any big questions.**
	I agree to take part in this project. **Name:** **Witness:** **Date:**

Appendix E11

DCU Research Integrity Training awarded 30/04/2023

Appendix E12

Personal Data Security Schedule (PDSS)

Panel 1	Panel 2	Panel 3	Panel 4	Panel 5	Panel 6	Panel 7	Panel 8	Panel 9	Panel 10	Panel 11	Panel 12	Panel 13	Panel 14	Panel 15	Panel 16
Schedule Ref	Type, category or description of the personal data	'Normal or Special (aka Sensitive) personal data	Format of the data (Electronic / Paper / Both)	Unit's or Team's reason or purpose for processing the data	Legal basis is for processing the data	Responsibility for the security of the data	Who may access the data?	Who may amend the data?	With whom may the data be shared?	Safeguards and controls to be applied to the data by Unit staff / Research Team	How long is the data to be held/retained?	Responsibility for the panel 12 task is assigned to?	Method of disposal for the data	Is the data shared outside of DCU?	Any other comments?
1	Master file of teacher/ parent/ guardian/ children codes	Normal	Electronic	Research	a) Consent	Máire Ní Láimhín	Máire Ní Láimhín	Máire Ní Láimhín	Personal data will not be shared beyond Máire Ní Láimhín.	1) This master file will allow the researcher to retain data provided by participants in the case that a participant decides to withdraw up until 30/06/2024. It is the only file that contains identifiable personal data. Each participant will be assigned a code. 2) These codes will only be matched	This electronic file will be retained until 30/06/2024 and then safely disposed of on 30/06/2024 by the researcher. Data will be fully anonymised from that point as the master file containing identifiable personal data will be destroyed. Anonymised data will be destroyed by	Máire Ní Láimhín	Deletion of the record	No	No

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										with actual participant names/identifying information in this master file. 3) The master file will be kept in electronic copy only on the researcher's DCU Google Drive that will remain unopened when not in use. 4) The seven principles of data protection will be enforced stringently in collecting and maintaining this file, and in particular the need for transparency, accuracy, safety/security and accountability. Please see: https://www.dcu.ie/sites/default/files/ocoo/docs/1_dp_help sheet_-_7_principles_-_v5.pdf	the researcher on 30/06/2029.				
2	Participant consent and assent forms	Normal	Both	Research	a) Consent	Máire Ní Láimhín	Máire Ní Láimhín	Máire Ní Láimhín	Personal data will not be shared beyond	1) Consent and assent forms will be scanned and stored on DCU Google Drive or other platform that is	1) Paper files of consent and assent forms will be destroyed and disposed of once scanned which will	Máire Ní Láimhín	Shredding and disposal into a	No	No

No.	Data type	Category	Format	Source	Legal basis				Sharing	Security measures	Retention		Disposal		
						Máire Ní Láimhín	Máire Ní Láimhín	Máire Ní Láimhín	Máire Ní Láimhín.	compliant with DCU DPU which is password protected and encrypted within two hours of receipt by the researcher. 2) Hard copies will immediately be shredded and disposed of once stored on DCU Google Drive by the researcher. There will be no paper data of this type beyond this point. 3) Identifiers will not be linked with these data and will be stored separately to the data on DCU Google Drive.	occur within two hours of receipt by the researcher. 2) Pseudo-anonymised electronic files will be retained until 30/06/2024 in the case that a participant decides to withdraw. 3) Data will be fully anonymised from that point and then safely disposed of on 30/06/2024 by the researcher. Anonymised data will be destroyed by the researcher on 30/06/2029.		secure bin and deletion of the record		
3	Audio-recordings (Interviews, PLC sessions)	Normal	Electronic	Research	a) Consent	Máire Ní Láimhín	Máire Ní Láimhín	Máire Ní Láimhín	Personal data will not be shared beyond Máire Ní Láimhín.	1) Audio recordings will be recorded on an encrypted device i.e. Dictaphone/Zoom platform. 2) Following each audio recording, the researcher will immediately transfer all audio/Zoom recordings to the	These electronic files will be retained until 30/06/2024 and then safely disposed of on 30/06/2024 by the researcher. Data will be fully anonymised from that point. Anonymised data will be destroyed by	Máire Ní Láimhín	Deletion of the record	No	No

									researcher's DCU Google Drive where they will be stored electronically. 3) The researcher will delete all audio/Zoom recordings from the Dictaphone/Zoom platform within two hours of recording. 4) All audio/Zoom recordings will be transcribed by the researcher and deleted within 6 months. As the researcher is transcribing the data herself this time is needed.	the researcher on 30/06/2029.				
4	Observation schedule, field notes and researcher's reflective journal	Normal	Both	Research	a) Consent	Máire Ní Láimhín	Máire Ní Láimhín	Máire Ní Láimhín	Personal data will not be shared beyond Máire Ní Láimhín.	1) Following each day's visit to the school, observation schedules, field notes and researcher's reflective journal will be scanned and stored on DCU Google Drive or other platform that is compliant with DCU DPU which is password protected and encrypted. 2) Hard copies will	1) Paper files will be destroyed and disposed of once scanned which will occur within two hours of each day's visit to the school. 2) Pseudo-anonymised electronic files will be retained until 30/06/2024 in the case that a participant decides to withdraw. 3) Data will be fully	Máire Ní Láimhín	Shredding and disposal into a secure bin and deletion of the record	No	No

									then be shredded and disposed of on accordance with the DPU. There will be no paper data of this type beyond this point. 3) Identifiers will not be linked with these data and will be stored separately to the data on DCU Google Drive.	anonymised from that point and then safely disposed of on 30/06/2024 by the researcher. Anonymised data will be destroyed by the researcher on 30/06/2029.				

Charmander is ainm dom.

Dexter is ainm dom.

Appendix G1

Literature for Professional Learning Community Sessions

Connaughton-Crean, L., & Ó Duibhir, P. (2015). *Teaching for transfer of skills across languages.* National Council for Curriculum and Assessment. http://curriculumonline.ie/getmedia/ecc16cdb-fdd2-4e80-a31b-d1c8b0a2f741/OLRW_TransferOfSkills.pdf?ext=.pdf

Cummins, J. (2017). Teaching for Transfer in Multilingual School Contexts. In O. García et al. (Eds.), *Bilingual and Multilingual Education, Encyclopaedia of Language and Education* https://doi.org/10.1007/978-3-319-02258-1_8

Cummins, J. (2021). Preface: Rethinking the Education of Multilingual Students: A Critical Analysis of Theoretical Concepts. *Rethinking the Education of Multilingual Learners: A Critical Analysis of Theoretical Concepts.* Multilingual Matters. http://capitadiscovery.co.uk/dcu/items/1077440

De Brún, J. (2015). *Fónaic.* National Council for Curriculum and Assessment. https://curriculumonline.ie/getmedia/1f9a15c6-c8d8-4643-b7e6-39784c5dcb92/READING_Fonac_NEW.pdf?ext=.pdf

Department of Education (2019). *Primary language curriculum: English-medium schools.* Government of Ireland. https://curriculumonline.ie/getmedia/2a6e5f79-6f29-4d68-b850-379510805656/PLCDocument_English.pdf

Kirwan, D. (2015). *Tacú le feasacht teanga a fhorbairt.* National Council for Curriculum and Assessment. https://www.curriculumonline.ie/getmedia/b918ce1e-e4d2-4806-808a-ddfb636a742c/Tacu-le-feasacht-teanga-a-fhorbairt.pdf

Mehigan, G. & Brennan, C. (2015). *Phonological awareness.* National Council for Curriculum and Assessment. https://curriculumonline.ie/getmedia/8d8213d3-7a43-4fde-b2a0-5d67fc8c9b6f/R_PhonologicalAwareness_1.pdf?ext=.pdf

Ó Duibhir, P., & Cummins, J. (2012). *Towards an integrated language curriculum in early childhood and primary education (3-12 years).* National Council for Curriculum and Assessment. https://www.ncca.ie/media/2467/towards_an_integrated_language_curriculum_in_early_childhood_and_primary_education.pdf