Developing teacher agency for professional learning and development through an enquiry-based learning approach involving action research

A thesis submitted to UCL for the degree of PhD in the Faculty of Education and Society

2024

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Declaration

‘I, Soh Young Lee, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.’

Abstract

This thesis reports on a case study exploring development of teacher agency for professional learning and development (PLD) with a group of nine Korean primary school teachers working in a variety of schools in Seoul, South Korea. The study examines how an enquiry-based learning (EBL) programme can develop teacher agency among the participants through their engagement in their own action research projects. It aims to better understand teacher agency to enhance PLD so that practitioners can be better supported to act more strategically within an educational climate of standardisation and accountability schemes.

The study explores teacher agency from multiple theoretical perspectives: Bandura's (1986) socio-cognitive view of agency, Mezirow's (1991) theories of critical reflection within his theory of transformative learning, and Priestley et al.'s (2015) ecological approach to teacher agency. By drawing on insights from these varied research areas, I develop conceptual models of teacher agency for PLD. This approach aims to understand, describe, and evaluate how different PLD environments influence teacher agency and how teacher agency operates within the realities of the constraints and resources provided by the workplace and policy conditions within which they work.

Conducted over 18 months, the research involved three phases of data collection to examine both short- and long-term changes in participants' teacher agency. Data were gathered through qualitative methods, including questionnaires, interviews, observations, a researcher's journal, and document analysis.

The findings of the study demonstrate the important role that a PLD programme based on EBL can have on enhancing teacher agency. Additionally, they highlight a need to support teacher agency at both the school and policy levels to enable teachers to exercise greater levels of teacher agency. These insights have implications for enhancing teacher agency to promote effective PLD, and they also prompt broader reflection on the role of teacher agency within society.

Impact Statement

There is growing evidence that teacher agency, defined as the capacity of teachers to make choices and implement intentional actions to effect change (Eteläpelto et al., 2013), plays a crucial role in professional learning, school improvement, and sustainable educational change. However, the global trend towards neoliberal economic policies and increased accountability has constrained opportunities for exercising teacher agency, highlighting the importance of its examination (Leijen et al., 2020; Cong-Lem, 2021; Mills et al., 2021; Cochran-Smith et al., 2022).

The significance of teacher agency in professional learning and development (PLD) is increasingly recognised (Eteläpelto et al., 2013; Toom et al., 2015). Although research suggests that teacher agency can be enhanced through teacher education (Dillon et al., 2011; King & Nomikou, 2018; Wagner et al., 2019), there remains a gap in understanding how teacher agency is exercised within organised teacher education settings and the types of practices and processes that support its growth (Soini et al., 2015; Heikkilä et al., 2020; Kauppinen et al., 2020).

Addressing this gap, this study investigates the effects of an enquiry-based learning (EBL) programme aimed at fostering teacher agency among a group of teachers in Seoul, South Korea. Conducted as a case study, it involves interviews with nine primary school teachers working across Seoul and employs qualitative data analysis to draw its conclusions. The findings of this study make a contribution by demonstrating that an EBL approach can empower teachers to exercise increased teacher agency in their PLD. This, in turn, allows for lasting changes in their practice, potentially better equipping students for the demands of a rapidly evolving and competitive global environment.

The conceptual frameworks for teacher agency developed in this study could serve as diagnostic and assessment tools, or as a foundation for developing further tools, assisting teacher educators and school leaders in integrating teacher agency as a learning objective within PLD initiatives. They could also be utilised by teachers for self-assessment of their own agency.

The findings suggest the need for a multidisciplinary approach to teacher PLD, one that empowers individuals to become self-regulated learners engaged in critical reflection and collaborative learning. It also reflects on the ways in which teachers can be supported to critically reflect, moving beyond effective learning focused on individuals to a broader consideration of the role of teacher agency within society. The study advocates for a deeper professional dialogue on the broader purposes and meanings of education, integrated into both pre-service and in-service teacher education, as well as into the educational policies that guide school operations. Ultimately, the hope is to enhance teacher agency in ways that not only develop individual capacities but also equip individuals and societies to address the growing environmental and social challenges.

Acknowledgements

Firstly, I would like to express my deepest gratitude to my supervisor, Dr. Susan Bodman. Through your unfailing advice, wisdom and kindness, I was able to develop and complete this PhD. Also, thank you for showing me how to support learners in the future through your model of supervision. I am most grateful for your support.

I would like to thank Dr. Ruth McGinity, who so kindly agreed to be a second supervisor towards the latter part of the research. Your sharp critical feedback and encouragement pushed me to be more critical as I approached the finishing line.

I would also like to thank Dr. Sue Taylor, who generously agreed to be my supervisor and enabled me to start the PhD journey. I am grateful for your advice and support in the first years of my studies, which got me through the upgrade and the implementation of the professional learning and development programme.

Huge thanks must be extended to the Korean teachers who made this study possible. I am amazed by your devotion to learning and the professionalism you bring to teaching. I am sincerely grateful for the time you so generously gave to participate in this project.

I would like to acknowledge my dad and mum, who instilled in me from a young age the importance of education, and my sister and brother, who through example showed me the significance of learning. My love to you all.

I want to thank my husband and my son. Ui-Su, your belief in me gave me the strength to start and finish this long PhD journey. I could not have done this without you. Also, my son Isaac, thank you for your patience and words of encouragement when mummy was studying. Thank you for your love and support, I love you both very much.

Most of all, I thank God for giving me the strength and wisdom to complete this challenging endeavour.

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Abbreviations

BC	British Council
CofL	Cycle of Learning
DfE	Department for Education
EBL	Enquiry-based Learning
ESD	Education for Sustainable Development
ICELT	In-Service Certificate in English Language Teaching
JPD	Joint Practice Development
LCP	Learner-Centred Pedagogy
MEST	Ministry of Education, Science and Technology
MOE	Ministry of Education
OECD	Organisation for Economic Cooperation and Development
PISA	Programme for International Student Assessment
PD	Professional Development
PL	Professional Learning
PLD	Professional Learning and Development
PLCs	Professional Learning Communities
SD	Sustainable Development
SDGs	Sustainable Development Goals
SISS	Self-Improving School-led System
SRL	Self-Regulated Learning
TALIS	Teaching and Learning in Schools
TESOL	Teaching English to Speakers of Other Language
TIMSS	Trends in International Mathematics and Science Study
TSA	Teaching School Alliances
UCL	University College London

Chapter 1: Introduction

1.1 Introduction

This study is interested in issues related to teacher professionalism and the influence of globalisation on teacher development. Research from the 1960s by the World Bank on globalisation identified education as the most effective long-term measure to eliminate poverty, benefiting individuals and providing social returns (Spring, 2008). Consequently, education has become a means of investing in the economic growth of both individuals and nations. Given the demands of the knowledge-based economy for student creativity and entrepreneurship, teacher quality has been recognised as vital for improving student learning (OECD, 2005). In this respect, it can be said that teacher quality and professionalism have become explicitly linked to a nation's economic competitiveness (Kennedy, 2014; Singh et al., 2021).

Major international organisations, such as the Organisation for Economic Co-operation and Development (OECD) and the World Bank, play a pivotal role in shaping global education policies. They advocate for policy borrowing, a strategy that many countries adopt to enhance their global competitiveness (Singh et al., 2021). While these globalisation strategies in education offer opportunities, including enhanced cooperation in the education sector and access to the latest educational research (Makarova et al., 2019), they also raise concerns among educators about the impact on teacher professionalism. Critics argue that restructuring education systems for market-driven outcomes significantly affects teacher professionalism, suggesting that OECD policies often directly link teacher accountability to student outcomes (Hargreaves, 2000; Vongalis-Macrow, 2007; Buchanan, 2015). Many contend that policymakers use this discourse to regulate and reform teacher education through strict accountability measures aimed at ensuring quality control (Robertson, 2016; Cochran-Smith et al., 2018; Sørensen & Robertson, 2018; Ro, 2023). These reforms appear to align with the post-professional model that Hargreaves (2000) warned could diminish and undermine teacher professionalism by narrowly focusing on performance, standards, and compliance, essentially

relegating teachers to the role of technicians executing decisions made by external authorities (Vongalis-Macrow, 2007; Biesta, 2015).

Yet, within these constraints, the evolving landscape of globalisation—which includes new technologies, migration, international competition, changing markets, and transnational environmental and political challenges—requires teachers to function as high-level knowledge workers. They are expected to continuously enhance their individual professional knowledge and contribute to the overall advancement of their profession, becoming 'active agents of their own professional growth,' as emphasised by an OECD review (Schleicher, 2012, p.73). Although the concepts of ‘agency’ and ‘teacher agency’ are subject to debate (discussed further in Chapter 2), agency can be broadly defined as the capacity to initiate purposeful action, encompassing autonomy, freedom, choice, and initiative (Bandura, 1986; Emirbayer & Mische, 1998; Archer, 2000; Biesta & Tedder, 2006; Eteläpelto et al., 2013; Priestley et al., 2015). Similarly, many define teacher agency as the capacity of teachers to make choices and implement intentional actions that affect their work and/or their professional identities (Eteläpelto et al., 2013; Toom et al., 2015; Tao & Gao, 2017; Kauppinen et al., 2020).

The current educational climate places greater demands on teachers' work, while also reducing their agency (Leijen et al., 2020; Cong-Lem, 2021; Mills et al., 2021; Cochran-Smith et al., 2022). However, research suggests that the knowledge-based economy requires professionals to possess the agentic capacity to teach essential twenty-first century skills, such as higher-order thinking, deeper learning outcomes, and advanced communication skills (Schleicher, 2012; Scott, 2015; Ventista & Brown, 2023). In recent years, a growing body of evidence has highlighted the crucial role of teacher agency in education (Cong-Lem, 2021), with many experts considering it an essential component of good and meaningful education (Eteläpelto et al., 2013; Toom et al., 2015). Teacher agency is increasingly recognised as a key factor in teachers' professional learning, enabling them to proactively navigate the complexities of educational practices (Priestley et al., 2015; van der Heijden et al., 2015; Hadar & Benish-Weisman, 2019), while promoting relevant, inspiring, and constructive classroom and school environments (Biesta et al., 2015; Wagner et al., 2019). Increasingly studies indicate that supporting teacher agency at both the

individual and structural levels represents the most sustainable approach to maintaining and enhancing the quality of education, with important implications for wider society (Priestley et al., 2015; Leijen et al., 2020).

Despite the growing interest in teacher agency, significant gaps in knowledge remain. One such gap is the lack of detailed understanding of how teacher agency is enacted in organised teacher education settings and the types of practices and processes that support its development (Soini et al., 2015; Heikkilä et al., 2020; Kauppinen et al., 2020). Although teacher agency may be facilitated through teacher education (Dillon et al., 2011; King & Nomikou, 2018; Wagner et al., 2019), there still appears to be a need for deeper theoretical and empirical insights.

In response to this need, this study explores the impact of an enquiry-based learning (EBL) programme designed to foster teacher agency among a group of teachers in Seoul, South Korea (hereafter referred to as Korea). My aim is to provide nuanced insights into how teacher agency for professional learning and development evolves through their participation in the EBL programme involving action research. Although the terms 'professional development' (PD) and 'professional learning' (PL) are often used interchangeably (Bubb, 2012), some suggest shifting from 'development' to 'learning' to advocate for a transition towards more active engagement in learning and self-development (Easton, 2008; Webster-Wright, 2009). While I adopt the term professional learning and development (PLD) for this study, a choice explained further in Chapter 3, I will use ‘PD’ for the moment, as it is more widely used in discussions related to teacher professional growth.

In the following sections, I will provide the background of this research, starting with the Korean educational context within which this study is situated. This will be followed by a discussion of my personal journey leading to the study. Both the global and Korean educational contexts, as well as my personal background, have shaped the focus, design, and scope of this research, which will be discussed next. I will then introduce the methodology employed, my positionality as a researcher, and my reflexivity. Finally, I will provide an overview of all the chapters.

1.2 Korean educational context

Teachers have played an important role in Korea's development since the end of the Japanese colonisation period (1910-1945) (Kang, 2002; Synott, 2007). Subsequently, they were tasked with preparing students to become suitable workers for a nation developing along the competitive, capitalist lines of the US (Namgung et al., 2020). In the 1990s, influenced by the global educational trends, Korea further embraced the widely held belief that quality teaching leads to improved student outcomes and, ultimately, to enhanced economic competitiveness (Scholes et al., 2017; Cochran-Smith et al., 2018). Consequently, Korea introduced the Presidential Commission on Education Reform in 1995, implementing market-based measures such as teacher evaluation and accountability, merit-based compensation, school-based management, and other neoliberal policies (Sung, 2011; Lee, 2022). Since the 1995 reforms, various Ministry of Education (MOE) policy documents (e.g., MOE, 2011, 2013) have consistently highlighted policymakers' firm belief that the primary goal of public education is to produce the nation's future human capital.

Capitalist instrumental values in educational policies are considered significant factors contributing to Korea's rapid economic development (Lee, 2022). Once one of the poorest countries in the early 1950s, Korea has become a leading participant in the global economy following the Korean War truce in 1953 (Lee, 2022). These policies have led to outstanding performances in international assessments, as documented in the Programme for International Student Assessment (PISA) studies and the Trends in International Mathematics and Science Study (TIMSS; Gonzales et al., 2008; Hanushek et al., 2011; So & Kang, 2014). However, some researchers suggest that the factors contributing to these high performances have now become the main causes of educational problems in Korea, including students' low levels of interest in learning and their decreased levels of happiness (So & Kang, 2014; Ro, 2023). Moreover, Korea's education system has been criticised for producing students who are passive recipients of a standardised knowledge package, focused more on passing exams than on becoming active, creative learners (Cha & Ham, 2012).

In response to concerns over what some suggest is an excessive focus on academic achievement (So & Kang, 2014; Ro, 2023), the government shifted its vision from ‘Stronger Future Competitiveness in Education, Science, and Technology’ (Ministry of Education, Science and Technology (MEST), 2009) to ‘Happy Education for All’ (MEST, 2015). The 2015 policy direction introduced several initiatives, including an exam-free semester system in middle schools (Years 7 to 9), increased focus on the humanities, arts, and sports (primarily through extracurricular clubs), and an ‘employment first, university later’ approach by promoting vocational education (MEST, 2015). Prior to these efforts, another significant move towards a more flexible educational model was made with the 2009 national curriculum revision, which empowered schools with greater autonomy to design their curricula, moving away from rigid, prescriptive standards (So & Kang, 2014). However, despite these changes aimed at both the student and curriculum levels, the initial and continuing education of teachers—viewed as the key workforce for producing human capital—remains under strong state control (Ro, 2023).

1.2.1 Teacher professionalism and teacher PD

Teaching is highly regarded as a career in Korea due to its status as a civil service, which guarantees tenure, relatively high starting salaries, and a traditionally respected social status (So & Kang, 2014). However, this privilege comes with numerous employment conditions. For example, the government determines teachers’ placement, employing a rotation system that reassigns state school teachers every five years to prevent corruption and issues associated with long-term tenure at a single school (Yoo, 2018). Additionally, the government exercises strict control over teaching content and methods through the national curriculum. Despite the government's efforts since 2009 to increase curriculum autonomy, many Korean curriculum scholars and teachers have criticised the national curriculum as still being overly controlled by the government (So & Kang, 2014).

The prevailing education reform rhetoric holds that the quality of education cannot exceed the quality of its teachers (Kim, 2022), highlighting the critical role of teacher PD in Korea as pivotal for enhancing both schools and student learning. The 1995

Education Reform sought to enhance teaching quality by providing more PD opportunities (Education Reform Council, 1995). As a result, the government introduced various in-service PD systems designed to enhance teachers' professional knowledge and skills, which it believes contribute to the country's educational quality[1]. These systems include a comprehensive training framework with national, regional, and school-based programmes; access to international expertise through conferences, workshops, and exchange programmes; and technology integration to facilitate resource access and peer collaboration[2].

In Korea, in-service PD can be categorised into three main types: institution-centred, school-centred, and individual-centred development (MOE, 2015), with the majority of this development conducted through government-approved institutes (Yoo & Lee, 2014). Teachers are required to complete a specified amount of PD annually, with those in Seoul needing to complete 60 hours each year, facilitated by government-approved teacher development institutions. The widespread practice of policy borrowing in Korea has led most of these institutions to deliver learning initiatives inspired by the US and the UK (Choi, 2013). Although some research and adjustments have been made to adapt these policies to the local context, concerns persist about the suitability of these copied and borrowed policies in a new environment (Choi, 2013). Park and So (2014) suggest that a reliance on institution-based training, along with a lack of varied training content, has caused some Korean teachers to perceive PD as fragmented and disconnected from classroom realities. This situation is reported to be worsened by the absence of adequate ongoing support for sustained learning and the evolution of teaching practices (Park & So, 2014). These issues appeared to be evident in the introduction of the 2009 National Curriculum, which research suggests was marred by reports of inadequate systematic training support for teachers to effectively implement the new curriculum (Park & Sung, 2013; So & Kang, 2014).

In response, a variety of new policies have been introduced (Yoo & Lee, 2014). The 2016 in-service teacher training report (MOE, 2015) indicates a shift from institution-

[1] Source: Korean Educational Development Institute, http://www.kedi.re.kr/
[2] Source: Korean Educational Development Institute, http://www.kedi.re.kr/

based training to school-based training. This approach aims to unify teachers within the same school to collaborate on teaching improvements (Park & So, 2014). Teacher development is now increasingly situated within the teachers' working environments, promoting collaboration with colleagues through initiatives such as lesson studies and subject study groups (MOE, 2015). This transition towards schools taking greater responsibility for teacher development aligns with trends observed in the UK. The 2010 change in the UK's education policy gives schools the principal responsibility for school improvement (DfE, 2010). Schools are encouraged to work with others in new organisational forms as exemplified in Joint Practice Development (JPD) (Hargreaves, 2014) and Teaching School Alliances (TSAs) (Maxwell & Greany, 2015), in a commitment by all the parties towards better practice.

Despite these advancements, challenges persist. In the UK, for instance, although Gu et al. (2015) highlighted significant progress in the evaluation of Teaching Schools, Greany and Higham (2022) contend that the 'self-improving, school-led system'—a term the government uses as an overarching narrative for its reform agenda—has generally allowed the central state to devise new methods of exerting control. Similarly, in Korea, education reform initiatives appear to have transitioned from direct regulation to indirect control via school-level accountability systems (Lee & Kim, 2016). An example is the 2008 Teacher Evaluation for Professional Development, which uses standardised surveys for peer, student, and parent evaluations of teachers, focusing on teaching quality, materials, interaction, and educational efforts (Lee, 2022).

The evidence suggests that Korea's educational system is strictly top-down, with policies and teacher PD heavily influenced by instrumental neoliberal values. Critics argue that within this framework, teachers' roles and efforts are reduced to quantifiable metrics, subject to rigorous control by a modern system of standardisation and accountability (Kim, 2022). Some contend that this perspective on teacher professionalism and development overlooks critical considerations, such as the aims of teacher education, the knowledge and skills teachers should acquire, and the guiding principles, procedures, and methods for their learning journey (Zeichner, 2012; Cochran-Smith et al., 2018; Ro, 2023). Ro (2023) suggests that

high-stakes accountability measures in Korea primarily position teachers as reform targets rather than as active participants, with their input often side-lined in discussions on teacher education. She argues that such a policy environment substantially narrows the scope for PD to foster meaningful learning and ongoing professional growth, indicating a critical need for a reassessment of educational policies and practices in Korea.

1.3 Personal background and creating a context for the study

The rationale for conducting this study on developing teacher agency for PLD is rooted in my experiences as a teacher, teacher educator, and as a life-long learner. I trained and worked as a primary school teacher in the UK for four years, but the majority of my career has been as a teacher educator for in-service teacher PD programmes at the British Council (BC) in Seoul, Korea.

As a teacher educator, I was involved in developing and delivering the in-service programmes at the BC, which were funded by the MOE. One of the key courses I coordinated was the Cambridge In-Service Certificate in English Language Teaching (ICELT) programme for Korean primary school teachers. This demanding course, tailored for experienced educators, featured evening sessions and assessed teaching practices at their schools. After completing the ICELT programme, I encountered many of these teachers in lower-level introductory courses run by the MOE. When asked why they were enrolling in these courses despite having completed the ICELT, the teachers often cited the need to meet the government's annual 60-hour requirement for mandatory PD. Additionally, frequent changes in education policies meant that teachers were expected to continuously move onto the next learning objective in alignment with government-endorsed standards of teacher professionalism (section 1.2.1). Consequently, they appeared to have limited opportunities to apply, experiment and reflect on what they had learned from PD programmes into their classrooms.

These experiences led me to perceive that the regulation of prescriptive teacher development programmes in Korea provided limited opportunities for teachers to self-direct their professional goals and development paths. This, in turn, appears to limit long-term changes in the practices of Korean teachers. Motivated by this perception, I embarked on this PhD study to empower teachers to take more control over their PD.

Based on my experience as a teacher educator, I have observed that certain PD programmes are more likely to produce positive changes in teachers than others. Programmes that provide opportunities for teachers to apply theoretical knowledge in their own classroom settings, engage in reflective practices, and work collaboratively with peers appear most likely to result in professional learning that leads to changes in practice. This observation is supported by the literature, which suggests that PD is most effective in bringing about positive changes to teachers and students when it is situated in classroom practice (Wilson & Berne, 1999; Altrichter & Posch, 2009; Opfer & Pedder, 2011; Hargreaves, 2013), involves reflective practice (Collin et al., 2013; Finlayson, 2015), and fosters a professional learning community (Stoll et al., 2006; Earley, 2010; Hargreaves, 2013).

As a firm believer in lifelong learning, I completed a master's degree in Teaching English to Speakers of Other Languages (TESOL) before starting my PhD studies. Prior to this, I had struggled to find solutions to issues in my classroom despite engaging in various PD programmes. However, during my master's programme, I learned to conduct systematic investigations into my own teaching practices. This led to increased reflection on both theoretical and practical knowledge, better self-regulated learning, and increased confidence in generating my own knowledge to address the unique challenges in my teaching context. By engaging in teacher research, I began to develop a greater sense of agency in my own continuous PD, which would enable me to respond to the complex and fast-changing educational environment.

Drawing on my experiences as a teacher, educator, and learner, I developed the EBL programme specifically for this study. It involves action research and aims to promote self-regulated learning (SRL), critical reflection, and collaboration with peers. As a full-time PhD student during the study, I was not associated with any

organisation, allowing me to design an EBL programme that did not evaluate teachers based on a list of competencies, unlike most Korean government-funded PD programmes. The EBL programme aimed to provide teachers with the tools and experiences that would support them in changing their practice and becoming knowledge creators through their own enquiries. The goal was to create an agentic learning environment that would enable teachers to take control of their own continuous learning and address the challenges that arise in their unique working contexts.

1.4 Research focus and scope

As previously argued, hierarchical educational structures and policies in Korea tend to promote a narrow, instrumental view of teacher professionalism, which appears to provide insufficient support for individual teachers to achieve their professional learning and developmental goals. This context has led to the generation of two main research enquiries: firstly, to investigate how teacher agency for PLD can develop through an EBL approach involving action research, and secondly, to explore the potential implications of the findings for the future development of teacher agency.

In the first research enquiry, I identify the scope and context of this study. Regarding the scope, both the global and Korean educational contexts, together with my experiences as a teacher educator and a learner, have guided my focus towards developing teacher agency to enhance PLD. Research suggests that fostering teacher agency is essential for teacher development because it enables self-motivation to develop and implement one’s own expertise throughout one’s career (Soini et al., 2015; Van der Heijden et al., 2015).

Concerning the study's context, I investigate how an EBL approach involving action research can promote the development of teacher agency. In line with existing research, my stance is that involving teachers in their own learning processes through enquiry (Timperley, 2011; Stoll et al. 2012; Kennedy, 2014; Cordingley, 2015; Darling-Hammond et al., 2017) and action research (Zeichner & Noffke, 2001;

Cordingley et al., 2007; Ponte, 2010; Thorgeirsdottir, 2019; Xin & Brioin-Meisels, 2022) facilitates the enhancement of teacher agency. Hence, the focus of this study is on understanding the shifts in teachers' thoughts and actions that result from their engagement in the EBL programme. This exploration aims to address the gap in research regarding the lack of detailed understanding of how teacher agency is enacted in organised teacher education settings (Soini et al., 2015; Heikkilä et al., 2020; Kauppinen et al., 2020). These considerations regarding the scope and context of the study are elaborated further in Chapters 2 and 3.

The second enquiry builds on the first, aiming to offer practical guidance on supporting teachers in developing their agency towards effective PLD. The research enquiries are further elaborated in Chapter 4, following a comprehensive literature review in Chapters 2 and 3.

This study reports on the development of teacher agency within a group of teachers working in a variety of schools in Seoul, Korea. Teacher agency is examined through a case study involving nine Korean primary school teachers who participated in a five-month EBL programme that I designed and facilitated for the purpose of this study. The main component of the EBL programme involved the teachers conducting their own chosen action research projects within their schools. Conducted over 18 months, the study generated interview data over three distinct phases to examine both the short- and long-term changes to participants' teacher agency and observations of learning during the programme itself.

The intention of this thesis is not to provide a comprehensive representation of how an EBL approach can affect teacher agency, given that every PD programme is unique, as are its individual participants and their working contexts. Instead, this study advocates for empowering teachers to become agents of their own learning and development. By doing so, it aims to provide nuanced insights into how an EBL programme can nurture and support teacher agency for PLD, thereby enabling teachers to better navigate the challenges and opportunities within the constraints and resources of their social, institutional, and policy settings.

1.5 Navigating researcher positionality and reflexivity

Interested in understanding teacher agency from the participants' perspectives within their context, I adopt a qualitative approach in this study to explore teacher agency through the lenses of interpretivism and constructivism. This research approach recognises that each teacher, as well as the researcher, has their own reality, leading to different interpretations of the same event. This means accepting that reality is complex, multi-layered, and dynamic (Robson, 2011; Cohen et al., 2015). Consequently, it is essential to acknowledge and account for the subjectivities of both the teachers, as narrators, and the researcher, as the interpreter.

Throughout the study, I found myself on a continuum between being an insider and an outsider, as outlined by Breen (2007). Sharing the same ethnicity, profession, and gender as the participants positioned me as an insider, which, according to Breen (2007), enables a deeper understanding of the group's culture, facilitates more natural interactions, and eases access. This insider status also assisted in designing an EBL programme that I perceived would enhance participants' teacher agency. Simultaneously, maintaining an objective perspective as an outsider, educated and experienced in teaching in the UK, helped to mitigate some disadvantages, such as subjectivity and potential bias, as suggested by Kanuha (2000).

Furthermore, my personal reflexivity extended to the selection of literature supporting the study and to an awareness of my role in facilitating the EBL programme and its potential impact on the teachers. To address power dynamics in the researcher-participant relationship, I made explicit disclosures about my dual roles as facilitator and researcher to lessen their impact.

Throughout the research process, I exercised reflexivity and recognised my values, interests, and goals of promoting teacher agency. I approached data collection, analysis, and reporting with critical subjectivity, and my personal development in understanding teacher agency informed the interpretation of the data. All of these issues are discussed further in Chapter 4.

1.6 Structure of the thesis

In this chapter, I have presented an overview of the context for this study, covering both the global and the specific Korean educational landscapes. This overview, together with my experiences as a teacher educator in Korea, has highlighted challenges to teacher professionalism and teacher agency. This serves as the foundation for establishing the rationale behind focusing on the development of teacher agency for PLD.

In Chapter 2, I continue to explore and establish connections between the complex and contested issues surrounding teacher professionalism, PD, and teacher agency. Through this exploration, I aim to further establish my rationale for studying teacher agency in relation to PLD and to clarify and define the conceptual meaning of teacher agency for PLD that forms the basis of this study.

In Chapter 3, I draw on literature that examines effective PD (e.g., Timperley et al., 2008, 2011; Opfer et al., 2011; Stoll et al., 2012; Kennedy, 2015; Darling-Hammond et al., 2017), to investigate the extent to which three different professional learning environments align with considerations and interests centred on teacher agency. These environments are defined in this study by the processes and outcomes of learning, as well as the theories and values that underpin and justify them. I develop a conceptual framework, the PLD environments–teacher agency continuum, which illustrates how the three environments may influence teacher agency for PLD. This conceptual framework will be used as a lens through which to interpret data and assess the influence of the EBL programme on participants' teacher agency in subsequent chapters.

Chapter 4 provides an account of the methodology of a qualitative study within the context of the EBL programme involving action research as a tool for developing teacher agency. In the chapter, I outline the argument for the use of constructivist and interpretivist paradigms and a case study approach to facilitate an understanding of the complexities of teacher agency. I then rationalise the use of an EBL approach involving action research through fostering self-regulated learning, collaboration, and critical reflection. I also give a detailed account of the recruitment

process, ethics, and data collection and analysis methods, as well as how trustworthiness is established in this study.

Having laid the theoretical and methodological groundwork, I proceed to the following two analysis chapters. In Chapter 5, I first examine the participants' perceptions of their PD within two different environments: government-provided PD and their own schools. These findings serve as a baseline for analysing both short-term and long-term changes in participants. Following this, I analyse how the EBL programme, by fostering SRL, reflection, and collaboration, brought about changes in these areas over the short term.

In Chapter 6, I further explore how these changes in reflection and action, initiated within the EBL programme, translated into both short-term and long-term changes within the participants' school environment. Initially, I examine changes within the classroom that emerge from the data relating to students, self as a teacher, and teacher-student relationship. I then move on to explore changes within the wider school environment by examining participants' reflections on collaborative learning with school colleagues. In the latter half of the chapter, I examine the sustainability of these changes by comparing and contrasting data gathered shortly after the EBL programme with that gathered one year later. Finally, I consider the impact of these sustained changes on participants' goals for professional growth and education.

In Chapter 7, I discuss the findings presented in Chapters 5 and 6 to address the question of how teacher agency for PLD can develop through an EBL programme involving action research. In the first section of this chapter, I synthesise the findings from Chapters 5 and 6 and discuss changes in teacher agency by using the PLD environments–teacher agency continuum developed in Chapter 3. Subsequently, I expand upon this continuum to create more detailed frameworks for various levels of teacher agency—low, moderate, and high. These frameworks could serve as diagnostic and assessment tools, assisting teacher educators and school leaders in integrating teacher agency as a learning objective within PLD initiatives. Furthermore, this chapter explores the study's contribution to a deeper understanding of teacher agency, especially its dynamic interplay between the individual and the environment connected across time. This is followed by a discussion on the possible limitations of the study.

Chapter 8 builds on the discussions from Chapter 7 by exploring the implications of the findings for advancing teacher agency. It outlines how this enhanced understanding can inform practice, starting with reflections on supporting teacher agency for PLD across various levels, including within organised teacher education and at the school level. Shaped by my evolving understanding of the concept, these reflections extend to consider the broader role of teacher agency within society. Unlike earlier chapters that analyse findings through the literature reviewed in Chapters 2 and 3, this chapter proposes ways forward for teacher agency, guided by new insights. This involves exploring how to support teacher agency in advancing education for sustainable development and preparing students to contribute to efforts aimed at creating better living and working environments for themselves and others. Following this, I identify agendas for future research and conclude by summarising the study's contributions to the field of teacher agency.

Chapter 2: Teacher professionalism, professional learning and development, and teacher agency

2.1 Introduction

In this chapter, I continue to explore the connections between the complex and contested issues surrounding teacher professionalism, teacher professional development, agency, and teacher agency. The purpose of this exploration is two-fold. First, I aim to explore the relationship between professional learning and development (PLD) and teacher agency, thereby establishing my rationale for examining the development of teacher agency for PLD in this study. Second, through a critical review of key literature on agency and teacher agency, I aim to identify key principles that will define what teacher agency for PLD means in this study. These principles will be used in Chapter 3 to develop a comprehensive conceptual framework for teacher agency for PLD.

The first half of the chapter examines the contentious nature of teacher professionalism (Hargreaves, 2000; Evetts, 2013; Sachs, 2016), followed by an exploration of teacher professionalism in an age characterised by standardisation, performance, and accountability (Sahlberg, 2011; Priestley et al., 2015; Kennedy, 2015; Sachs, 2016). Subsequently, the discussion extends to address the disputed aspects of teacher development and learning, and the rationale for adopting the term 'teacher professional learning and development' within this study. These discussions serve to establish the context for positioning teacher agency as a key element in the process of teacher PLD.

In the second half, a review of literature is conducted to explore some of the core understandings of agency and teacher agency across various disciplines, including social science (Giddens, 1984; Archer, 2000), psychology (Bandura, 1986, 1997), and education (Mezirow, 1991; Biesta & Tedder, 2006; Priestley et al., 2015). This examination reveals a notable gap in understanding the internal individual

dimensions that constitute teacher agency. Consequently, by synthesising concepts from the selected key literature, I argue for an interpretation of teacher agency that centres on the dynamic interplay between the individual and the environment, with a particular focus on interpreting an individual's intrapersonal factors and their actions. This interpretation will subsequently serve as the working definition for this study.

2.2 Teacher professionalism

2.2.1 Teacher professionalism as a contested site

The concept of teacher professionalism has always been a subject of debate, with numerous attempts made to categorise it. However, there is no universal agreement or understanding regarding its meaning (Hargreaves & Goodson, 1996; Bubb, 2012; Sachs, 2016). Hargreaves & Goodson (1996) highlight the distinction between professionalisation as a social and political effort aimed at advancing the interests of a professional group, and professionalism as a framework that defines and expresses the quality and nature of people's actions within that group. They draw attention to how the interpretations of what constitutes professional knowledge and professional action in teaching vary greatly.

In exploring teacher professionalism, Hargreaves (2000) situates the teaching profession within its social and historical contexts. He presents a conceptual framework that identifies four broad historical phases in the evolution of teachers' professionalism and professional learning in the modern United States. He states that these four ages of professionalism—the pre-professional, autonomous professional, collegial professional, and post-modern professional/post-professional—are not universally applicable but are rather prevalent in Anglophone cultures and many other nations, although not always in the exact same sequence.

The fourth phase, according to Hargreaves, is an open-ended period with two potential trajectories for the future. In one path, teachers could function as post-modern professionals, leveraging aspects of both the autonomous and collegial professional eras to collaborate with colleagues and communities. In the other path, teachers could transition into post-professionals, characterised by a

deprofessionalization of teaching that returns educators to a pre-professional era. In this era, existing skills and knowledge are transmitted from expert to teachers, and the focus is primarily on reproducing practice rather than improving it (Hargreaves, 2000).

Focusing on a closer examination of Hargreaves' (2000) final phase of professionalism, a more detailed understanding of its implications can be gained by considering Evetts' (2013) theories on professionalism. Evetts argues that contemporary societies are witnessing the development of two distinct discourses of professionalism: organizational and occupational. These competing forms produce different outcomes and cater to different interests held by the government and the teaching profession. Evetts (2013) defines organizational professionalism as a discourse primarily used by managers within work organisations to exert control. It includes hierarchical decision-making structures and increased standardisation of work procedures, accompanied by managerial controls. It heavily relies on external regulations and accountability measures such as target-setting and performance reviews.

Alternatively, occupational professionalism represents a discourse constructed within professional occupational groups and incorporates collegial authority. This form of professionalism emphasises autonomy and the exercise of discretionary judgment by practitioners, particularly in complex cases. It depends on extensive systems of education, vocational training, and socialisation, as well as the cultivation of robust occupational identities and work cultures. Controls are implemented by practitioners themselves, guided by codes of professional ethics that are overseen by professional institutes and associations.

Building upon Evetts' (2013) distinction between organizational and occupational professionalism, Sachs (2016) categorises professionalism into managerial and democratic discourses. The managerial perspective, aligned with organizational professionalism, emphasises efficiency and compliance, with a strong emphasis on externally imposed accountability measures. In contrast, democratic professionalism aligns with occupational professionalism, positioning teachers as agents of change. It aims to make professional work transparent while fostering alliances between teachers and marginalised stakeholders such as students and community members.

Sachs (2016) suggests that this perspective promotes collaboration, openness, agency, and a clear commitment to social justice.

The types of professionalism described above serve as ideal models, but their practical application may not be as straightforward as the concepts suggest. Sachs (2016) acknowledges that a gap exists between the desires and expectations of governments and teachers and argues that the increased international focus on teacher quality appears to have brought with it an increased focus on the use of professional standards, with governments endorsing organizational/managerial professionalism while teachers tend to favour occupational/democratic professionalism. Building on this discussion, the following section describes how governments appear to endorse organizational/managerial professionalism through a variety of education policies and examines their impact on teaching practices and student outcomes.

2.2.2 Teacher professionalism in an age of standardisation

Contemporary patterns of education reform at the beginning of the new millennium could be characterised by deprofessionalization of teaching (Hargreaves, 2000) associated with managerial professionalism (Sachs, 2016). These trends appear to be evident in worldwide reforms and policies emphasising teacher standards, performance, and accountability (Sachs, 2016; Mockler, 2022). Performance indicators are employed to measure student learning outcomes and teacher performance, serving as measures of accountability and alignment with strategic goals (Sachs, 2016). Performance indicators, including standardised test scores, can be viewed as reflecting government intentions for improvement and accountability; however, they can also be seen as a lack of trust in teachers' professionalism to meet their students' needs, consequently affecting teachers' autonomy in applying their professional knowledge and judgment (Elliott, 2006; Sachs, 2016).

In contrast to this trend, Priestley et al. (2015) observe two key recent shifts in educational policies across various countries, indicating a move away from

approaches that deprofessionalize teachers. Firstly, they highlight an emerging tendency in curriculum policy to explicitly portray teachers as agents of change, leading to the development of new national curriculum frameworks such as Scotland's Curriculum for Excellence and the New Zealand Curriculum Framework (Sinnema & Aitken, 2013; Priestley & Sinnema, 2014). Secondly, they note that there has been a significant emphasis on enhancing teacher quality through initiatives like continuous professional development and the establishment of teacher professional learning communities (Stoll et al., 2006; Earley, 2010; Hargreaves, 2013). Similar changes can be observed in Korea, where efforts have been made to increase curriculum autonomy following the 2009 national curriculum revision (Choi, 2013; So & Kang, 2014). Additionally, there has been a shift from institution-centred to school-centred training, in efforts to foster collaborative teaching improvement among teachers within the same school (Park & So, 2014). This has resulted in teacher development being situated within their working contexts through practices like lesson studies and subject study groups conducted in collaboration with colleagues (MOE, 2015).

While the emerging trends outlined above seem to indicate a shift from managerial to democratic professionalism (Sachs, 2016), offering numerous opportunities and greater control to teachers, Biesta et al. (2015) and Priestley et al. (2015) point out several underlying problems associated with this trend. They suggest that the rhetoric of placing teachers at the centre of the educational process has not been matched by actual moves towards greater teacher influence. It is argued that while direct control by the central state, such as through tight curricular prescription, has seemingly diminished in many countries, there has been an observable increase in indirect regulation, such as through school inspections and the evaluative use of attainment data (Kuiper et al., 2013). An example of this phenomenon can be observed in Korea's Teacher Evaluation for Professional Development, introduced in 2008 to assess teacher professionalism. This evaluation process involves teachers being evaluated by their peers, students, and parents following standardised processes and criteria. Peers assess teachers' teaching quality, materials, teacher-student interaction, and educational efforts, while students and parents use the Likert scale to evaluate teachers' teaching methods, classroom management, and teacher-student relations based on their satisfaction (Lee, 2022; Chapter 1, p.21).

Sachs (2016) argues that teacher professional standards, accountability, and performance cultures can have positive implications by establishing shared baselines for learning outcomes, providing a common language for teachers, holding teachers accountable to students and communities, and offering a systematic approach for recognition and reward for teachers' work. However, there are also critiques of these functions. Sahlberg (2011) suggests that policymakers and education reformers often unquestioningly believe that setting clear and high-performance standards for schools, teachers, and students will automatically improve the quality of desired outcomes. According to both Sahlberg (2011) and Kennedy (2015), this belief has translated into policy measures that may lack adequate evidence-based support. Furthermore, Kennedy (2015) states that the connection between the standards-based statements and their impact on teachers' practices, and ultimately students' educational achievement, has not undergone extensive empirical scrutiny.

The subsequent sections move on to explore how governments, in adopting managerial professionalism (Sachs, 2016), tend to embrace professional development approaches that have raised concerns regarding their effectiveness (Clarke & Hollingsworth, 2002; Bubb, 2012), and how this has prompted the reconceptualisation of professional development by some scholars (Easton, 2008; Webster-Wright, 2009).

2.3 Teacher PLD

2.3.1 Defining professional development and professional learning

Understanding teacher PLD has long been a complex and debated topic. Bubb (2012) highlights the lack of consensus surrounding terms like 'professional development' (PD) and 'professional learning' (PL), which are often used interchangeably. In contemporary education policy, Mockler (2022) observes that the term PL is often used when referring to PD activities, effectively incorporating the flawed assumption that PL naturally occurs from PD activities. To address this

confusion, Opfer and Pedder (2011) prefer using the term PL, as they believe that the term PD reinforces the focus on activities.

Critics of the term PD argue that it perpetuates a discourse that portrays professionals as deficient and in need of external direction, rather than recognising their engagement in self-directed learning (Clarke & Hollingsworth 2002; Timperley et al., 2008; Webster-Wright, 2009; Sachs, 2016). This critique aligns with the 'deficit-mastery model' (Clarke & Hollingsworth, 2002), perpetuating the notion of an expert instructing an amateur. Timperley et al. (2008) suggest that this assumption often results in teachers being regarded as human capital and passive carriers of knowledge, lacking the ability to interpret and apply knowledge in context. Additionally, Ginsburg (2012) points out the paradox in this perspective, as teachers are acknowledged as professionals capable of constructing and facilitating the learning of others, yet their own agency as active organisers is often overlooked.

It is argued that the definition of teacher professionalism significantly contributes to the conceptualisation of PD (Kennedy, 2014; Sachs, 2016). The tendency for governments to adopt a managerial professionalism (Sachs, 2001) appears to have resulted in the same governments adopting a PD approach that has faced criticism for perceiving teachers as passive carriers of knowledge within a deficit-mastery model (Clarke & Hollingsworth, 2002; Timperley et al., 2008; Webster-Wright, 2009; Scheerens, 2010; Ginsburg, 2012; Sachs, 2016).

An illustration can be seen in Korea, as evident from the implementation of the requirements by the 1995 Education Reform Council. Under this policy, primary school teachers in Seoul are mandated to complete a minimum of 60 hours of in-service PD annually, provided by organisations certified by the Seoul Metropolitan Office of Education (SMOE) (Lee, 2022). Failing to meet this requirement has negative consequences in terms of school assessments, teacher evaluations, and career advancement (Lee, 2022). Despite the policy's intended aim to enhance teacher professionalism and teaching quality through increased PD opportunities (Education Reform Council, 1995), it appears to embody the criticisms of PD outlined above in several ways. The emphasis on fulfilling a specific number of hours reinforces a focus on activities rather than meaningful learning, perpetuating the flawed assumption that professional growth naturally stems from participating in PD

activities (Mockler, 2022). Furthermore, the fact that only SMOE-certified programmes count towards the mandatory 60 hours suggests that teacher PD in Korea follows a ‘deficit-mastery model’ of teacher development, overlooking teachers' capacity as active organisers of their own learning (Clarke & Hollingsworth, 2002; Webster-Wright, 2009; Ginsburg, 2012).

Sachs (2016) argues that the current situation, which prioritises regulation over genuine teacher professional growth, has significant short-, mid-, and long-term consequences. In the short term, the influence of short-sighted political agendas from the ruling government fosters a compliant teaching profession that continually reacts to government mandates. This approach, in the mid-term, impedes decision-making and encourages a ‘teach to the test’ mindset. Over the long term, it might lead to a teaching profession lacking confidence in judgment, diminished skills, and being perceived as technical workers by the community. Consequently, she contends that this environment stifles innovation and obstructs the creation of new knowledge aimed at enhancing teaching practices.

2.3.2 Reconceptualising PD to PLD

Today's teaching requires individuals who can adapt to the diverse and demanding contexts within which they work. Teachers should engage in innovative learning, tailor their approaches to meet varied requirements, and skilfully navigate policies within their working environments. This involves interpreting and negotiating with their colleagues and parents the multiple possibilities implied by policies, making independent choices, and finding a balance between personal preferences and shared collegial understandings (Eteläpelto et al., 2015; Toom et al., 2015). In essence, teaching requires professionals who can act agentically.

Given the rapidly evolving landscape of globalisation (see Chapter 1, p.16), concerns have arisen regarding the effectiveness of current PD policies. For example, Clarke & Hollingsworth (2002) suggest that these policies often rely on deficit-training-mastery models that fail to produce substantial changes in teacher practice, while Bubb (2012) highlights that teachers face challenges in applying

acquired PD knowledge to enhance their teaching. Consequently, there is a growing demand for a reconceptualisation of professional development. Scholars like Easton (2008) and Webster-Wright (2009) advocate for a shift in focus from ‘development’ to ‘learning’, urging teachers to become active learners and self-developing individuals, empowering them as autonomous and self-driven professionals.

Recognising the complexity of teacher PD, some argue that a crucial missing element in these concepts is the impact on student learning. Bubb and Earley (2007) present an alternative definition of PD that significantly diverges from the deficit-mastery model, encompassing a broader yet more specific understanding:

> [...] an on-going process encompassing all formal and informal learning experiences that enable all staff in schools, individually and with others, to think about what they are doing, enhance their knowledge and skills and improve ways of working so that pupil learning and wellbeing are enhanced as a result. It should achieve a balance between individual, group, school and national needs; encourage a commitment to professional and personal growth; and increase resilience, self-confidence, job satisfaction and enthusiasm for working with children and colleagues (Bubb & Earley, 2007, p.4)

Their definition of PD revolves around adult learning, with the ultimate goal of enhancing the quality of education for students. The focus is on the process itself, as development is seen as innate within individuals rather than something done to or provided for them. This development is facilitated through various means, including planned and formal activities as well as experiential learning. Timperley (2011) supports these ideas by asserting that the primary purpose of teacher PD is to improve student learning and wellbeing. She asserts that this perspective is rooted in the belief that schooling should create an environment where everyone, including leaders, teachers, and students, can engage in continuous learning.

Given the current educational environment, which places accountability and transparency at the forefront of political discourse and practice, and in response to the growing demand for a reconceptualisation of PD, this study adopts the term ‘professional learning and development’ (PLD). The term ‘learning’ recognises

teachers as active participants in their own growth, emphasising that learning is primarily driven by the learner. On the other hand, the term ‘development’ acknowledges the significance of teachers acquiring knowledge and skills not only from external experts but also from their fellow teachers, rejecting the notion of a distinction between knowledgeable external experts and knowledge-deficient teachers. Therefore, in this study, PLD is viewed as a self-driven process that enhances teachers' professional knowledge, skills, attitudes, and beliefs to improve teaching practices. It entails continuous learning from various formal and informal experiences, all with the ultimate goal of enhancing student learning and wellbeing.

Recognising the complexity of teacher PLD involves a shift in focus from perceiving teacher learning as a passive developmental process to an active and dynamic one. Research indicates that individuals' learning experiences are influenced by various factors, including their prior beliefs, personal values, professional backgrounds, work contexts, and other life circumstances such as health and changes in educational policies (Clarke & Hollingsworth, 2002; Opfer & Pedder, 2011; Day, 2017). These insights link to Bubb's (2012) observation that assessing the impact of PLD is a multifaceted undertaking. Engaging in activities and exposure to PD may or may not lead to changes in individuals' beliefs, values, attitudes, and behaviours, and these changes may or may not translate into modifications in classroom and school practices, ultimately impacting student outcomes.

One way to address some of these issues is by recognising the subjective nature of the learning experiences and positioning teacher agency as a key element of this process (Alexander, 1987; Nolan & Molla, 2019). Increasing evidence highlights the influential role of teacher agency in PLD and sustainable educational change (Eteläpelto et al., 2013; Toom et al., 2015). Moreover, research suggests that one of the ways in which teacher agency can be facilitated is through PLD (Dillon et al., 2011; King & Nomikou, 2018; Wagner et al., 2019). These issues will be discussed in further detail in the next chapter.

Positioning teacher agency as a key element of PLD leads me to explore the concept of agency and teacher agency, beginning with the contentious issues surrounding these terms. In the next section, I examine the complex nature of understanding these concepts through a review of selected key theories. This

examination sheds light on the reasons for this study's focus on understanding the individual's intrapersonal aspects and actions that constitute teacher agency.

2.4 Agency and teacher agency

Despite the growing interest in agency and teacher agency (Chapter 1, p.16), a review of research suggests that their core meaning has remained largely undefined, leading to confusion surrounding the concept (Eteläpelto et al., 2013). The multidisciplinary and abstract nature of agency has resulted in various interpretations, necessitating a critical examination of different frameworks to define teacher agency, especially in the context of teacher PLD. This section reviews key concepts of agency and teacher agency within the fields of social sciences (Giddens, 1984; Archer, 2000), education (Mezirow, 1991; Biesta & Tedder, 2006; Priestley et al., 2015), and psychology (Bandura, 1986, 1997), aiming to shed light on the diverse understandings and their potential contributions to defining teacher agency.

Based on this review, I argue that exploring teacher agency in relation to teacher PLD requires adopting an alternative conceptual and analytical framework, one that emerges from synthesising the existing conceptions of agency and teacher agency. This framework focuses on the dynamic interplay between the individual and the environment, particularly highlighting the significance of an individual's intrapersonal components that lead to changes in action. Through this perspective, I propose that a more comprehensive understanding of teacher agency for PLD can be achieved.

2.4.1 Agency rooted in social sciences

The concept of agency, rooted in the social sciences (Giddens, 1984; Archer, 2000), has emerged as a core but complex idea in recent years. Researchers in this field have engaged in discussions and debates that primarily focus on the interplay between social and economic structures and their impact on human behaviour, as

well as the extent of individual agency within these structures (Eteläpelto et al., 2013).

In social science discourse on agency, two influential scholars, Anthony Giddens and Margaret Archer, have offered their perspectives on understanding agency. Giddens, in his theory of structuration (1984), highlights intentionality as a key aspect of agency, emphasising the agents' knowledge and ability to reflect on themselves and their social contexts. Essentially, Giddens views human beings as purposeful agents who engage in intentional actions, grounded in an understanding or belief in the anticipated outcomes. He contends that competent agents are typically able to articulate their actions, explain their behaviour, and justify and motivate their own actions as well as those of others.

However, Giddens' theory has faced criticism in recent discussions on agency, particularly for its narrow focus on individual rational action and the perceived lack of analytical separation between the individual and the social, which is seen as reducing human existence to purely individual behaviour (Archer, 2000). In contrast, Archer's realist social theory of agency (2000, 2002) critiques what she describes as 'upwards, downwards, and central conflation' within social theorising. She argues that such conflations hinder the recognition of the true emergent powers of individuals and the foundation of human agency. 'Downwards conflation' refers to over-socialised theorising, where individuals are understood merely as products of society, lacking genuine agency. Conversely, 'upwards conflation' denotes a form of individualism that reduces society to the individual, disregarding emergent powers at the societal or cultural level. According to Archer (2002), Giddens' account (1984) exemplifies 'central conflation,' where structures are only observed in their enactment, making the analysis of social change challenging since the world is only manifested through present individual actions.

Contrasting with the three modes of conflation, Archer (2000) proposes that individuals and society possess unique properties and powers, necessitating their analytical separation. This separation allows for an examination of the dynamic interaction between the individual and the social, and facilitates an understanding of their temporal differences. Archer further argues that human agency is characterised by both social reproduction and transformation. The power of agency lies in human

ability to reflect upon and evaluate social contexts, creatively envision alternatives, and collaborate with others to effect transformative change (Archer, 2000).

Despite varying perspectives within the field of sociology, there is a general consensus among sociological researchers that agency cannot be separated from structural influences. It is widely acknowledged that agency is shaped and limited by the existing structures (Eteläpelto et al., 2013). This understanding has also influenced the current conceptualisations of teacher agency, emphasising the interdependence between teacher agency and the environment. This perspective is evident in the conceptual framework of teacher agency as an ecological phenomenon (Biesta & Tedder, 2006; Priestley et al., 2015), as discussed in the following section.

2.4.2 Teacher agency as an ecological phenomenon

Drawing on theories that highlight the interdependence between the individual and structure, Biesta and Tedder (2006) built upon Emirbayer and Mische's work (1998) to examine how agency is attained within specific ecological contexts. Priestley et al. (2015) further developed this ecological conceptualisation through an empirical study of teacher agency in the implementation of Scotland's 'Curriculum for Excellence'. They propose that ‘actors always act by means of their environment rather than simply in their environment [so that] the achievement of agency will always result from the interplay of individual efforts, available resources and contextual and structural factors as they come together in particular and, in a sense, always unique situations' (Priestley et al., 2015, p.137). In other words, agency concerns how actors ‘critically shape their responses to problematic situations’ (Priestley et al., 2015, p.11). Here, agency is not seen as residing in individuals but is understood as an emergent phenomenon of actor-situation transactions (Priestley et al., 2015).

The ecological perspective emphasises the dynamic and interconnected aspects of teacher agency across different contexts and timeframes. From this perspective, understanding agency requires focusing on the dynamic interplay between (i) past

influences and experiences (e.g., adopted routines); (ii) engagement with the present (e.g., judgments about the limits and opportunities provided by the present contexts); and (iii) orientations towards the future (e.g., hopes, fears, desires). Teacher agency is seen to be rooted in past achievements, understandings, and patterns of action; it is not something that people possess as an attribute, but something they 'do' in different contexts (Priestley et al., 2015). This developmental understanding of teacher agency has important implications, as it recognises individuals as complete beings with their own past experiences, emotions, commitments, and concerns for personal wellbeing. Pantić (2015) points out that this conceptualisation recognises individuals' considerations of the potential benefits and drawbacks of participating in an activity, taking into account the intricate interplay among cultural, institutional, and educational labour market contexts.

By emphasising the interdependence between the individual and the social context, Priestley et al. (2015) suggest that while the possession of competences is a necessary condition for achieving teacher agency that enables good teaching, it can never be a sufficient condition. They emphasise that despite having considerable capacities, including knowledge and skills, and holding strong educational aspirations, teachers may face challenges that make enacting innovation difficult or risky. They argue that an important implication of the ecological understanding is the need for policymakers and leaders in public organisations to give greater consideration to the influence of context, as these contexts can potentially hinder individuals with otherwise high levels of agentic capacity.

Since its emergence, the ecological perspective has been widely used in empirical studies on teacher agency (Deschênes & Parent, 2022). However, researchers have directed less attention towards exploring the internal dimensions of teacher agency and the processes that facilitate it within individuals (Cong-Lem, 2021). A similar trend can be observed in research on PLD. Evans (2014) states that educational researchers have insufficiently explored the cognitive processes involved in PLD that shape individuals' experiences of professional learning. She suggests that this knowledge imbalance has resulted in an oversimplified understanding of what PLD entails, with the information on PLD often lacking the specificity necessary for those responsible for leading and facilitating PLD to gain meaningful insights.

Drawing on Evans' (2014) argument and applying it to teacher agency for PLD, I argue for a deeper understanding of the influence of individuals' internal dimensions on teacher agency. This assertion is further supported by Eteläpelto et al. (2013), who point out the lack of analysis of the internal dimensions in both the ecological perspective and situational socio-cultural approaches in general. To examine these internal dimensions of teacher agency, I turn to the theories of Bandura (1986) and Mezirow (1991) on agency.

2.4.3 Socio-cognitive perspective

Aligned with other social science researchers such as Giddens (1984) and Archer (2000), Bandura's (1986) well-established socio-cognitive conception of human agency perceives individuals neither as autonomous agents nor simply as conveyers of environmental influences. Instead, it offers an integrated perspective that recognises social influences operate through psychological mechanisms to produce behavioural effects. Bandura's conception of agency operates within an interdependent causal structure that he termed 'triadic reciprocal causation' (Bandura, 1986, p.22). This model outlines how three sets of determinants— intrapersonal factors in the form of cognitive, affective, and biological events; behaviour; and environmental influences— interact and influence each other bidirectionally.

In this three-way interplay, human functioning is a product of intrapersonal influences, individuals' behaviour, and the environmental forces that act upon them. Bandura's model makes it clear that personal influences play an influential role in the casual mix, positioning individuals as both producers and products of their environments. It highlights the concept of self-influence, whereby individuals operate generatively and proactively, not just reactively, to shape the character of their social systems. In contrast to a simple system with predictable behaviour patterns, such as traffic lights, Bandura's model of agency can be characterised as a complex system (Larsen-Freeman & Cameron, 2008) because it comprises multiple components— personal, behavioural, environmental—that connect and interact in diverse and evolving ways. Moreover, each component can be seen as a complex system in

itself, with the personal determinant linked to self-beliefs of efficacy, the behavioural determinant influenced by executed managerial choices, and the environmental determinant represented by the properties of the organisational environment and the challenges it presents (Bandura, 1986).

2.4.3.1 Bandura's theory of agency, self-regulated learning, and self-efficacy

Bandura's perspective on agency encompasses a multitude of intrapersonal factors, including cognition, motivation, and affect, which together serve to regulate behaviour. Among these factors, he places significant importance on cognition, emphasising that cognitive development requires much more than simply understanding factual knowledge. It also requires metacognitive skills and the ability to appraise and control one's cognitive activities—essentially, thinking about the adequacy of one's own thinking (Bandura, 1997). He argues that individuals cannot effectively influence their own motivation and actions without monitoring their thoughts and feelings, situational influences, and the outcomes of their actions (Bandura, 1997).

Consequently, Bandura proposed that human agency is characterised by core features found in self-regulated learning (SRL), a concept that centres around learners exercising agency by making and acting upon their choices through a systematic and constructive process. This process includes intentionality, forethought, self-reactiveness, and self-reflectiveness (Bandura, 2001). Within self-reflectiveness, Bandura identified reflection on self-efficacy as the crucial component that drives agency and teacher agency. He argued that this core self-belief serves as the foundation for human aspiration, motivation, and accomplishments. The motivation to engage in behaviour fundamentally stems from the core belief that one has the ability to achieve desired outcomes. If individuals lack belief in their power to produce results, they are unlikely to take action. Although no single factor in the social sciences consistently influences human functioning, Bandura's extensive research and meta-analyses conducted across different realms of functioning, under laboratory and naturalistic conditions, have consistently demonstrated the

significance of self-efficacy beliefs as a vital personal resource for agency (Holden et al., 1990; Multon et al., 1991; Stajkovic & Luthans, 1998).

Self-efficacy among teachers is defined by Bandura (1997) as the belief that they can bring about desired outcomes of student engagement and learning. Extensive evidence highlights the impact of self-efficacy on both teacher behaviour and student achievement (Bandura, 1997; Tschannen-Moran & Hoy, 2007; Chong & Kong, 2012; Zee & Koomen, 2016; De Smul et al., 2018; Schipper et al., 2020). High self-efficacy among teachers is associated with providing a high-quality classroom environment through various means, including experimenting and being creative in classroom practice (Bandura, 1997; Tschannen-Moran & Hoy, 2001; De Smul et al., 2018); belief in the teachability of difficult students (Bandura, 1997); use of persuasive approaches over authoritarian control (Bandura, 1997; Zee & Koomen, 2016); and support for students' intrinsic interest and self-directedness (Bandura, 1997; Chong & Kong, 2012; Zee & Koomen, 2016; De Smul et al., 2018).

Further supporting the importance of self-efficacy, research has shown that teachers with low levels of self-efficacy can undermine students' sense of efficacy, academic interest, motivation, and cognitive development through various means. These include being pessimistic about student learning and readily giving up on students if quick results are not achieved (Bandura, 1990, 1997); emphasising strict control of classroom behaviour through regulations and negative sanctions (Bandura, 1997; Zee & Koomen, 2016); and reacting with anger to student misbehaviour, as well as criticising them for their failures (Bandura, 1997; Tschannen-Moran & Hoy, 2007; De Smul et al., 2018; Schipper et al., 2020).

In addition, positive self-efficacy beliefs have been found to contribute to improved psychological wellbeing, manifesting in higher levels of job satisfaction and commitment, alongside reduced levels of stress and burnout (Bandura, 1997; Zee & Koomen, 2016). It is important to note that research indicates that self-efficacy beliefs may vary across different activity domains and situational conditions, rather than manifesting uniformly across tasks and contexts (Bandura, 1990; De Smul et al., 2018).

In summary, Bandura's social cognitive theory suggests that agentic capability emerges from a self-regulatory process that includes self-reflectiveness. This involves reflecting on one's self-efficacy, identified as a key component driving agency. However, despite the significance of self-regulation and reflection in his theory, the exploration of how these processes are influenced by one's frames of reference and their origins seems lacking. This observation leads me to explore Mezirow's theories on critical reflection and its role in shaping agency.

2.4.3.2 Mezirow's theory of cognition and agency

Mezirow, a prominent figure in adult education and the founder of the theory of transformative learning (1991), appears to share Bandura's emphasis on the pivotal role of cognition in agency. He states that cognitive development affects individuals' self-efficacy and motivation to reflect on what they know and how to justify that knowledge, without which they cannot act intentionally. In acknowledging the importance of justifying what people know, Mezirow echoes Bandura's assertion that SRL and metacognition are crucial to agency. However, there is a divergence in focus as Bandura emphasises the significance of metacognition, SRL, and self-efficacy in relation to agency, whereas Mezirow highlights the importance of critical reflection in empowering individuals to take control of their lives.

Mezirow (1991) discusses human agency within the context of emancipatory adult learning, specifically focusing on how critical reflection leads to cognitive development. This enables adults to independently reason and make decisions based on their own beliefs, values, emotions, and judgments, rather than acting on the assimilated beliefs, values, feelings, and judgments of others. Ultimately, this process empowers individuals to gain greater control over their lives, enabling them to live as socially responsible, clear-thinking decision-makers.

Upon exploring Bandura's theories on agency, it becomes evident that developing a comprehensive understanding of teacher agency requires examination of the influence of intrapersonal factors such as cognition, motivation, and affect. The emphasis Bandura and Mezirow place on cognition leads me to direct this study

towards exploring how PLD, with its various affordances and constraints, can influence cognitive development and its subsequent impact on other intrapersonal components that collectively regulate behaviour. A detailed analysis of the significance of cognition—particularly in terms of Self-Regulated Learning (SRL) and critical reflection—in enhancing teacher agency for PLD, will be conducted in the next chapter.

While the examination of Bandura's and Mezirow's theories discussed above sheds light on the role of individuals' internal dimensions on teacher agency, they do not provide a comprehensive analysis of its developmental aspects (Martin, 2004). A more detailed analysis of agency's developmental aspect is provided by the ecological perspective, which outlines how it is strongly influenced by multiple contexts across time (Biesta, 2006; Priestley et al., 2015). Therefore, building upon the insights gained from the critical review of key literature, I present an alternative conceptualisation of teacher agency in the following section.

2.5 Intra- and interpersonal perspectives of teacher agency

This study, building on the earlier suggestion of teacher agency's influential role within PLD (section 2.3.2)—a role that will receive further examination in Chapter 3—aims to deepen the understanding of how teacher agency for PLD is enacted within organised teacher education settings. Specifically, it will explore how an EBL programme involving action research can influence the intrapersonal components of individuals, leading to subsequent changes in their teaching practices.

To facilitate this investigation, subsequent sections will synthesise a more individual-centred, intrapersonal perspective on agency (Bandura, 1986, 1997; Mezirow, 1991) with environmental and developmental, interpersonal perspective of agency (Biesta & Tedder, 2006; Priestley et al., 2015).

2.5.1 Intrapersonal perspective

This research adopts a holistic view of teacher agency, considering its interconnectedness with the individual as a whole. This contrasts with other studies that adopt a cognitivist approach to understanding teacher agency, an approach Cong-Lem (2021) suggests, in his systematic review of teacher agency research, tends to be atomistic. This broader and more complex perspective incorporates various intrapersonal components, including cognition, motivation, and affect (Bandura, 1997; Larsen-Freeman & Cameron, 2008; Mercer, 2012). The level of agency an individual feels can be said to be strongly influenced by these intrapersonal components (Bandura, 1997). As depicted in Figure 2.1 below, these intrapersonal factors can be viewed as a complex system in themselves and thus can be considered a 'subsystem' of the larger agentic system.

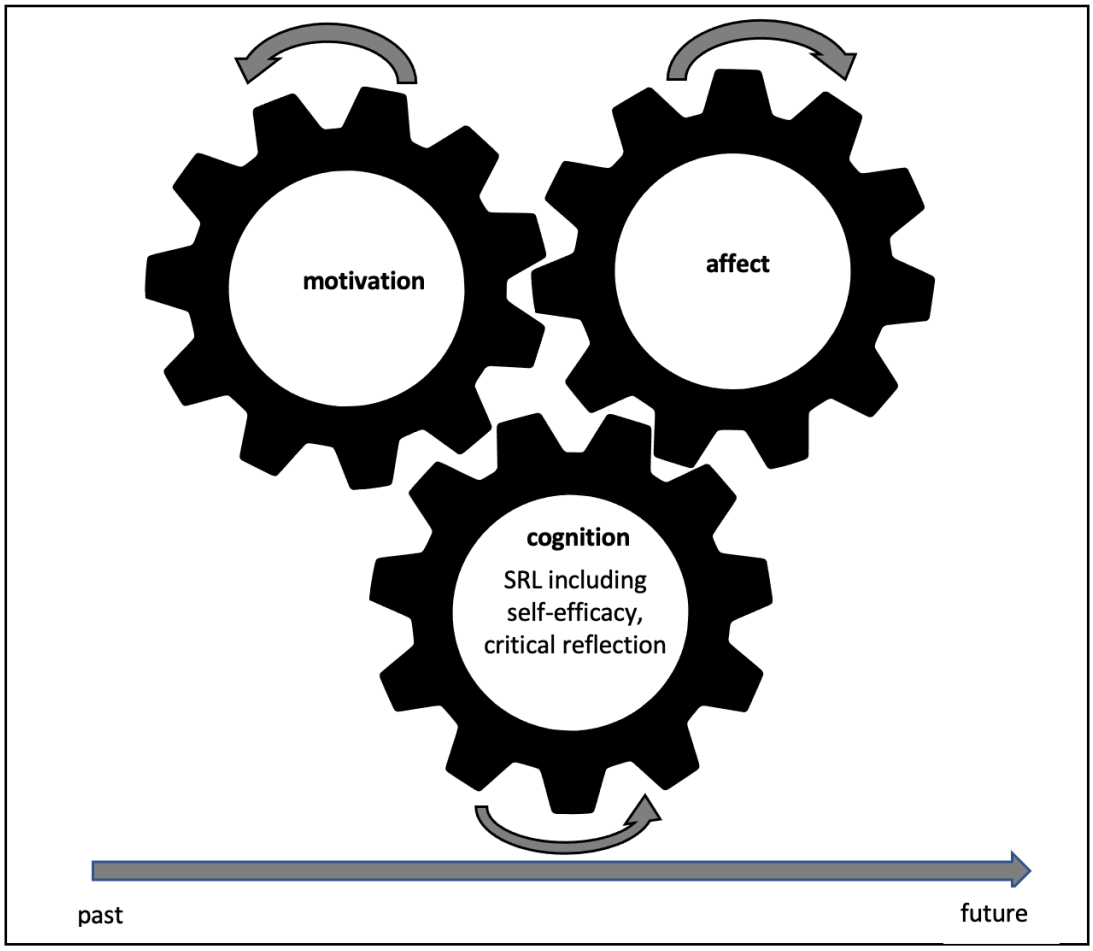

Figure 2.1: Complex dynamic interplay between key intrapersonal components

The three intrapersonal components—cognition, motivation, and affect—are depicted as individual cogs, illustrating their interconnectedness. Among these, cognition, particularly self-regulated learning processes which can significantly influence self-efficacy (Bandura, 1997), and critical reflection (Mezirow, 1991), hold a central position as a key influencer of teacher agency. However, it should be noted that despite the centrality of cognition, no single factor in the social sciences consistently influences human functioning (Bandura, 1997). Therefore, the cogs representing the intrapersonal components also indicate the non-linearity of their relationship, in that there is not one single factor that causes agentic behaviour but rather its activation is supported by a series of multiple, interconnected causes. The timeline at the bottom of the figure represents the temporally situated nature of the components, meaning that they interact in unpredictable ways and can vary in their relative significance depending on the individual, context, and time (Emirbayer & Mische,1998; Biesta & Tedder, 2006; Mercer, 2012; Priestley et al., 2015; Larsen-Freeman, 2019).

This leads on to the interpersonal aspect of teacher agency and the ways in which intrapersonal components are influenced by various contexts over time.

2.5.2 Interpersonal perspective

The interconnected nature of teacher agency highlights the interplay between individuals and their beliefs within a contextual framework, where neither the individual nor the environment is seen as independent (Mercer, 2012; Larsen-Freeman, 2019). Literature supports the idea that environmental factors at various levels, including the individual, school, local, national, and international, influence and shape teachers' professional capacities and available resources for action (Eteläpelto et al., 2013; Pantić, 2015; van der Heijden et al. 2015; Kauppinen et al., 2020).

Nevertheless, despite the significant influence of diverse environments, empirical studies have identified individual variations in the manifestations of professional and teacher agency (Billett, 2006; Lipponen & Kumpulainen, 2011; van der Heijden et al.,

2015; Lai et al., 2016; Tao & Gao, 2017; Hadar & Benish-Weisman, 2019; Ashton, 2021). While Bandura (1990) states that different environments, categorised as imposed, selected, and created, influenced the ways individuals exercise agency, he contends that the impact of environmental influences on human action is heavily mediated through intrapersonal processes that give meaning to external events. This perspective aligns with an ecological approach to agency, which states that agency has to do with the capacity of individuals to shape their responsiveness to the situations they encounter in their lives (Biesta & Tedder, 2006). Similarly, Billett (2006) constructed a theory of 'relational interdependence,' highlighting the dynamic interplay between the individual and the social. According to his theory, the strength of the influence of social suggestions can vary across different situations, and the level of individual engagement with social suggestions may also differ depending on individual interests and intentions. He believes that as a result, individuals may selectively exercise agency with varying degrees of engagement, impacting what is learned or changed through their involvement.

Another key component in this understanding of teacher agency is its temporal nature, where an individual's teacher agency is not a fixed disposition but rather interconnected across time. This temporal perspective, best captured by the ecological model (Biesta & Tedder, 2006; Priestley et al., 2015), requires a focus on the dynamic interplay between (i) past influences and experiences, (ii) engagement with the present, and (iii) orientations towards the future (Emirbayer & Mische, 1998; Biesta et al., 2015; Priestley et al., 2015). Temporal features of teacher agency are reflected in research examining individual teachers' responses to policy reforms, where it has been found that responses to reform can take multiple forms rather than a specific, fixed 'response' (Ball et al., 2011; Vähäsantanen, 2015; Kayi-Aydar, 2015; Ryder et al., 2018).

Recognising the temporal aspect of agency, several researchers emphasise that teacher agency is a developmental phenomenon, manifested differentially due to changes in the individual (e.g., teachers' pedagogical beliefs, professional identities), the environment, or both (Eteläpelto et al., 2013; Ryder et al., 2018; Wagner et al., 2019). Considering this developmental perspective, which recognises that teacher

agency involves ongoing growth and change, this study aims to explore changes in teacher agency over time.

2.5.3 Intentional action as core to teacher agency

The discussion so far has highlighted the multifaceted nature of teacher agency, which encompasses intrapersonal components of cognition, motivation, and affect, which are strongly influenced by multiple environments across time. However, at the core of teacher agency lies the crucial element of intentional action. Despite the existence of diverse theories on agency and teacher agency, research consistently emphasises that their central criterion is rooted in deliberate, purposeful action.

For instance, Giddens' (1984) theory of structuration highlights that human beings are purposeful agents who engage in intentional actions and can provide explanations for their behaviour, as well as justify and motivate their own actions. Archer's (1995) theory of agency emphasises humans' ability to reflect on and evaluate social contexts to bring about transformative change. Priestley et al. (2015) describe teacher agency as an active process rather than a possession, emphasising that agency is something teachers intentionally do. Bandura's (1986) theory proposes an integrated perspective, wherein social influences operate through psychological mechanisms to impact behaviour. Mezirow (1991) highlights the role of reflection, which is essential for intentional action.

Correspondingly, this study highlights the significance of intentional action as a central criterion for teacher agency. It suggests that realising teacher agency involves translating interactions between various intrapersonal components into intentional actions. This process involves making informed pedagogical choices and deliberate decisions that enhance their learning and work practices, assuming responsibility for the situation, and the ability to articulate and elaborate on the multiple reasons behind these actions (Pantić, 2015; Soini et al., 2015). Ultimately, these pedagogical choices and decisions aim to promote student learning and wellbeing (Buchanan, 2015; van der Heijden et al., 2015; Toom et al., 2015).

2.5.4 Defining teacher agency for PLD

The fundamental understanding presented in this study is that teacher agency involves the dynamic interplay between the individual and the environment (Bandura, 1986; Emirbayer & Mische, 1998; Archer, 2000; Biesta & Tedder, 2006; Eteläpelto et al., 2013; Priestley et al., 2015), while simultaneously recognising the analytical distinction between them (Archer, 2000). The conceptual framework for this study is underpinned by the following five propositions:

1. The individual has a central influence on how they perceive and negotiate teacher agency. Therefore, how agentic an individual feels can be said to be strongly influenced by key intrapersonal components such as cognition—encompassing self-regulated learning (SRL), self-efficacy within this process (Bandura, 1997), and critical reflection—along with motivation and affect (Mezirow, 1991; Bandura, 1997; Larsen-Freeman & Cameron, 2008; Mercer, 2012).
2. Teacher agency is interconnected with a person as a whole, encompassing a multitude of interconnected intrapersonal components. It is not caused by a single factor, but is exercised when supported by a series of multiple, interconnected causes (Bandura, 1997; Larsen-Freeman & Cameron, 2008; Mercer, 2012).
3. The environment, including the educational environment, school culture, and policy context, is seen to have a significant impact on the intrapersonal components as they provide constraints and affordances on the 'choices' that the individual can make (Biesta & Tedder, 2006; Priestley et al., 2015).
4. Teacher agency is not a fixed capacity or disposition; rather, it is a developmental phenomenon that is connected across time. This involves examining the dynamic interplay between an individual's past experiences, present circumstances, and future orientations (Emirbayer & Mische,1998; Biesta & Tedder, 2006; Priestley et al., 2015).
5. The central criterion for teacher agency for PLD is intentional action that enhances teachers' learning and work practices, ultimately aiming to promote student learning and wellbeing.

The culmination of these five propositions leads to the following definition of teacher agency for PLD:

> Teacher agency for PLD is realised when teachers take intentional action as a result of the dynamic interplay between the intrapersonal components (cognition, motivation, and affect) and multiple environments connected across time, to enhance their learning and work practices, ultimately with the aim of improving student learning and wellbeing.

These five underpinning principles will be used to develop a comprehensive teacher agency for PLD conceptual framework in Chapter 3. This framework will explore how teacher agency for PLD can be developed through an organised teacher education setting, specifically in the form of an EBL programme. The key aspects of teacher agency that I have identified through my engagement with the literature—namely, the individual's perception of their teacher agency, their intentional actions to enhance learning and work practices, and the characterisation of teacher agency as a developmental phenomenon—will guide the development of the research questions presented in Chapter 4.

2.6 Conclusion

Through the literature review of this chapter, closer connections were established among the multifaceted aspects of teacher professionalism, PLD, agency, and teacher agency. With an increasing global emphasis on teacher quality, directly linked to a nation's economic competitiveness (Lingard, 2010; Singh et al., 2021), today's teachers appear to be operating in a post-professionalism age characterised by deprofessionalization of teaching (Hargreaves, 2000), which aligns with managerial professionalism (Sachs, 2016).

Furthermore, a link was established between the adoption of managerial professionalism, primarily functioning as a mechanism for overseeing and controlling activities within the teaching profession (Sachs, 2016), and governments' support of PD approaches that take on a deficit-oriented perspective on teacher learning

(Clarke & Hollingsworth, 2002). This contrasts with the concept of democratic professionalism, which tends to be favoured by teachers and aligns closely with PL approaches emphasising teachers' active involvement in self-directed learning (Sachs, 2016).

In this study, I adopt the term PLD amidst the ongoing debates about PD and PL. PLD incorporates key elements from both PD and PL, understanding it as a self-driven process that enhances teachers' professional knowledge, skills, attitudes, and beliefs to improve teaching practices. It entails continuous learning from various formal and informal experiences, all with the ultimate goal of enhancing student learning and wellbeing. This perspective highlights the rationale of this study's focus on teacher agency, specifically emphasising the significant role that teacher agency plays in effective PLD, which consequently influences teacher practices and student outcomes.

Moving onto the concept of teacher agency, a critical review of key understandings of agency and teacher agency from a selection of key literature (Giddens, 1984; Bandura, 1986, 1997; Mezirow, 1991; Archer, 2000; Biesta & Tedder, 2006; Priestley et al., 2015), revealed a shared emphasis on the interdependence between the individual and the environment. Within this context, individuals operate generatively and proactively to shape the character of their social systems. However, there appears to be a gap in the knowledge of the internal dimensions of individuals that influence teacher agency within these concepts.

To address this gap, I synthesised concepts from Bandura's theory of agency (1986, 1997), Mezirow's theories on critical reflection (1991), and the ecological perspective of teacher agency (Priestley et al., 2015). This synthesis outlines an intra- and interpersonal perspective of teacher agency, as adopted in this study. The conceptualisation recognises the dynamic interplay between the individual and the environment, while also acknowledging the analytical distinction between them. The conceptualisation proposed in this study is summarised through five key propositions, culminating in the definition of teacher agency as follows: Teacher agency for PLD is realised when teachers take intentional action as a result of the dynamic interplay between the intrapersonal components (cognition, motivation, and affect) and multiple environments connected across time, to enhance their learning

and work practices, ultimately with the aim of improving student learning and wellbeing. This definition will serve as the foundation for developing a conceptual framework of teacher agency for PLD in the next chapter.

In the upcoming chapter, I will further explore the connections between teacher agency and PLD, investigating how various PLD environments (defined in the upcoming chapter) can serve as constraints or affordances for teacher agency.

Chapter 3: Teacher agency for professional learning and development: Building a conceptual framework

3.1 Introduction

This chapter develops the five principles of teacher agency for PLD presented in Chapter 2 to build a comprehensive conceptual framework. This framework will be used to analyse the influence of the enquiry-based learning (EBL) programme on teacher agency for professional learning and development (PLD) and will guide the data analysis in the upcoming chapters.

My analysis begins by exploring the types of PLD recommended in the literature to prepare teachers in today's rapidly evolving educational landscape. I draw on literature that examines effective PLD (e.g.s, Timperley et al., 2008, 2011; Opfer et al., 2011; Stoll et al., 2012; Darling-Hammond et al., 2017) to identify a variety of successful PLD processes and practices. Next, to gain an understanding of PLD within various educational policy contexts and their objectives, I examine Kennedy's (2015) assertion that different PLD[3] models, aligned with distinct educational purposes as identified by Biesta (2009), can lead to varying levels of affordances for teacher agency.

Following this, I build upon Kennedy's PLD models (2015) and conduct a close examination of three PLD environments that drive many of the most prominent and widespread teacher PLD initiatives:

i. Transmissive PLD, which primarily views teaching as knowledge transmission and learning as knowledge acquisition.

[3] Kennedy (2005, 2014) employs the term continuous professional development (CPD) rather that PLD. However, in this study, PLD incorporates the idea of continuous learning throughout a teacher's career (Chapter2, p.38). Therefore, in the interest of greater consistency and coherence, the term 'PLD' rather than 'CPD', is used.

ii. Collaborative PLD, characterised by its strong contextualisation and the perception of learning as an ongoing participatory process.
iii. Enquiry-based PLD, which prioritises the learning processes of self-regulated learning (SRL), critical reflection, and collaboration.

I analyse each PLD environment, providing examples where certain aspects of these settings are reflected in Korean PLD, to examine their influence on teacher agency.

Finally, these explorations culminate in the development of a conceptual framework that is structured along a PLD environments–teacher agency continuum, ranging from low to high levels of teacher agency. This framework illustrates how various PLD environments may influence the intrapersonal components that shape intentional action towards achieving different educational purposes (Biesta, 2009).

3.2 Effective PLD and purpose of education

In chapter 1 (p.16), it was suggested that due to globalisation, teachers are required to function as high-level knowledge workers, capable of teaching the complex thinking and communication skills that students need to survive and succeed in the twenty-first century (Schleicher, 2012; Scott, 2015; Ventista & Brown, 2023). This raises the question: What type of PLD is necessary to effectively prepare teachers for this new era?

Bubb (2012) identifies many forms of PLD, ranging from individual and within-school initiatives to cross-school networks and external expertise activities. These can be informal, unplanned and brief, or formal and long-lasting. Despite the diversity of PLD forms, well-cited research such as Timperley et al. (2008), Stoll et al. (2012) and Darling-Hammond et al. (2017) has enabled the identification of key characteristics that contribute to its success.

Many agree that effective PLD, understood in this study as a continuous, self-driven process that enhances teachers' professional knowledge, skills, attitudes, and beliefs to improve teaching and student learning and wellbeing (Chapter 2, p.38), involves:

- Active learning (Darling-Hammond et al., 2017) that is situated in classroom-based learning experiences (Wilson & Berne, 1999; Altrichter & Posch, 2009; Opfer & Pedder, 2011; Timperley, 2011; Stoll et al., 2012; Hargreaves, 2013).
- Reflection that challenges thinking as a fundamental part of changing practice (Webster-Wright, 2009; Opfer at al., 2011; Stoll et al., 2012; Darling-Hammond et al., 2017).
- Collaborative learning, often within schools in the form of professional learning communities (Stoll et al., 2006; Timperley et al., 2008; Earley, 2010; Hargreaves, 2013; Darling-Hammond et al., 2017) and between schools (Hargreaves, 2014; Maxwell & Greany, 2015; Godfrey, 2020); with key contributions from external expertise (Cordingley et al., 2007; Timperley et al., 2008; Darling-Hammond et al., 2017).

There are additional features that can enhance the effectiveness of PLD. PLD sustained over time provides teachers with adequate time to learn, practice, implement, and reflect upon new strategies, thereby facilitating lasting changes in their practice (Timperley et al., 2008; Stoll et al., 2012; Darling-Hammond et al., 2017). Additionally, leadership within both PLD programmes and schools has been found to be instrumental in creating the necessary conditions for effective, meaningful, and sustained teacher PLD (Stoll et al., 2012; Pantić, 2015; OECD, 2019; Bingham & Bubb, 2022; Earley & Greany, 2022).

Kennedy (2015) points out that the growing emphasis on and investment in teacher PLD has led to widespread calls for more evidence of its impact. Stoll et al. (2012) identify that the impact on teachers resulting from PLD can be observed in:

- Practice, for example, changes in subject or process knowledge and classroom practice.
- Interpersonal capacity, including improved collaboration with colleagues, increased confidence in sharing best practice, and greater ability to question alternative viewpoints (Earley & Porritt, 2009; Frost & Durrant, 2003 cited in Stoll et al., 2012).

- Personal capacity, including skill acquisition, increased self-confidence, greater motivation, improved reflection on practice, and greater ability to participate in or lead change initiatives.

Acknowledging the importance of the impact of effective PLD on students, Bubb & Earley (2011) emphasise that this can manifest in various ways, including enhanced enjoyment in learning, improved attitudes, increased participation, a sense of pride and organisation in their work, responsiveness to questions and tasks, improved performance and progress, and greater engagement in a wider range of learning activities.

Within the extensive international literature on effective PLD, Kennedy (2005) identified a gap that needed addressing. She argued for the need to provide theoretical tools that could aid in understanding PLD within diverse educational policy contexts and their objectives. To address this gap, Kennedy synthesised a variety of PLD models to construct a conceptual framework for understanding and classifying PLD according to their fundamental purpose. Drawing inspiration from Sachs' concepts of managerial and democratic professionalism (2001, 2016), the PLD models are placed along a continuum ranging from transmissive to transformative purposes (Kennedy, 2005, amended in 2014).

Subsequently, Kennedy expanded her work with an updated analysis in 2015, utilising the amended PLD models to examine key features of contemporary teacher professional learning policies. Her examination was guided by educational purposes as outlined by Biesta (2009). Biesta (2009) proposed that education should be orientated towards achieving an equal balance of the following three domains of purpose:

- Qualification—the development of human capital whereby better education of individuals corresponds to better national economy.
- Socialisation—the socialisation function whereby, through education, we become members of society.
- Subjectification—the support and encouragement of individual interests and creativity, through which education allows individuals to become more autonomous and independent.

These domains reflect Egan's (2001, p.923) argument that educational thinking draws on three fundamental ideas: 'socialising the young, shaping the mind by a disciplined academic curriculum, and facilitating the development of students' potential'. These correspond to socialisation, qualification, and subjectification, respectively. Egan argues that the pursuit of a balance among socialisation, academic knowledge, and individual development has historically shaped contemporary education systems. He contends that although advocates of this approach recognise the inherent tensions and criticisms, such as the risks of indoctrination, intellectual elitism, or a lack of civic values associated with isolating each component, they believe that integrating these elements can mitigate such risks.

However, Egan (2001) critiques the attempt to balance these three domains as fundamentally flawed, asserting that the three ideas undermine rather than complement each other. For example, he points out that the goal of fostering individual development, aimed at bringing out the uniqueness of individuals, pulls against the homogenising influence of socialisation and the standardised approach of academic programmes. This conflict, according to Egan, results in ongoing debates among advocates of these domains as they argue over which should be given priority within education. As a result, he argues for a new, better conception of education that avoids the problems associated with the incompatibilities among the three domains.

Despite Egan's critique, Biesta's (2009) proposal that education should be oriented towards the three domains of purpose appears to be more frequently referenced in educational literature (Kennedy, 2015; foreword by Robinson in Greany & Earley, 2022) than his newer paradigms for understanding the nature of learning presented in 'The Educated Mind' (1997). Egan's views highlight the challenging and contentious nature of education, and reflecting on the arguments for and against the balance of these domains suggests the need for a deeper, more nuanced understanding, one that acknowledges how these domains can both conflict and complement each other. Despite the challenges, I argue that striving for a balance among these functions can promote the development of individuals who are knowledgeable, well-socialised, and independent.

3.2.1 PLD and affordances for teacher agency

Building on Kennedy's research (2005, 2014, 2015), I synthesise and suggest connections among several key concepts in the field of PLD. These concepts include the educational purposes proposed by Biesta (2009), the purpose of teacher PLD as outlined by Kennedy (2015), Stoll et al. (2012), and Sachs (2016), and the PLD models proposed by Kennedy (2014). These PLD models are subsequently linked to different levels of affordances for teacher agency, as depicted in Figure 3.1.

Purpose of education (Biesta, 2009)	Purpose of PLD for teachers (Kennedy, 2015; Stoll et al., 2012; Sachs, 2016)	Purpose of PLD models (adapted from Kennedy, 2014)	
Qualification	• State functionaries who will enable students to enhance the standing of the country through increased success in international league tables of performance (Kennedy, 2015) • Changes in practice (Stoll et al., 2012) • Managerial professionalism (Sachs, 2016)	Transmissive PLD models (e.g., training, deficit models)	Increasing affordances for teacher agency ↓
Socialisation	• To be trained into the existing culture and practices of the profession to help maintain the status quo (Kennedy, 2015) • Interpersonal capacity (Stoll et al., 2012) • Managerial or democratic professionalism (Sachs, 2016)	Malleable PLD models (e.g., coaching/mentoring, communities of practice models)	
Subjectification	• Autonomous educators who can contribute to the common good through the fostering of their own specific interests and talents in creative ways (Kennedy, 2015) • Personal capacity (Stoll et al., 2012) • Democratic professionalism (Sachs, 2016)	Transformative PLD models (e.g., collaborative professional enquiry models)	

Figure 3.1: PLD and levels of affordances for teacher agency

Looking across the first row of Figure 3.1, Kennedy (2015) asserts that the qualification function is evident in how international measures of student achievement are used as proxies for evaluating the success of individual nations' education systems. These metrics are perceived to reflect the effectiveness of the teachers and their capacity to foster human capital. Although a focus on qualification can prompt changes in teacher practice (Stoll et al., 2012), it tends to cultivate managerial professionalism that equips teachers with skills to enact externally mandated educational reforms, typically by governmental authorities (Sachs, 2016). Kennedy (2015) suggests that this path often leads to teacher PLD policies aligned with training and deficit models, endorsing a 'transmissive' perspective of PLD. Such a model is perceived to be externally controlled and top-down, doing little to promote teacher agency (Kennedy, 2015).

Moving onto the second row, Kennedy states that the socialisation function in teacher PLD is evident through the identification of professional norms and the building of national professional identity. According to Kennedy (2015), the socialisation purpose in teacher education policies can either promote positive and activist professional identities or serve as a mechanism of control. This aspect links to interpersonal capacity (Stoll et al., 2012) and can lead to either managerial or democratic professionalism (Sachs, 2016). Kennedy (2015) further states that pursuing the socialisation function tends to align with PLD models such as coaching/mentoring and communities of practice. She notes that these models are 'malleable', meaning they can accommodate underlying agendas that align with either transmissive or transformative PLD purposes.

Finally, Kennedy highlights that subjectification can be seen in teacher PLD policies which value individual aspirations and promote autonomy, creativity, and teacher voice. This concept relates to personal capacity (Stoll et al., 2012) and democratic professionalism (Sachs, 2016). According to Kennedy, policies centred on subjectification align with the transformative model of collaborative professional enquiry. This model centres around problematising practice within a shared, local context that is fundamentally driven by both teachers and students (Kennedy, 2015).

While Kennedy's conceptual framework aims to analyse patterns and trends in PLD, she clarifies that her methodology is not the only way to organise PLD models, nor

does she claim her framework provides an exhaustive overview. Kennedy argues that not all PLD experiences need to be transformative, recognising that some skills might be more effectively acquired or refreshed through traditional, transmissive learning methods. Nevertheless, Kennedy suggests that the key feature of the transformative model is its effective integration of various approaches found in both transmissive and malleable phases, which in turn can enhance teacher agency. Despite the framework's lack of consideration of personal factors, it remains particularly relevant and valuable for this study because it connects PLD with affordances for teacher agency and transformative practice.

Among the PLD models, collaborative professional enquiry emerges as a prime example of this transformative approach, offering the greatest affordances for teacher agency and thereby establishing a strong connection between effective PLD and teacher agency. This model notably incorporates the three characteristics of effective PLD as identified earlier through an examination of relevant literature: active and situated learning, collaboration, and reflection (Timperley et al., 2008, 2011; Opfer et al., 2011; Stoll et al., 2012; Darling-Hammond et al., 2017). The following section provides a closer look at action research, a form of practitioner enquiry that integrates these three characteristics of effective PLD.

3.2.2 Action research and teacher agency

Action research, especially when undertaken collaboratively, has been supported by a multitude of primarily small-scale studies for fostering teachers' development of agency and empowerment (e.g., Zeichner & Noffke, 2001; Campbell et al., 2007; Cordingley et al., 2007). Ponte (2010) states that teachers in these studies report their ability to influence their practice and classroom contexts. Furthermore, they express an increased sense of control over the process, leading to even greater influence through a better understanding of how to realise that influence.

Recent empirical studies further affirm the positive impacts of action research on teacher agency. This includes reports of increased professional skills and knowledge, enhanced collegial support, active participation in decision-making, and

recognition of their viewpoints by peers (Xin & Brioin-Meisels, 2022). Teachers also express a growing commitment to incorporating the voices of key stakeholders, such as students and parents, into the teaching and learning process, demonstrating an increased teacher agency for enacting social justice (Storms, 2015; Thorgeirsdottir, 2019).

However, it is important to note that professional enquiry models, whether in collaboration or not, do not universally guarantee high affordances for teacher agency. Advocates for action research (Carr & Kemmis, 2009; Groundwater-Smith & Campbell, 2010), for instance, express concerns that the focus of policymakers on teacher research has, at times, undermined teachers' autonomous professional judgment and the pursuit of a transformative approach to education.

Despite these challenges, strong theoretical and empirical evidence supports the use of action research (e.g., Noffke & Somekh, 2009; Ponte, 2010) as a tool for developing teacher agency that enhances PLD. Fostering teacher agency can cultivate a self-driven learning disposition, a quality that is considered essential for educators to effectively prepare students for success in the twenty-first century (Schleicher, 2012; Scott, 2015; Ventista & Brown, 2023). This rationale informs my decision to employ an EBL approach involving action research in this study. The issues surrounding impacts of policy on action research and a more detailed discussion of the rationale for its use in this study will be further explored in Chapter 4.

3.2.3 PLD environments and teacher agency

This study's approach is founded on the idea that teacher agency for PLD is realised when teachers take intentional action as a result of the dynamic interplay between the intrapersonal components and multiple environments connected across time (Chapter 2, p.54). These environments include teacher PLD, school cultures, and policy contexts, all of which are seen to exert significant influence on teacher agency by offering both constraints and affordances on the 'choices' that the individual can make (Eteläpelto et al., 2013; Ryder et al., 2018).

Focusing specifically on teacher PLD, this research aims to develop a conceptual framework that provides a nuanced and comprehensive understanding of how a formal and planned EBL programme can influence teacher agency for PLD. Drawing on Reid's definition of different types of teacher learning (McKinney et al., 2005), the EBL programme is formal in that it is explicitly established by an agent other than the teacher (i.e., this is a taught programme), and it is planned in that its content and structure are pre-arranged.

In the following sections, I examine the different learning environments created by three distinct PLD models. To offer a more comprehensive view, I will refer to these as 'PLD environments' rather than 'PLD models.' This shift in terminology aims to encompass a wider array of activities and their underlying rationale within the learning context. In this study, a 'learning environment' is defined by both the processes and outcomes of learning, as well as the theories and values that underpin and justify them. These PLD environments drive many of the most prominent and widespread teacher education initiatives across the developed world, all aimed at enhancing teacher quality. Adapting Kennedy's (2014) three categories of perceived purposes of PLD—transmissive, malleable, and transformative—I will analyse three different PLD environments: transmissive, collaborative, and enquiry-based learning (EBL), in turn, to explore their affordances and constraints for teacher agency.

3.3 Transmissive PLD environment

Transmissive PLD, widely recognised for its continued prevalence in global education systems (Saavedra & Opfer, 2012, cited in Scott, 2015), is primarily favoured for its perceived effectiveness in conveying new knowledge and skills to educators. It is seen as instrumental in conveying subject and process knowledge, subsequently leading to changes in practice (Hoban, 2002; Kennedy, 2014). A practical example of this is the standardised training provided to designated safeguarding officers in schools or compliance with digital and technological standards set by educational institutions (Williams et al., 2022). Further advantages of the training model include its swift implementation, reliance on decentralised

actors and private providers, and the use of specifically trained presenters (Breakey & Sampford, 2014). Government-initiated reforms often feature this approach, characterised by the flexibility of scheduling lectures and workshops, enabling professionals to integrate them into their existing work commitments, with straightforward attendance tracking.

However, despite its widespread popularity and utility, the transmissive PLD approach primarily views teaching as the transmission of knowledge and learning as the accumulation of knowledge (Eraut, 1994; Cochran-Smith & Lytle, 1999; McNiff & Whitehead, 2002; Manyukhina & Wyse, 2019). This perspective appears to overlook the complexity of teacher PLD, as discussed in the preceding chapter (Chapter 2, pp.35-40). Additionally, it is thought that the training approach is particularly prevalent when professionals need to acquire new skills or undergo re-education to align with newly mandated, centrally-controlled reforms or policy initiatives (Breakey & Sampford, 2014). This perspective aligns with the views of Kennedy (2014) and Sachs (2016), who argue that this approach is often perceived as a means for dominant stakeholders to assert control. According to their perspectives, in this model, knowledge is typically ‘delivered’ to teachers by ‘experts’, and the agenda is determined by those delivering the knowledge, ultimately placing teachers in a passive role as recipients of specific information.

In recent years, transmissive PLD has involved teachers acquiring knowledge rooted in evidence-based practice (EBP). EBP can be defined as the utilisation of the best available evidence to bring about desirable outcomes, or conversely, to prevent undesirable ones (Kvernbekk, 2017). Commonly known as the ‘what works’ agenda, this aims to narrow the gap between research and practice. Its objective is to equip teachers with evidence-based practice knowledge encompassing classroom management, instructional techniques, curriculum development, and assessment strategies.

Kvernbekk (2017) highlights that contemporary educators exhibit an ambiguous relationship with what EBP can offer to practice. He notes that educators like Robert Slavin (2002), a significant influencer in educational research and an advocate for EBP, argue that rigorous research, over time, will lead to the same incremental, irreversible progress in education that medicine has achieved. This is due to the

strict evaluation standards that all interventions would undergo before being endorsed for widespread use. However, figures such as Gert Biesta (2007, 2010), also highly influential in the field, approach this matter with caution. Biesta is concerned that giving substantial weight to research might potentially limit or even replace the valuable experiences and professional judgment of practitioners.

Within the extensive literature on this subject, it becomes evident that while transmissive PLD approaches may have their place, none can be universally applied above the context-specific needs. This highlights the importance of enhancing teacher agency in the ongoing discourse about effective educational practices. Biesta (2007) expresses concerns regarding the prescriptive adoption of EBP, arguing that it could undermine the expertise and professional judgment of educators. These concerns resonate within the context of teacher PLD in Korea, where a significant part of the educational strategy relies on transmissive learning methods. A notable example is the requirement for teachers to complete 60 hours of PLD annually through government-approved institutions. These institutions primarily focus on imparting knowledge and skills from US and UK initiatives that are based on EBP, to be used largely in a prescriptive manner (Choi, 2013). Furthermore, the emphasis on knowledge transfer is also evident through the Teacher Evaluation for Professional Development policy (Chapter 2, p.34), which includes 'open classes'. These sessions involve peers, school principals, and parents in observing and evaluating teachers based on standardised processes and criteria.

Such educational policies seem to foster a transmissive PLD environment where teachers appear to be developed primarily to realise the qualification function of education (see Figure 3.1). Kennedy (2015) observes such a trend as part of a broader global movement which, she argues, comes at the expense of subjectification, a process essential for the development of agentic educators. Such a bias can have adverse consequences for PLD, as explored in the subsequent section.

3.3.1 Absolutist epistemology

Transmissive learning environments that implement a prescriptive use of EBP can result in instrumental learning, which relies on empirical evidence for universal application to all types of knowledge (Habermas, 1971; Mezirow, 1991). This approach can adversely affect teacher agency by its tendency to impose an absolutist epistemology (Kuhn, 1991) and a fixed knowledge frame (Johnston, 2012), thereby encouraging the belief that knowledge is fixed, certain, and known by authorities. This epistemological stance does not assign a central role to the knower as a constructor of knowledge (Hofer, 2001), positioning knowledge as existing primarily in the external world, waiting to be discovered by knowledge authorities (Kuhn, 1991). The status and power dynamics arising from this standpoint appear to confine professional knowledge to what Eraut (2003) describes as replicative and applicative domains. These domains have predominantly characterised teachers' experiences in constructing knowledge during PLD programmes within the confines of policy-driven curricula (Bodman et al. , 2012).

Eraut (2003) states that the replicative mode of knowledge typically does not encourage the use and development of the metacognitive skills required to engage in reflection as it does not require reorganisation by the user but is presented in a form that differs little from the received professional training. Similarly, the applicative model, while employing knowledge in circumstances that differ a little from those previously encountered, still implies working with rules or procedures, even if these are occasionally of one’s own devising. Believing that their role is to simply apply received knowledge can lead to low teacher motivation to engage in reflection, low self-efficacy and a lack of belief in one’s own coping mechanisms when faced with difficulties. These negative influences on intrapersonal components can then lead to actions associated with low levels of teacher self-efficacy (Chapter 2, p.46), such as giving up on struggling students (Bandura, 1997) and managing classroom behaviour through strict regulations and negative sanctions (Bandura, 1990; Zee & Koomen, 2016).

3.3.2 Evaluatist epistemology

It has been found that prescriptive adoption of EBP is not sufficient to prepare teachers for the complex demands of a reform-oriented educational arena (Zeichner & Liston, 1990; Cochran-Smith & Lytle, 1999; Godfrey, 2020). PLD is a complex process which encompasses the individual needs of teachers and their students, alongside a commitment to organisational agendas (Fullan, 1993; Day & Gu 2007; Kennedy, 2015). Biesta et al. (2015) argue that good teachers are required not only to perform a wide range of tasks but also to judge which knowledge and competencies should be utilised in the always concrete situations in which they work. Biesta argues that research 'can tell us what worked but cannot tell us what works' (2007, p.6). Kvernbekk (2017) concurs, emphasising that researchers may not know what is relevant in the concrete contexts faced by practitioners. Therefore, EBP demands much knowledge, sound thinking, and astute judgments by practitioners. From this standpoint, a more realistic view of professional knowledge emerges, aligned with Eraut's (2003) concept of associative and interpretive knowledge use. His understanding is shaped by a more interpretative use of theoretical knowledge, whereby the practitioner has a more agentic role. Their perspectives–questioning the appropriateness and effectiveness of received knowledge, along with their discernment and discrimination–provide the basis for their understanding of situations and hence, the grounds for justifying actions.

Therefore, it follows that rather than a PLD environment that promotes an absolutist epistemology, one that develops an evaluatist epistemology would better enable teachers to address the complex issues of daily teaching. This involves understanding knowledge as 'the product of a continuing process of examination, comparison, evaluation, and judgment of different, sometimes competing, explanations and perspectives' (Kuhn, 1991, p.202). Unlike absolutist epistemology, which favours technical rationality and accruing of fixed knowledge (Schön, 1983, Johnston, 2012; Manyukhina & Wyse, 2019), evaluatist epistemology involves having a dynamic knowledge frame. This frame involves viewing knowledge as evolving, subject to change, and influenced by context and perspective (Johnston, 2012). A dynamic knowledge frame facilitates reflection on both theoretical and practical knowledge, potentially enhancing self-efficacy and other intrapersonal

components of motivation and affect. This, in turn, can empower teachers to adopt positive behaviours associated with high levels of self-efficacy, including perseverance in the face of obstacles (Bandura, 1997; Chapter 2, p.46). Overall, the cumulative effect of these intrapersonal components and actions could lead to an increase in personal capacity to participate in or lead change initiatives (Stoll et al., 2012). Consequently, such a learning environment holds promise for positively influencing teacher agency, as will be outlined later in the chapter (section 3.6).

The recognition that transmissive PLD approaches, by themselves, are not sufficient to produce long-term proficient practitioners (Hager, 2011) has led to an increasing concern regarding the need to better align PLD with practice. In response to this, collaborative learning has gained significant attention for its potential to reshape the concept of PLD (Hager, 2011). The subsequent section examines this theme.

3.4 Collaborative PLD environment

Based on Vygotsky's (1978) sociocultural theory of learning, collaborative PLD is characterised by its strong contextualisation and its view of learning as an ongoing process of participation. This stands in contrast to transmissive PLD, which views learning as detached from the individual and context, treating it as a finished product rather than an ongoing process. Collaborative PLD takes into consideration the relational aspects of teacher agency within the learning process, while also highlighting the importance of the various teacher collaborative contexts that are inherent in teachers' everyday pedagogical work.

Research on teacher isolation and its potential negative effects on both teachers and students (Lortie, 1975; Britzman, 1991) gave rise to new efforts to enable more collaboration between teachers. In the UK, this is exemplified by initiatives such as Joint Practice Development (Hargreaves, 2014), Teaching School Alliances (Maxwell & Greany, 2015), and peer review programmes (Godfrey, 2020). Korea seemed to adopt a similar approach with the 2016 in-service teacher training report (MOE, 2015), changing its approach to PLD from institution-centred to school-centred. The shift aimed to enhance collaborative teaching within and between

schools through practices such as collaborative lesson studies, subject study groups with colleagues, and mentoring (MOE, 2015).

This emphasis on collaborative engagement has long been recognised as a vital component to teachers' PLD and student success (Louis et al., 1995; Hord, 1997; Stoll et al., 2006; Earley, 2010; Hargreaves, 2013; Glazier et al., 2017). Within the literature, collaborative learning in professional school cultures is often related to communities of practice (Wenger, 1998), communities of enquiry (Cochran-Smith & Lytle, 1999), or professional learning communities (PLCs; Stoll et al., 2006). These various approaches share a common focus on fostering teacher collaboration to extend teachers' knowledge through learning in communities and improving lesson quality, ultimately to enhance student learning (Weißenrieder et al., 2015).

Across different contexts and over time, consistent observations have been made of the strong links between professional collaboration and teacher effectiveness, leading to positive outcomes for student learning and achievement (Day et al., 2007; OECD, 2014; Hargreaves & O'Connor, 2018; Schipper et al., 2020). This positive impact includes the development of collegiality, which leads to stronger teacher commitment to their practice, alongside increased teacher self-efficacy and the implementation of high-quality lessons, all aimed at improving student learning (Hord, 1997; Weißenrieder et al., 2015; Glazier et al., 2017).

Nevertheless, despite the evidence confirming the benefits of collaborative learning (Louis et al., 1995; Hord, 1997; Stoll et al., 2006; Earley, 2010; Hargreaves, 2013; Glazier et al., 2017), it is not merely the commonality of teachers working together that matters. Rather, it is how these collaborations are conducted that seems to have varying implications for teacher learning (Hord, 1997; Hargreaves, 2001). This resonates with Kennedy's (2014) suggestion that collaborative PLD environments have a 'malleable' purpose, meaning that collaborative learning can support underlying agendas compatible with either transmissive or transformative goals.

Research shows that engaging in collaborative learning in teachers' real-life contexts often falls short of the ideal (Glazier et al., 2017). Building on the types of collaboration described in educational research literature (Stake, 1987; Hargreaves & Dawe, 1990; Little, 1990; Louden, 1991; Grossman et al., 2001; Hargreaves,

2001; Datnow, 2011; Kutsyuruba, 2011), Glazier et al. (2017) conceived collaboration as occurring on a continuum, consisting of contrived, comfortable, and critical types of collaboration. I have adapted Glazier et al.'s (2017) continuum to formulate a collaboration continuum, presented in Figure 3.2:

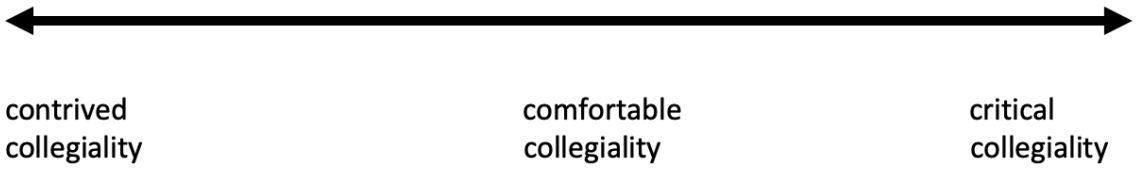

Figure 3.2: Collaboration continuum (adapted from Glazier et al., 2017)

The collaboration continuum (Figure 3.2) serves as a useful tool by providing an overview of the diverse forms of professional collaboration found in the research literature. This continuum allows for the consideration of changes in teacher practices across different contexts and over time. Furthermore, it offers a framework for analysing the potential impact of these practices on teacher agency, as elaborated below.

3.4.1 Contrived collegiality

At one end of the continuum, contrived collegiality is identified as administratively regulated, mandatory, implementation-oriented, fixed in time and space, and predictable (Hargreaves, 2001; Datnow, 2011). Although 'collegiality' relates to the quality of relationships among teachers, involving aspects like respect, trust, and positive, caring interactions (Ning et al., 2015), this context lacks the necessary time and space to nurture trust and support among collaborative partners. Consequently, it limits teachers' inclination to expose their own struggles for fear of appearing weak to colleagues, leading to a lack of deep engagement or strong commitment to the learning community (Stake, 1987; Hargreaves & Dawe, 1990; Louden, 1991). In such environments, community members maintain surface-level congeniality,

avoiding challenging each other or seeking thorough clarifications (Grossman et al., 2001).

According to Hargreaves (2019), many top-down systems, including those in the US and the UK, use collaboration to impose their policies, creating contrived collegiality where teachers are co-opted to fulfil administrative purposes and implement external mandates. A prime example of contrived collegiality observable in the Korean context is the ‘open classes’ (section 3.3), which requires teacher colleagues, school principals, and parents to observe classes and evaluate teachers following standardised processes and criteria. While open classes could potentially serve as opportunities for promoting critical reflection and professional learning (Louis et al., 1995; Stoll et al., 2006), in this context, they appear to be government-imposed mechanisms for teacher evaluation.

3.4.2 Comfortable collegiality

Next to contrived collegiality on the continuum lies comfortable collegiality. This form of collaboration offers important benefits, as it can promote reflection, self-efficacy, and motivation to resolve classroom issues through the exchange of stories, ideas, materials, and practices among teachers. However, it is argued that while comfortable collegiality enables teachers to manage classroom challenges, it remains restricted in nature as it focuses on immediate, short-term matters that offer easy-to-reach solutions. It tends not to engage teachers in challenging each other’s practices, perspectives, and assumptions (Little, 1990; Glazier, 2017)—a process that is fundamental to promoting critical reflection on the value, purpose, and consequences of what teachers do (Little, 1990; Peterson, 1994; Kutsyuruba, 2011).

The prevalence of this type of collaboration is supported by findings from the OECD's 2019 Teaching and Learning International Survey (TALIS). These studies revealed that the two most common collaborative practices reported by teachers are discussions concerning individual students and resource sharing. In contrast, collaborations that require greater interdependence among teachers, such as mutual

classroom observations and feedback, or participation in collaborative professional learning and teaching, are less common.

3.4.3 Critical collegiality

At the opposite end of the continuum lies critical collegiality. The term ‘critical’ in this context refers to professional discourses that can facilitate teacher agency (Biesta et al., 2015; Stillman & Anderson, 2015), often referred to as reflective dialogue (Louis et al., 1995; Hord, 2004; Stoll et al., 2006) or learning conversations (Stoll, 2015, 2020). These practices invite the disclosure of tacit knowledge, including any presuppositions, ideas, and beliefs, by aiding practitioners in making explicit not only what they know but also how they come to know it (Hofer, 2001). This process allows others to contribute diverse perspectives, promoting individuals to engage in deep reflection that challenges existing beliefs. Such interactions can lead to the generation of knowledge and intentional change, thereby improving both teaching practices and student learning (Cochran-Smith & Lytle, 1999; Stoll, 2015; Glazier et al., 2017).

Learning through reflective dialogue involves taking risks. Teachers are less likely to discuss personal pedagogical issues unless they feel safe, highlighting the importance of 'collegiality' in critical collegiality for effective professional discourse. Among the qualities that constitute collegiality, trust has been identified as a key element for effective collaboration (Priestley et al., 2012; Quinn & Carl, 2015; Pantić, 2015). It encompasses dimensions such as providing space to take risks and ensuring access to support, recognition, and affirmation (Woodhouse & Pedder, 2017). Therefore, creating a collegial teacher learning community, where members trust and respect each other and engage in supportive and productive interactions towards shared goals, is vital for successful collaborative learning and development.

When examining the three types of collaboration and their influence on teacher agency, it becomes clear that each type offers varying degrees of support. Contrived collegiality presents the most limitations, offering few opportunities for genuine collaboration, reflection, or independent action. This limitation primarily stems from

its focus on adhering to external mandates aimed at managerial professionalism (Sachs, 2016) and fulfilling the qualification function (Biesta, 2009; Figure 3.1), resulting in little affordances for teacher agency. Comfortable collegiality, which is seen to serve the socialisation function (Biesta, 2009), seems to provide moderate affordances for teacher agency. Although it enhances interpersonal capacities (Stoll et al., 2012), it can be limited to maintaining the status quo (Kennedy, 2015). Furthermore, some researchers caution that collaboration, when oriented towards predictability and stability rather than critical reflection, can be harmful as it reinforces existing practices instead of challenging them through innovation (Smylie & Hart, 1999; Hargreaves, 2001). In contrast, critical collegiality is distinguished by its high affordances for teacher agency, potentially fulfilling the subjectification function (Biesta, 2009) and empowering teachers to become independent, creative contributors to the common good (Kennedy, 2015). The role of critical reflection as a means to achieve high levels of teacher agency will be further explored in section 3.5.2.

Although the collaboration continuum (Figure 3.2) is a valuable tool for understanding the varied forms of professional collaboration evident in research literature, it is important to acknowledge the complexities inherent in the identified collaboration types. For instance, research demonstrates that certain administratively initiated collaborations can significantly contribute to teacher learning. This is exemplified by peer review programmes (Godfrey, 2020), where schools collaborate with and visit other schools to offer recommendations for improvement. Such initiatives have been found to strengthen moral, professional, and lateral accountability in an educational landscape often dominated by centralised, top-down and market-oriented accountability (Godfrey, 2020).

Despite the simplification, conceiving of collaboration as occurring on a continuum, rather than categorising it as separate types as described in the educational research literature (e.g., Fullan & Hargreaves, 1996; Hargreaves, 2001), provides a framework for a more nuanced understanding of how various types of collaboration can influence teachers' abilities and beliefs when engaging in critical reflection. This continuum also highlights the fluid and dynamic nature of collaboration by illustrating

how teachers might move between the different types of collaboration, depending on context and time.

Within schools, it has been proposed that school leaders, particularly principals, represent a key influence on teacher agency through their central role in setting the school culture and atmosphere (Eteläpelto et al., 2015; Toom et al., 2015; Bingham & Bubb, 2022; Earley, 2022). This involves establishing shared goals and visions, nurturing professional communities within schools, and supporting teachers by enhancing their sense of efficacy. This support comes through acknowledging achievements and providing opportunities for participation in decision-making and collaborative endeavours (Pantić, 2015; Woodhouse & Pedder, 2017). Creating such a school culture may entail time, care, and sensitivity to build up specific designs, protocols, structures, and processes to enable individuals to move beyond what is comfortable and engage in more critical analysis and interactions (Hargreaves & Dawe, 1990). However, it is thought that even within such a conducive environment, critical reflection is ultimately an individual undertaking (Mezirow, 1991) and a process that requires learning (Dewey, 1910; Argyris & Schön, 1974). This moves me on to the next section.

3.5 EBL environment

This section examines how an EBL approach can provide high affordances for teacher agency by engaging individuals in a systematic study of their own learning. I begin by exploring the metacognitive processes involved in SRL, which involve systematically organising one's thoughts, feelings, and actions (Usher & Schunk, 2017). These processes enable teachers to reflect on both the process and content of learning, thereby moving them closer to their educational goals. I then examine the regulation of cognitive processes, as theorised by Bandura (1991) and further developed by Zimmerman (2000), focusing on their effects on the regulation of self-efficacy, motivation, and affective aspects.

Subsequently, I explore the role of critical reflection in teacher agency. While reflection is a fundamental component of SRL, it does not necessarily lead to critical

reflection. Critical reflection, as proposed by Mezirow (1991), is a central concept in understanding how adults learn to think for themselves rather than acting on the concepts, values, and feelings of others. This process is therefore seen as crucial for exercising high levels of teacher agency.

3.5.1 SRL

Cognitive development requires more than simply understanding factual knowledge. It also demands metacognitive skills and the ability to evaluate and control one's cognitive activities—essentially, thinking about the adequacy of one's own thinking (Bandura, 1997). Exerting influence over one's motivation and actions entails monitoring thoughts, feelings, situational influences, and their outcomes (Bandura, 1997). This involves understanding the processes through which individuals set goals, plan for, execute, and reflectively refine and adapt learning, which is a primary focus of SRL (Hadwin, 2008). In the current rapidly changing world, the skills needed for continual self-development are seen to be particularly relevant (Bandura, 1997; Kremer-Hayon & Tillema, 1999; Schleicher, 2012; Scott, 2015), emphasising that teachers need to develop not only knowledge and skills but also an understanding of the processes by which they attain them.

Bandura (2001) proposed that human agency involves core features found in SRL, which centres around learners exercising agency by making and acting upon their choices through a systematic and constructive process. Many process models depict regulatory processes in SRL (Boekaert, 1992; Winne & Hadwin, 2000; Zimmerman, 2000; Bandura, 2001), each resting on the assumption that learners can exercise agency. However, it is recognised that agency is not boundless and can be strongly influenced by social conventions (Pintrich, 2000; Zimmerman, 2000; Hadwin & Winne, 2010). Within SRL models, learning unfolds in cycles that include: i) planning, which involves assessing the current situation in terms of the task, knowledge, and motivation, and making decisions about desired directions, goals, or states; ii) employing strategies for regulating or enacting change; and iii) reflection that perpetuates changes in both current and future learning.

Zimmerman's widely recognised SRL model (2000) proposes a cyclical model of self-regulation that unfolds across three phases of learning: forethought, performance, and reflection. In the initial forethought phase, individuals engage in planning strategies wherein they analyse the task ahead, set goals, and motivate themselves to act according to what they believe about themselves and their situation. The second performance phase involves monitoring progress with respect to the set goals. Feedback is an essential component at this stage, with its source being either self-generated or provided by external parties, while a combination of both is often considered more dependable. In the final self-reflection phase, learners review the outcomes of their efforts and the behaviours that led to them. This stage of self-reflection involves not only assessing what happened and why but also responding to one's own performance, often initiating a new cycle of behaviour.

Exercising agency towards SRL requires great energy and effort (Bandura, 1993; Usher & Schunk, 2017). It is commonly acknowledged that, in addition to understanding cognitive and metacognitive strategies, SRL requires self-efficacy in one's self-regulatory skills to persistently apply these strategies in the face of difficulties, stressors, and competing attractions (Bandura, 1997). The motivational facets encompass a variety of interlinked processes, with goals playing a pivotal role in action towards SRL (Bandura, 1993). Research has shown that pursuing mastery/intrinsic goals is more desirable than pursuing performance/extrinsic goals (Pintrich, 2000; Zimmerman, 2011). Mastery/intrinsic goal-oriented learners tend to develop new skills and improve their competence levels based on self-referenced standards. They maintain positive and adaptive efficacy beliefs and perceptions of competence in the face of difficult tasks and exhibit more pride and satisfaction (Pintrich, 2000). In contrast, performance/extrinsic goal-oriented learners tend to focus their abilities with reference to besting others, seeking public recognition for superior performances, and avoiding punishment (Pintrich, 2000; Zimmerman, 2011).

The SRL cycle involving goal-setting, strategy selection, testing, reflection, and corrections enables metacognitive knowledge of the learning process. When combined with intrinsic goal-setting and collaborative efforts, it can promote an evaluatist epistemology (Kuhn, 1991) and a dynamic knowledge frame (Johnston,

2012). In contrast to the absolutist epistemology (Kuhn, 1991) observed earlier in the transmissive learning environment (Section 3.3), SRL can enhance self-efficacy, motivation, and affective control, empowering individuals to translate knowledge into appropriate actions for individual contexts. Such behaviours are associated with high levels of teacher efficacy, including persistence in creating high-quality classroom environments (Bandura, 1997; Tschannen-Moran & Hoy, 2007; Chong & Kong, 2012; Zee & Koomen, 2016; De Smul et al., 2018; Schipper et al., 2020). The combined impact of these features indicates a PLD environment that provides many affordances for teacher agency.

It appears that SRL contributes to fulfilling the subjectification function by allowing individuals to become more independent (Biesta, 2009; Kennedy, 2015). However, to do so effectively, individuals must engage in critical reflection (Mezirow, 1991). Through SRL, individuals gain awareness of their metacognitive knowledge and acquire tools to gain new knowledge and cultivate skills to achieve their desired learning goals (Mezirow, 1991). However, teacher agency involves more than becoming aware of one's learning processes and problem solving. In other words, it goes beyond instrumental learning and involves reflection on the premise itself and consideration of the importance of effective learning (Bateson, 1973; Isaacs, 1993). Therefore, the next section examines critical reflection, which involves questioning the merit and relevance of teaching and learning.

3.5.2 Critical reflection

Reflection in teacher education has been employed in diverse ways, ranging from being viewed as a means to achieve prescribed practices to a route to emancipation (Calderhead, 1989). Critical reflection aligns with the latter view, and in this section, the focus centres on the concepts of Mezirow (1991), who emphasised critical reflection as a means for personal transformation and growth.

Mezirow (1991) drew heavily from pragmatist constructivism, notably Dewey (1933), to explore the role of experience and reflection in adult learning. Dewey’s ideas on reflection (1933) are seminal, differentiating between routine thought—accepting a

belief with minimal effort to examine supporting evidence—and reflective thought, defined as:

> Active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends (Dewey, 1933, p.9)

Mezirow (1991) also distinguishes between non-reflective and reflective thought, but he extends these concepts by categorising various types and levels of non-reflection and reflection. He identifies three forms of non-reflective action: i) habitual action—activities performed with little conscious thought; ii) thoughtful action—use of existing knowledge without addressing the grounds or justification for one's belief of that knowledge; and iii) introspection—recognition of feelings or thoughts about oneself or feelings towards others without considering how or why these feelings developed.

When it comes to defining reflection, Mezirow (1991) pointed out that while Dewey correctly understood reflective thought as the process of examining assumptions and validating assertions, Dewey did not explicitly differentiate the distinct functions of reflection. Mezirow proposed that individuals learn and develop through three levels of reflection: i) content reflection—reflecting on what we perceive, think, feel, or act upon; ii) process reflection—examining how we perform the functions of perceiving, thinking, feeling, or acting, along with assessing efficacy in performing them; and iii) premise reflection—becoming aware of why we perceive, think, feel, or act as we do. During premise reflection, individuals question the merit and relevance of their perceptions and ask why a particular issue is important in the first place.

Mezirow (1991) stated that the object of content and process reflection is instrumental: to improve performance and engage in what he termed 'objective reframing'. This concept entails pausing during task-oriented problem-solving to examine one's assumptions in defining a problem, aiming to adopt more effective actions to solve it. Reflection can focus on either the problem's content or the process of problem-solving. This aligns with Argyris and Schön's (1974) concept of double-loop learning, whereby practitioners examine their core beliefs against evidence and, where necessary, re-orientate those beliefs before seeking a solution. This is distinguished from the generally self-confirmatory single-loop learning, often

seen in transmissive learning, where actions are changed to fit existing assumptions without reflection on foundation beliefs. Synthesising the theories of Argyris and Schön's (1974) and Mezirow's (1991) on reflection, it can be said that SRL, by incorporating content and process reflection, can lead to double-loop learning. However, it is important to acknowledge that SRL, on its own, may be constrained to instrumental learning (Mezirow, 1998), with objectives aimed at improving performance.

In considering premise reflection (which I shall henceforth refer to as critical reflection), the influence of critical theory on Mezirow's work, particularly through the lens of Habermas (1971), becomes evident. Critical reflection is seen as a higher level of reflection, distinct from content and process reflection and double-loop learning (Argyris & Schön, 1974). Unlike the reframing process in content and process reflection, critical reflection does not aim to solve immediate issues; instead, it focuses on explicitly identifying one's frames of reference, their sources, and their implications for understanding the world, others, and oneself (Mezirow, 1998). This requires what Mezirow termed 'subjective reframing', a critical analysis of the psychological or cultural assumptions informing one's experiences and beliefs. It involves a searching examination of the unquestioningly accepted presuppositions that sustain individuals' fears, inhibitions, and patterns of interaction. Critical self-reflection may include assumptions individuals hold regarding the self (narrative), the cultural and educational systems in which they operate (systemic), their workplace (organisational), or their predispositions to learn in certain ways or to achieve particular goals (epistemic).

Critical reflection extends beyond instrumental learning, enabling emancipatory learning that leads to perspective transformation (Mezirow, 1991). Perspective transformation entails making judgments grounded in relevant data while remaining open to ongoing re-evaluation (Mezirow, 1991). This approach enables the development of more inclusive, discerning, and integrative perspectives that are open to alternative viewpoints and experiences. These emancipatory perspectives serve as a foundation for informed actions.

In Figure 3.3, I have adapted Mezirow's (1991) multi-tiered levels of non-reflection and reflection. This adaptation serves two primary purposes: first, to establish clear

definitions for the various reflective terms utilised in this study; and second, to create a more practical instrument for informing the subsequent analysis of teacher agency in the upcoming chapters. Notably, introspection has been omitted from this adaptation, as it does not pertain to cognition but rather resides within the affective domain, which is seen in this study as a separate intrapersonal component.

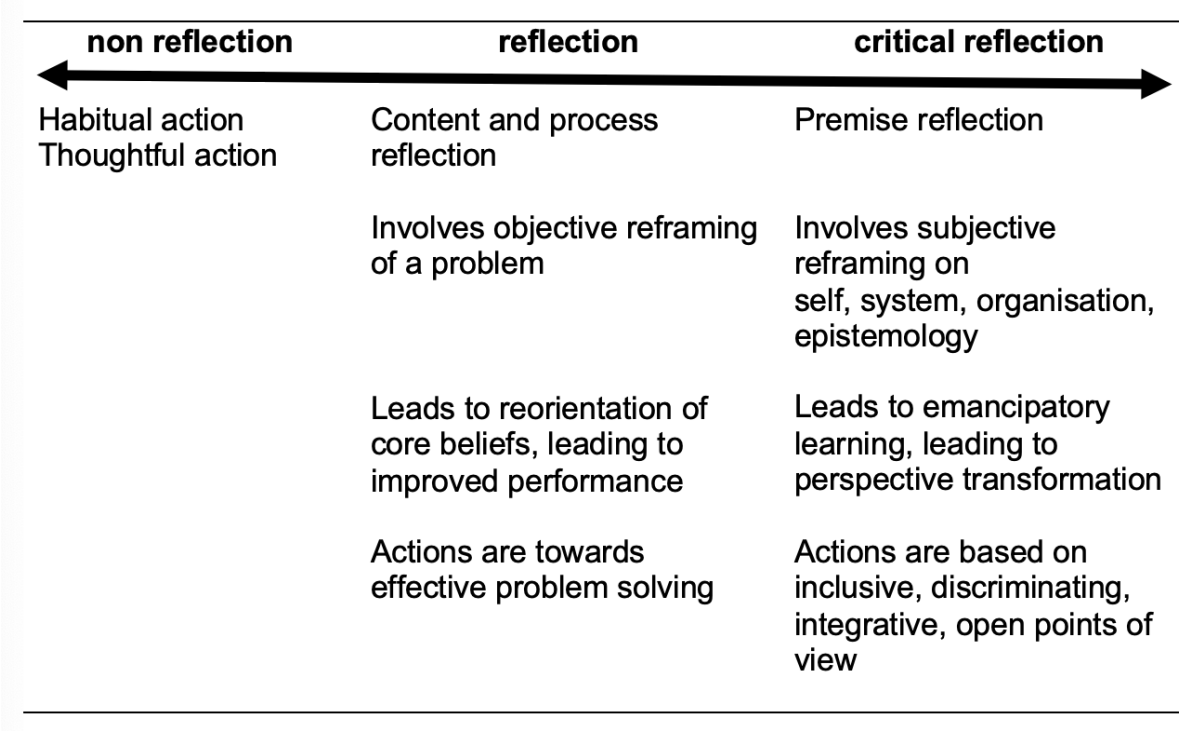

Figure 3.3: Reflection continuum

While reflective practice can occur as a solitary process, engaging in reflection with others can offer alternative perspectives, provide support for change, and validate changed perspectives through rational discourse (Dewey, 1933; Schön, 1983; Cochran-Smith & Lytle, 1999; Brookfield, 2010). Changes in teachers' beliefs through critical reflection, both individually and collectively, can lead to emancipatory learning and perspective transformation (Mezirow, 1991), whereby teachers conceive aspects of their worlds or themselves differently. This, in turn, allows them to reinterpret their experiences from a new perspective and engage in action to change situations (Webster-Wright, 2009).

Despite Mezirow (1991) drawing on the works of Freire and Habermas, his work has faced criticism for a perceived neglect of social change (Cranton & Kasl, 2012; Kroth & Cranton, 2014). Mezirow theorised critical reflection as a key part of the

transformative learning process. He emphasised that while critical reflection may have social consequences or be fuelled by social change, it remains primarily an individual endeavour. He contends that critical reflection need not take a political or ideological stance but instead emphasises genuine enquiry that seeks out disconfirmation of ingrained mindsets. According to him, through critical reflection, individuals learn to think independently by freeing themselves from conditioned assumptions about the world, others, and themselves. This process empowers individuals to function as engaged citizens in a democratic society and make responsible moral decisions.

3.6 Teacher agency and PLD: A conceptual framework

In this study, teacher agency for PLD is seen to be realised when teachers take intentional action as a result of the dynamic interplay between the intrapersonal components and multiple environments connected across time, to enhance their learning and work practices, ultimately with the aim of improving student learning and wellbeing (Chapter 2, p.54). Figure 3.4 below draws together the dynamic interplay between the intrapersonal components and the three PLD environments analysed in sections 3.3, 3.4, and 3.5 to identify:

i. key influences on the intrapersonal components of cognition—encompassing self-regulated learning (SRL), self-efficacy within this process (Bandura, 1997), and critical reflection—along with motivation, and affect;
ii. how changes in the above intrapersonal components serve to shape intentional action.

Through the combined impact of (i) and (ii), I describe and position the level of teacher agency. This positioning will be used to help inform the subsequent analysis of teacher agency in the following chapters.

It should be noted that the influence of the PLD environments on teacher agency is not readily quantifiable and is therefore represented as varying degrees along a continuum from low to high. Moreover, although the dimensions occupy different

positions on this scale, ranging from low to high levels of the hierarchy, there is a certain amount of grey area in each dimension as it transitions to the next, higher dimension, highlighting the continuum's nuanced nature.

While the conceptual framework suggests that levels of teacher agency for PLD can increase as one progresses from transmissive to transformative PLD environments, consistent with research findings (Bubb, 2012; Kennedy, 2015; Philpott & Oats, 2017), it is important to emphasise that the framework does not guarantee that individuals will use the available affordances to develop and/or exercise increased teacher agency. Instead, it highlights the potential for the development of teacher agency for PLD.

PLD environments	Teacher agency for PLD		iii) Levels of teacher agency for PLD (i and ii) and outcomes for education (Biesta, 2009; Kennedy, 2015)
	i) Intrapersonal components (cognition, motivation, affect)	ii) Intentional action	
Transmissive PLD: e.g., training model, contrived collegiality	• Holds an absolutist epistemology, leading to non-reflection and instrumental single-loop learning • Low levels of self-efficacy, motivation, and affective control to resolve classroom issues	**Action towards one's PLD:** • Consumes knowledge and looks to outside 'experts' • Focuses on individual learning and practices little collaboration with colleagues or students **Classroom practice:** • Applies received knowledge, modifying actions to fit existing assumptions • Gives up on struggling students • Uses strict regulations and negative sanctions	**Low level** leading to qualification
Malleable PLD: e.g., comfortable collegiality	• Holds an evaluatist epistemology, leading to reflection (content and process) and instrumental single/double-loop learning • Moderate levels of self-efficacy, motivation, and affective control to resolve classroom issues and collaborate with colleagues	**Action towards one's PLD:** • Shares classroom ideas, materials and practices with colleagues • Focuses on comfortable, immediate, short-terms issues that allow for easy-to-reach solutions • Tends to reorientate beliefs before seeking a solution but engages in little critical reflection on the value, purpose and consequences of actions **Classroom practice:** Uses knowledge interpretively to achieve effective problem solving	**Moderate level** leading to socialisation
Transformative PLD: e.g., enquiry-based learning with critical collegiality	• Engages in SRL and critical reflection on self, system, organisation, and epistemology • High levels of self-efficacy, motivation, and affective control to: achieve set goals; translate knowledge into appropriate actions for individual contexts; persevere in the face of obstacles; take part in or lead change initiatives	**Action towards one's PLD** • Produces knowledge through engaging in SRL • Sets intrinsic goals • Engages in critical reflective dialogue with others **Classroom practice:** Takes action based on open and discerning points of view to achieve effective learning and wellbeing of students	**High level** leading to subjectification

Figure 3.4: PLD environments–teacher agency continuum

The conceptual framework depicted in Figure 3.4 extends the research synthesis presented in Figure 3.1. While Figure 3.1 established links between the purpose of education, the purpose of PLD for teachers, various PLD models, and the affordances for teacher agency, Figure 3.4 takes this analysis a step further. It elaborates on how increased affordances for teacher agency, as one moves from

transmissive to malleable, and then to transformative PLD, can lead to changes in teachers' intrapersonal components—encompassing cognition, motivation, and affect—as well as in their intentional actions.

As depicted in Figure 3.4, an increased level of teacher agency can be seen as one progresses through the three PLD environments. Focusing first on intrapersonal components (i), there is an increase in opportunities for individuals to develop their cognitive capacities. Initially, in the transmissive PLD environment, the promotion of an absolutist epistemology can result in individuals engaging in minimal reflection. As they move into more collaborative PLD environments, a shift towards adopting evaluatist beliefs can occur, prompting engagement in both content and process reflection (Mezirow, 1991). This progression culminates in the transformative EBL environment, where teachers actively engage in SRL and critical reflection.

In chapter 2 (p.49, Figure 2.1), the interconnected nature of the intrapersonal components was highlighted, suggesting that a change in one component is likely to cause similar changes in others. Consequently, positive changes in SRL and critical reflection are likely to have positive influences on self-efficacy, as well as on other intrapersonal components of motivation and affective control.

Moving on, changes in intrapersonal components (i) as one progresses through the three PLD environments can consequently lead to changes in intentional action (ii). Regarding actions towards one's PLD, teachers can progress from being consumers of knowledge, to engaging in increased collaboration with others, and finally, to becoming producers of knowledge. In terms of classroom practices, this evolution involves teachers moving from taking action to fit existing assumptions, to interpreting knowledge for effective problem-solving, and ultimately, to taking action based on open and discerning viewpoints aimed at improving student learning and wellbeing. Within the school context this may involve a process in which teachers and students 'work out who they are and how they can live together successfully' (McNiff & Whitehead, 2002, p.13), fostering an authentic and trusting relationships between teachers and students (Cranton & Carusetta, 2004; Mezirow & Taylor, 2009), leading to a mutual openness to transformation (Mercer, 2018; Larsen-Freeman, 2019).

Finally, the combined effects of intrapersonal components (i) and intentional actions (ii) reflect the level of teacher agency for PLD (iii), which can range from low to high. It is when teachers exercise agency at a high level that a balance of the three educational functions—qualification, socialisation, and subjectivity—is most likely to be achieved. Furthermore, the dynamic nature of teacher agency implies that these changes will depend on the individual, context, and time (Emirbayer & Mische, 1998; Biesta & Tedder, 2006; Mercer, 2012; Priestley et al., 2015; Larsen-Freeman, 2019; Chapter 2, p.49, Figure 2.1).

It is important to acknowledge that not all PLD experiences should inherently aim to be transformative. Kennedy (2015) highlights the valuable role of transmissive PLDs, such as training-focused development, in introducing new knowledge and establishing a common language. However, the reliance on transmissive PLD approaches in pursuit of the qualification function (Biesta, 2009), as exemplified by Korea's annual mandatory 60 hours of professional development (section 3.3) and 'open' classes (section 3.4.1), does not align with Biesta's (2009) vision of a balanced education system that equally integrates the three functions of education. This imbalance highlights the need for increased opportunities to engage in transformative PLD, such as EBL, to support the goal of subjectification.

3.6.1 Issues to be addressed

Before applying the teacher agency concepts in practice, two key issues need to be addressed. The first issue relates to the challenges associated with acquiring the skills of self-regulation and critical reflection.

In terms of SRL, research suggests that these skills do not arise spontaneously and that acquiring them can be challenging. SRL involves acquiring cognitive, behavioural, and self-regulatory tools for effective decision-making, a process learned over time and across tasks to manage evolving life circumstances (Bandura, 1997; Hadwin, 2008).

As for critical reflection, Mezirow (1991) states that learners enter educational experiences with varying levels of readiness for transformative learning, ranging

from conventional learners assimilated within traditional cultural perspectives to transformational learners who recognise how culture and attitudes limit self-concept and choices through prescribed, stereotypical roles. Furthermore, Mezirow (1991) highlights the challenge of critical reflection due to the difficulties in changing deeply embedded conventional wisdom and assumptions. This view is supported by empirical studies by Kember (1999) and Kember et al. (2000), which reveal that infrequent engagement in critical reflection results from its demanding nature in reviewing assumptions formed from both conscious and unconscious prior learning. These perspectives may help explain Guskey's (2002) findings that teachers do not readily change or discard practices developed and refined in their own classrooms, even when presented with evidence from carefully designed experimental studies.

The challenge of critical reflection might be particularly pronounced for teachers operating within the non-critical culture prevalent in Korea and other Confucian-heritage societies. This issue is highlighted in Park and So's (2014) study of Korean teachers, where feedback discussions following lesson observations mainly revolved around praising the observed teacher. They observed that these teachers struggled to identify and analyse valuable aspects of their practices. This situation may be attributed to the bureaucratic work ethic ingrained in Korean teachers, which encourages compliance and rule-following while discouraging questioning, exploration of alternatives, or addressing conflicting values (Kim, 2003). The research further revealed that even when teachers held differing viewpoints, articulating doubts and concerns proved difficult, hindering collaborative efforts for improvement. Similarly, Zhan and Wan's (2016) study found that Chinese teachers tended to avoid publicly challenging peers due to Confucian values emphasising group harmony over individual expression.

The second issue concerns the sustainability of change. While changes towards SRL and critical reflection may occur, sustaining such changes has been found to be challenging for various reasons. Research suggests that when trying to assimilate new practices, skills, techniques, and strategies, the implementation lacks consistency or shows irregular progress, as teachers are likely to take steps forward and backward as they learn (Wagner et al., 2019). Developing proficiency in new practices until they become habitual and ingrained requires time and effort, both of

which can significantly add to teachers' workload (Guskey, 2002; Porritt et al., 2022). Moreover, research suggests that it is insufficient to intellectually understand the need to change; change can bring anxiety and threats, which require emotional strength and willpower to move forward (Lortie, 1975; Mezirow, 1991; Guskey, 2002). Mezirow (1991) theorised that the power of the threat presented by a new perspective depends on the nature of the threat and how effectively individuals have personalised and integrated what has been learned into their experiences, which will affect their understanding.

In light of these challenges, this study aims to examine the challenges associated with acquiring SRL and critical reflection skills, as well as those related to sustaining change, by investigating both the short- and the long-term changes in teacher agency. Grounded in the interpretivist and constructivist paradigms (Methodology, Chapter 4), data analysis in subsequent chapters builds upon the conceptual framework represented in Figure 3.4, culminating in a more in-depth teacher agency conceptual framework presented in Chapter 7.

3.7 Conclusion

In this chapter, I have established connections among educational purposes (Biesta, 2009), the purpose of PLD for teachers (Stoll et al., 2012; Kennedy, 2015; Sachs, 2016), and the resultant PLD models (based on Kennedy's PLD models, 2014). These PLD models were then linked to various levels of affordances for teacher agency. Through this exploration, strong theoretical and empirical evidence emerged, suggesting that collaborative professional enquiry models can effectively serve to develop teacher agency for PLD (Ponte, 2010; Kennedy, 2014, 2015). This evidence has guided my decision to investigate how an EBL approach involving action research can contribute to the development of teacher agency for PLD.

Examination of the three PLD environments and their influence on teacher agency revealed that each provided different levels of affordances for teacher agency. Transmissive PLD environments, encompassing deficit learning models and contrived collegiality, appeared to promote an absolutist epistemology and therefore

were seen to provide low affordances for teacher agency. Collaborative PLD environments, such as those promoting comfortable collegiality, appeared to offer positive but limited opportunities for teacher agency, resulting in moderate affordances. In contrast, transformative PLD environments based on EBL, which foster SRL, critical reflection, and collaboration, were seen to offer high affordances for teacher agency.

This analysis led to the development of a conceptual framework for teacher agency. This framework details how PLD environments can impact teacher agency by identifying potential changes in intrapersonal components such as cognition—encompassing self-regulated learning (SRL), self-efficacy within this process (Bandura, 1997), and critical reflection—along with motivation and affect. These components, in turn, shape intentional action. Arranged along a continuum from low to high levels of teacher agency, it is proposed that the combined changes in intrapersonal components and intentional actions determine the variations in levels of teacher agency for PLD.

Applying this framework to the context of Korean teacher PLD, which largely aligns with transmissive forms of learning, it appears that these environments provide limited affordances for teacher agency. This situation aligns with the global trend of prioritising transmissive PLD, often focusing on achieving the qualification function (Johnston, 2012; Biesta et al., 2015). To achieve a more balanced vision of education that encompasses Biesta's (2009) three functions, there is a need to create more transformative PLD environments, such as those based on EBL, which have the potential to develop teacher agency.

It is important to acknowledge that teacher agency is dynamic, influenced by individual, contextual, and temporal factors (Emirbayer & Mische, 1998; Biesta & Tedder, 2006; Mercer, 2012; Priestley et al., 2015; Larsen-Freeman, 2019). Creating the 'right' PLD environment for teachers does not guarantee that they will exercise agency in a certain way. However, environments that offer high affordances for teacher agency are more likely to encourage teachers to exercise greater agency in enhancing their learning and working practices to improve student learning and wellbeing.

I now move onto Chapter 4, which examines the methodology of this study and outlines the designs of the EBL programme for a group of Korean primary schoolteachers in Seoul, Korea, that underpins this empirical research.

Chapter 4: Methodology

4.1 Introduction

This study aims to gain a deeper understanding of the changes in teacher agency for professional learning and development (PLD) that result from participants' engagement in the Enquiry-Based Learning (EBL) programme involving action research, as introduced in section 1.3. This involves creating a research context that specifically examines participants' perceptions of changes in their intrapersonal components such as cognition, motivation, and affect, which shape intentional actions.

Given the focus on participants' perceptions and the subjective nature of teacher agency, this study employs a qualitative interpretivist and constructivist paradigm to examine the experiences and changes reported by the participants. Consequently, this chapter outlines the rationale for selecting these approaches and case study methodology. This is followed by an explanation of the reasons for adopting an EBL programme involving action research, along with a comprehensive description of the programme itself. Subsequently, I provide a detailed account of the recruitment and ethics process and then proceed to describe the data collection and analytical methods used in the study. In the final section, the focus shifts to a discussion of how trustworthiness was established in this qualitative research. This includes reflections on the tensions I navigated as both an insider and an outsider researcher throughout the study.

4.2 Research design

My choice of qualitative research with a case study approach can support a more nuanced understanding of teacher agency. The sections below aim to highlight the benefits and insights that this methodology provides in comprehensively analysing the complexities surrounding teacher agency.

4.2.1 Qualitative approach

In this study of teacher agency, grounded in my philosophical orientations, I sought to understand: i) how individuals interpret their experiences; ii) how they construct their worlds; and iii) the meanings they attribute to these experiences (Merriam & Tisdell, 2016). It is thought that such a focus aligns with a qualitative research approach as it acknowledges the fluid and evolving nature of situations and behaviours (Cohen et al., 2015). I employed the interpretive paradigm, characterised by its emphasis on the individual and prioritising understanding the phenomenon from the participants' viewpoints, rather than the researcher's (Cohen et al., 2015; Merriam & Tisdell, 2016). This approach mirrors the understanding of agency in this study which highlights the importance of considering each individual's subjective interpretation of their environment (Bandura, 2001; Mercer, 2011) as well as its developmental nature (Emirbayer & Mische, 1998; Eteläpelto et al., 2013; Priestley et al., 2015). As an interpretive enquirer, my goal was to discover and understand how participants felt, perceived, and experienced the social world, striving to acquire in-depth insight into the meanings and particular motivations behind their actions. Consequently, this research was exploratory, delving into the participants' own interpretations of situations to understand their attitudes, behaviours, and interactions (Cohen et al., 2015).

My view in this research, grounded in interpretivism, recognises that reality is socially constructed. It assumes that individuals actively and intentionally seek out, select, and construct their own views, worlds, and learning experiences (Cohen et al., 2015). This process is influenced by historical and cultural norms within individuals' lives (Snape & Spencer, 2003; Creswell, 2013; Merriam & Tisdell, 2016). Such a stance resonates with the understanding of teacher agency in this study, which views individuals' decisions not merely as responses to external forces, but as intentional actions to influence their environment (Bandura, 1986; Eteläpelto et al., 2013).

This perspective necessitates an understanding that reality is complex, multi-layered, and dynamic (Cohen et al., 2015). Recognising that each participant, as

well as the researcher, brings their own reality, the goal was to comprehend and interpret these various social constructions of meaning and knowledge (Robson, 2011). Recognising the fluid and evolving nature of situations and behaviours, this study undertakes an extended exploration, spanning a period of a year and a half. This approach facilitated a deeper investigation into the developmental aspects of teacher agency and its changes over time (Eteläpelto et al., 2013; Ryder et al., 2018; Wagner et al., 2019).

Aiming for a holistic understanding of participants' views and actions within their life contexts (Snape & Spencer, 2003), I sought to obtain detailed descriptions that reflect the complexity of the situations and individuals involved (Snape & Spencer, 2003; Cohen et al., 2015). The employment of a diverse array of research methods, including questionnaires, interviews, observations, a researcher's journal, and document analysis (Section 4.5), enriched the depth and breadth of these descriptions. In addition to producing in-depth descriptions, this variety of data sources facilitated the triangulation of participants' multiple perspectives (Robson, 2011; Section 4.8).

As the primary instrument for data collection and analysis, I recognised the advantages and limitations of this role. Being directly involved enabled immediate response and adaptation during data collection and analysis, but also posed the risk of my biases influencing the study (Merriam & Tisdell, 2016). Instead of attempting to eliminate these biases, I focused on reflexivity, acknowledging that my interpretations were shaped by my personal, cultural, and historical experiences (Snape & Spencer, 2003; Creswell, 2013). A more detailed discussion on how I critically reflected on my own assumptions, values, beliefs, and positionality within the research is presented later in the chapter (Section 4.8.2).

4.2.2 Case study approach

To gain deeper insight into teacher agency, I chose a case study methodology within the qualitative research paradigm. This approach was selected for its effectiveness in facilitating holistic, in-depth, and interpretive research (Yazan, 2015), and is

particularly suitable for studying specific experiences within a bounded context (Miles et al., 2014; Merriam & Tisdell, 2016).

This case study focused on the changes experienced by participants engaging in an EBL programme involving action research. The scope of the study was bounded by several factors: the number of participants, the specific EBL programme, the duration during which evidence was collected, and the types of evidence gathered (Yin, 2003). Studying teacher agency within a bounded context offers several potential advantages (Stake, 1995; Yin, 2003; Cohen et al., 2015), including:

- Allowing the emergence of unique dynamic patterns by not solely relying on group averages, which may obscure individual idiosyncrasies.
- Revealing unique features that might hold the key to understanding the situation.
- Providing insights into similar situations and cases, thereby aiding in their interpretation.

Employing a case study methodology, among others, is relevant in real-world contexts (Cohen et al., 2015), implying that insights gained into teacher agency through this approach could have immediate and practical applications for educators and policymakers. However, like other qualitative studies, case studies face certain limitations, including concerns about trustworthiness, particularly in terms of generalisability and researcher bias. These challenges are further explored and addressed in a later section (Section 4.8).

4.2.3 Research questions

This was an exploratory case study, as reflected in the research questions outlined below. These primarily consist of 'what' questions that lead to the development of pertinent propositions for further enquiry. The ‘how’ question introduces an explanatory character to the study since such questions deal with information traced over time rather than numerical frequencies (Yin, 2003). Despite its exploratory nature, there was a rationale and direction to the research, with the research questions assuming that the study’s participants would undergo changes through their participation in the EBL programme and that the process would be challenging.

These assumptions emerged from my engagement with the literature and experiences working with Korean teachers.

As an interpretivist researcher, I refined the research enquiries (as presented in Chapter 1, p.24) as follows:

1) How can teacher agency for professional learning and development (PLD) be developed through an enquiry-based learning (EBL) approach involving action research?
    a) What are the participants' perceptions of teacher agency in relation to their own PLD before taking part in the EBL programme?
    b) What are the perceived changes to their teacher agency shortly after taking part in the EBL programme, and what is the impact of these changes within the classroom and the wider school environment?
    c) A year after the EBL programme, have any changes been sustained, and if so, what is their impact?
2) What are the potential implications of the findings for developing teacher agency in the future?

The development of these research questions reflects my ongoing process of reflexivity, guided by a comprehensive engagement with the literature. This engagement highlighted for me the significance of individuals' perceptions of their teacher agency and their intentional actions to enhance learning and work practices as key components of teacher agency (Chapter 2, p.53). Furthermore, the characterisation of teacher agency as a developmental phenomenon (Emirbayer & Mische, 1998; Eteläpelto et al., 2013; Priestley et al., 2015) guided me to examine teacher agency across three distinct phases. This approach facilitates the exploration of both short-term and long-term changes in teacher agency.

Given the study's small sample of teachers (section 4.4), the aim was not to generalise the findings. Instead, the focus was on gaining deeper insights into the complexities of teacher agency and stimulating thought and discussion among professionals in the field of education.

4.3 Case study context

The challenge of effecting changes in teachers' attitudes and behaviours may be particularly pronounced among Korean teachers, who are often educated in environments that adhere to a traditional model of knowledge transmission (Park & Sung, 2013; Park & So, 2014; So & Kang, 2014). Recognising this context, the following section explores how an EBL programme involving action research could address these challenges. Specifically, the examination focuses on how fostering the key features of effective PLD identified in the literature (Chapter 3)—namely, SRL, collaboration, and critical reflection— might influence changes in teacher agency.

4.3.1 Action research as a tool for teacher agency

I chose an EBL programme involving action research for this study. While this methodology is not the method of this study, the selection of action research within the EBL programme aligns with the definition of teacher agency employed in this study and my perspective on fostering agentic practice within the current educational climate. Action research appeared to distinguish itself from other forms of practitioner enquiry, such as lesson study (Murata, 2010), mentoring (Tomlinson et al., 2010), and narrative enquiry (Clandinin & Huber, 2010), through its systematic and transformative nature (Brydon-Miller et al., 2003; Kennedy, 2014). This method has the potential to develop teacher agency, as supported by numerous studies demonstrating its effectiveness in enhancing teachers' agency and empowerment (e.g., Campbell et al., 2007; Cordingley et al., 2007; Zeichner & Noffke, 2001; Chapter 3, p.64). Additionally, action research is recognised for its active emancipatory intentions (Stenhouse, 1975; Carr & Kemmis, 1986; Reason & Bradbury, 2013), enabling it to challenge existing social norms and structures that perpetuate inequalities (Whitehead, 2019).

Dewey's (1933) seminal theories of progressive education, focusing on the active participation of teachers in research, have significantly influenced the development of action research. Lewin (1948) built on this concept, first using the term 'action

research' and developed a systematic cyclical process consisting of planning, acting, observing, and reflecting to help people solve their own problems. In the US, Corey (1953) was one of the first to promote action research in education. In the UK, Stenhouse (1975) introduced the 'teacher as researcher' approach through curriculum development initiatives, where teachers created knowledge by testing academic proposals in action in their classrooms. While acknowledging the importance of such a knowledge base, Carr and Kemmis (1986) developed a distinct form of action research based on the critical social theory of Habermas (1971), aimed at transforming educational theory and practice towards emancipatory ends. Despite its varied forms, Noffke & Somekh (2009) state that knowledge through action research is essentially connected to an individual's practice.

Action research may be regarded as a form of practitioner enquiry, a term interpreted somewhat differently across various parts of the world (Groundwater-Smith & Mockler, 2009; Putney & Green, 2010). Although it is commonly observed that action research lacks a single definition, Reason and Bradbury (2013) define it as follows:

> ... a participatory process concerned with developing practical knowing in the pursuit of worthwhile human purposes. It seeks to bring together action and reflection, theory and practice, in participation with others, in the pursuit of practical solutions to issues of pressing concern to people, and more generally the flourishing of individual persons and their communities (Reason & Bradbury, 2013, p.4)

In this definition, action research is described as integrating the processes of action and reflection, along with theory and practice, into the practitioner's life, where they exert mutual influence on each other. This symbiotic relationship aligns well with the concept of teacher agency in this study, where the reflective intrapersonal components and active intentional behaviour are seen as interdependent.

There is some debate within the field regarding what constitutes 'proper' action research, with different types being associated with instrumental, communicative, or emancipatory learning (Mezirow, 1991). In this research, action research is understood as a form of situated, enquiry-based learning with emancipatory learning

intentions, characterised by the core features of SRL, collaboration, and critical reflection. Each of these features will be discussed further below.

4.3.2 SRL

Action research, as an EBL approach rooted in classroom practice, promotes the development of SRL by addressing challenges encountered in teachers' daily work. Unlike top-down professional learning, which may limit teachers' choices regarding which aspects of their practice to examine, action research is a bottom-up approach that empowers teachers to select their own areas of investigation. Action research requires strategic action and a deliberate, planned effort to address specific problems through a systematic cycle of planning, acting, observing, and reflecting (Carr & Kemmis, 1986; McMahon, 1999; Ponte, 2010). This process mirrors the cyclical model of self-regulation described in Chapter 3 (p.79). Through this cycle of learning (CofL) process, teachers can develop metacognitive knowledge about themselves as learners, understanding how theories and models are formulated, evaluated, and revised through investigation and analysis. This framework enables teachers to perceive themselves as self-aware and continually improving learners (White & Frederiksen, 2005).

SRL can empower teachers to be open to new ideas and developments in education. Van der Heijden et al. (2015) state that this entrepreneurial approach enables teachers to move beyond their current, possibly traditional, practices and embrace the calculated risks associated with innovative initiatives. This approach can also enable teachers to evolve from being consumers of knowledge to becoming producers of knowledge (Cochran-Smith & Lytle, 1999; Reason & Bradbury, 2013). However, within this process, Ponte (2010) emphasises the important role of integrating teachers' professional knowledge with academic theory. He argues that without the incorporation of theory, distance, and abstraction, teachers' professional knowledge risks remaining at the level of uncritical, everyday experience, thereby limiting its potential impact and application.

4.3.3 Collaboration

Another key feature of action research is its collaborative nature, which can facilitate SRL and critical reflection, among other benefits. Research findings indicate that PLD is most effective when it involves a community of professionals working collectively to enhance the quality of teaching and learning (Stoll et al., 2006; Earley, 2010; Hargreaves, 2013). Action research in collaboration shares key characteristics with professional learning communities (PLCs), which are believed to promote effective learning. These characteristics include reflective dialogue, mutual trust and respect among members, and shared values and vision (Louis et al., 1995; Hord, 2004; Stoll et al., 2006).

Reflective dialogue is a crucial component, facilitating the change of tacit knowledge into explicit knowledge and encouraging members to critically evaluate each other's perspectives. This is particularly significant in contexts like Korea and other Confucian heritage societies, where non-critical cultures are common (Kim, 2003; Park & So, 2014; Zhan & Wan, 2016). Reflective dialogue facilitates dynamic interaction and reciprocal scaffolding, where peers support each other's understanding (Edwards, 2005). Heuristic scaffolding, often through problem-specific 'why' and 'how' questions, can develop problem-solving strategies that transcend specific content (Holton & Clarke, 2006). Reflective dialogue acts as an external 'brain', providing consciousness and control that individuals might not access independently. This external scaffolding can transform into internalised knowledge over time, enabling individuals to construct or solve problems independently. Effective reciprocal scaffolding can lead to self-scaffolding, where individuals gradually gain better regulatory control over cognition, metacognition, motivation, and behaviour (Holton & Clarke, 2006).

Knowledge depends not only on social interaction, like reflective dialogue, but also on other personal aspects such as attitudes, emotions, values, and actions (Beck & Kosnik, 2006). Therefore, mutual trust and respect between members are essential for collaboration (Bolam et al., 2005; Stoll et al., 2006; Priestley et al., 2012). Nias et al. (1989) argue that trust requires high predictability among individuals and a substantial sharing of values and vision. In collaborative settings, dimensions of

power and trust in interpersonal relationships are crucial for teacher agency, as group members must be open to giving and receiving critiques to avoid reinforcing traditions and to advance professional learning (Priestley et al., 2012; Pantić, 2015).

While collaboration is important, it is also essential to remember that the communities formed by teachers consist of individuals who are independent in thought and action, committed to taking responsibility for their actions and potential influence. McNiff and Whitehead's (2002) living theory approach to action research emphasises the importance of individuals focusing on their own learning while also recognising their potential to positively influence others.

4.3.4 Critical reflection

Action research enables individuals to respond adaptively to the issues identified within their own practices, thus fostering agentic learning. However, researchers such as Carr and Kemmis (1986) and Hammond (2013) have observed that it can sometimes become overly focused on problem-solving strategies. This focus may lead predominantly to instrumental learning, rather than facilitating critical reflection on unexamined assumptions (Mezirow, 1991).

A significant aspect of action research is reflexivity, which involves a critical examination of one's beliefs, judgments, and practices (Carr & Kemmis, 1986). This process is closely linked to critical reflection, where one identifies their frames of reference, understands their origins, and assesses their implications for understanding the world, others, and oneself (Mezirow, 1998). This process is seen as continuously evolving, with new understandings emerging over time (McNiff & Whitehead, 2002). As Cochran-Smith and Lytle (1999) suggest, it can transform practitioners into lifelong learners who bring about fundamental changes in classrooms, schools, professional organisations and districts, ultimately enhancing students' learning and life opportunities.

4.3.5 Challenges of action research

Like any PLD model, action research comes with its challenges. These include concerns about government-funded action research initiatives (Carr & Kemmis, 2009; Groundwater-Smith & Campbell, 2010), its application as a research methodology (Cabaroglu, 2014; Korthagen, 2010; Stringer, 2010), technical issues like finding time for research (Jaipal & Figg, 2011), and the dual role of practitioners as both teachers and researchers (Day, 1999; Ponte, 2010). I will address the first of these challenges, government-funded action research, as it is particularly relevant to the context of Korea.

Action research has been promoted in Korea since the 1950s, with the government initiating annual competitions that contribute to teachers' promotion scores (Park, 2004). Many Korean teachers participate in government-funded competitions and projects, where the government's primary goal is to improve classroom instruction, while the teachers often focus on gaining promotion (Yoon et al., 1999; Lee, 2010). Teachers learn about conducting action research through discussions with previous competition winners and by adhering to evaluation criteria that emphasise generalisations of best practices and transferability (Park, 2004).

Advocates for action research (Carr & Kemmis, 2009; Groundwater-Smith & Campbell, 2010) argue that policymakers' focus on teacher research has undermined teachers’ professional judgment and the development of a transformative approach to education. Despite the value placed on action research for professional development in Korea (MOE, 2014, 2015), this issue is apparent in government-led teacher research projects. These projects have often been found to lead teachers to focus on theoretical research that enhances technical skills—a focus that may not align with their everyday teaching needs (Lee, 2002; Park, 2004). Furthermore, academic studies on Korean teacher research often appear to overlook the dominance of this technical approach, instead focusing mainly on improving the action research process and aligning it with education policy (Yoon et al., 1999; Park, 2004; Ahn, 2010; Lee, 2010). Currently, action research in Korea appears to be employed as a technical method for generating quick solutions to

superficially defined problems, a practice that is unlikely to enhance teacher agency or support effective, lifelong PLD.

Despite these challenges, EBL through action research can facilitate emancipatory learning and the development of teacher agency (sections 3.2.2 and 4.3.1). It provides a means for teachers to engage in SRL and critical reflection collaboratively, thereby fostering their own knowledge generation in pursuit of personal and professional change. The following section will describe the recruitment of participants and outline the specifics of the EBL programme in this study.

4.4 Sampling and the EBL programme

In this section, I provide information about the participants, including the recruitment process and details of the participants, followed by an outline of the EBL programme.

4.4.1 The participants

This study acknowledges the growing emphasis on within-school initiatives and cross-school networks (Hargreaves, 2014; Maxwell & Greany, 2015; Godfrey, 2020), which support teacher learning. However, I adopted a different approach by choosing to implement the EBL programme with individual teachers from a variety of schools around Seoul, rather than limiting participation to those from a single school. This decision was driven by the study's focus on understanding changes in individuals' intrapersonal components and actions, which led to the goal of recruiting teachers who were genuinely motivated to engage in the programme. Additionally, I aimed to capitalise on research findings that highlight the benefits of collaboration among professionals with diverse expertise in different contexts (Cochran-Smith & Lytle, 1999; Townsend, 2014; Kauppinen et al., 2020).

I used a non-random method of purposive recruitment/sampling (Cohen et al., 2015; Hennink et al., 2011) to contact teachers with whom I had previously worked. These teachers were selected based on the following criteria:

- They lived and worked in Seoul to minimise travel time and distance, as the EBL programme was conducted in that location.
- They were experienced teachers familiar with a variety of PLD programmes. This familiarity provided a baseline (Earley & Porritt, 2014) for comparing and contrasting changes experienced through the EBL programme with those from other teacher learning contexts.
- They were primary school teachers, who are generally more available to engage in research compared to secondary school teachers, who are often occupied with preparing students for national exams. Additionally, since primary school teachers are required to teach all subjects, any research topic chosen by participants would be relevant and meaningful to the entire group.

As this was a case study with no intent to represent the wider population, participants were gathered through individual email invitations. I began by contacting teachers I had previously collaborated with as a facilitator on British Council (BC) in-service teacher programmes. The initial two participants who agreed to join subsequently referred other interested teachers, culminating in a group of nine, seven of whom I had previously worked with on BC programmes. This number was small enough to allow for in-depth data collection and analysis (Cohen et al., 2015), yet large enough to foster dynamic and supportive discussions during the EBL programme. Prior to the start of the programme, the benefits and demands of participating in the study were clearly detailed in the information sheet provided to the participants (Appendix 1).

The participants were all female, with ages ranging from the early thirties to the late fifties, and their teaching experience varied from six to over 20 years. The group consisted of an equal mix of general classroom and English language teachers, with half having engaged in teacher research during their master's degree studies. An overview is provided in Figure 4.1.

Name (pseudonym)	Age range (years)	Teaching experience (years)	Subject	Master's degree Yes/No	Previous professional contact group
Ilene	30-34	6	General	No	ICELT
Helen	30-34	8	English language	Yes	ICELT
Gail	30-34	11	General	Yes	ICELT
Fay	40-44	13	English language	Yes	ICELT
Alice	40-44	13	English language	No	English book club
Dani	40-44	15	General	Yes	English book club
Erin	55-59	24	English language	No	English book club
Beth	45-49	21	General	Yes	English book club
Carol	50-54	19	General	No	None

Figure 4.1: Overview of participants

The EBL programme consisted of nine participants. However, these participants could be subdivided into two groups based on prior acquaintance from previous PLD programmes, as illustrated in Figure 4.1. The first group, comprising Ilene, Helene, Gail, and Fay, established a connection during their participation in a BC-run Cambridge In-Service Certificate in English Language Teaching (ICELT) programme (Chapter 1, p.22). They maintained this connection by meeting two to three times a year to discuss teaching practices after completing the programme. The second group, consisting of Alice, Dani, Erin, and Beth, became well-acquainted through an informal English book club, where they met monthly to maintain their English proficiency and discuss English education. Carol, while not part of any informal group outside of school, worked with Beth at the same school.

4.4.2 The EBL programme

I developed the EBL programme based on a proven action research programme from University College London's (UCL) Faculty of Education and Society, Institute of Education (IOE) Master's in Education module titled 'The Action Researcher: Exploring Issues and Contexts'. I adapted the aims, outcomes, and materials of this module (Appendices 2 and 3), to align with the specific context and timeframe of this study. As this was an exploratory case study, I was immersed in the research. Using a proven programme not only helped to establish a clear, shared vision for the EBL programme but also ensured its quality through transparent and comprehensive aims, outcomes, and content. The schedule of the EBL programme is illustrated in Figure 4.2 below.

Phase	Content	Duration
1. Action research sessions	1. Action research within practitioner enquiry 2. Research methodology, planning your research 3. Research methods 1—observation, journal writing, questionnaires 4. Research methods 2—interviewing, transcribing, collecting documents for analysis 5. Data analysis and disseminating findings	Two-hour workshops, every week for five weeks
2. In-school action research and discussion meetings Dissemination of findings	• In school-—cycle of learning (CofL) plan-act-observe-reflect; data collection; analysis of data • Out of school action research meetings—collaborative discussion and feedback • Presentation of action research findings to group	8 weeks Two hours, every two weeks for 8 weeks 4 hours

Figure 4.2: EBL programme schedule

Drawing on my previous experience with Korean teachers, I designed the programme to be conducted face-to-face over a single school semester, lasting five

months. This duration was chosen in response to the common challenge that teachers face in committing to schedules that extend beyond one semester.

Central to the programme was the participants' engagement in small-scale action research projects within their own schools. To facilitate this, the programme was divided into two phases, as illustrated in Figure 4.2. Phase 1 concentrated on the fundamentals of conducting action research, including the topics listed in Figure 4.2 (with further details in Appendix 4). Phase 2 focused on the participants actively conducting their research. The programme, designed as an experimental form of action research, diverged from other models that focus on whole-school collaboration. It emphasised improving teacher agency through its individual, voluntary, and participatory nature. The participants chose to conduct individual action research projects with different topics rather than working on a shared enquiry theme. I supported the participants in planning their chosen projects (Appendix 5) and aimed to ensure quality by providing relevant research papers. Additionally, this approach encouraged the integration of theoretical concepts into classroom practices where appropriate and promoted clear and transparent decision-making (Reason & Bradbury, 2013) by helping participants articulate these decisions to themselves and others.

After completing the initial five weeks in Phase 1, participants embarked on Phase 2, an eight-week action research project conducted in their respective schools. They utilised the plans developed during the initial sessions, conducting their research based on the iterative cycle of planning, acting, observing, and reflecting (Appendix 6). During this phase, we met every two weeks to discuss progress and reflections (Appendix 7). These discussions facilitated a continuous cycle of modifications, including alterations to the research focus and questions, planned actions, data collection methods, and data analysis techniques.

Most of the participants attended the majority of the programme, with no-one opting to drop out. Six out of the nine participants attended the final session in which they presented their action research findings.

4.4.2.1 Monitoring and reflecting on the EBL programme

I conducted an ongoing appraisal of participants' learning in the EBL programme, which included observations of the input sessions and reflections on audio recordings of these sessions. This approach enabled me to monitor the participants' learning experiences and make weekly amendments to the programme, thereby better supporting participant learning. Furthermore, after the initial five weeks of Phase 1, I collected mid-course written feedback (Appendix 8) to assess the programme's effectiveness in meeting participants' needs and to identify areas for improvement. By the end of Phase 1, the overall feedback suggested that the participants had acquired sufficient methodological knowledge to examine their own teaching practices. This aspect, highlighted by Ponte (2010) as crucial in action research, is believed to enable teachers to develop educational insights in areas such as course content, teaching strategies, and student understanding.

During Phase 2, which entailed fortnightly meetings to discuss the participants' research, a key concern arose regarding my dual role as both the facilitator of the EBL programme and the researcher of this study. This concern was rooted in the potential influence my position might have on the data, given the power dynamics inherent in my role as the programme's facilitator. To mitigate this, I initially steered discussions to encourage self-direction among participants, aiming to reduce their reliance on me for critical feedback. I also provided written guidance on conducting feedback before the discussion sessions (Appendix 9), to help participants prepare for and engage more effectively in feedback sessions.

However, subsequent informal classroom observations and reviews of audio recordings revealed that the initial discussions lacked critical feedback from participants. Recognising this issue, I assumed a more active role to foster idea development and construct a coherent line of enquiry. Despite my increased involvement, I remained mindful of the influence my feedback could have and sought to balance this by assigning specific participants to provide feedback in each session. This strategy was intended to encourage greater responsibility among participants in critically evaluating their peers' research, ensuring they did not overly rely on my input.

4.5 Data collection methods

Qualitative techniques were used to collect data, including a questionnaire, individual interviews, observations, a researcher journal, and document analysis. Details of the data collection are outlined in Figure 4.3 below.

Time	Data collection methods
Pre EBL programme	• Background questionnaire • Interview 1: Individual interviews • Researcher journal
During EBL programme	• Observations of EBL programme sessions • Document analysis • Researcher journal
End of EBL programme	• Interview 2: Individual and group interviews • Researcher journal
One year after EBL programme	• Interview 3: Group interviews • Researcher journal

Figure 4.3: Data collection methods

The study adopted a 'multi-methods' approach, which involves using more than one method, rather than a 'mixed methods' approach that combines quantitative and qualitative methods (Robson, 2011, p.162). Each of these methods and the rationale for their use is outlined in the following sections.

4.5.1 Questionnaire

A questionnaire (Appendix 10) was used to gather factual background information from the participants, allowing for more in-depth discussions during the initial interviews regarding their professional experiences, knowledge, and beliefs. This short questionnaire focused on participants' educational backgrounds, PLD

experiences, and current working contexts. It was distributed via email and primarily consisted of a list of questions with checkboxes (e.g., experience with PLD activities) and spaces for participants to provide additional details (e.g., list of qualifications, current job details). The objective of the questionnaire was to acquire background information to inform the initial round of interviews.

Self-administered questionnaires were used as they can provide large amounts of data at a relatively low cost within a short time frame (Robson, 2011; Denscombe, 2014), and they could be easily administered to participants in Korea from the UK. Collecting data electronically posed no issues, as internet usage is commonplace among Korean teachers. The questionnaire was not anonymised to allow for matching individuals for subsequent interviews and observations. However, if individual data were used in the study, they were anonymised for confidentiality.

4.5.2 Interview

Individual and group interviews served as the primary means of data collection, with the goal of obtaining in-depth insights into the experiences, beliefs, and attitudes of the interviewees. This approach acknowledges that knowledge is generated between humans (Kvale, 2007), allowing for discussions of individuals' interpretations of their world and their perspectives on various situations (Cohen et al., 2015). Semi-structured interviews were chosen because they offer a structured framework through the use of interview schedules while also providing flexibility to delve into and explore relevant issues raised by the interviewees (Legard et al., 2003).

The data collection process spanned a year and a half, consisting of three face-to-face individual and group interviews, as illustrated in Figure 4.4. These interviews were spaced to examine the evolution of teacher agency over time. All nine participants participated in the first two interviews, while six participants were available for the final interview.

Interview	Participants	Individual or group interview	Face-to-face or online video
1- before start of EBL programme	Alice, Beth, Carol, Dani, Erin, Fay, Gail, Helen, Ilene	Individual	Face-to-face
2- after end of EBL programme	Beth, Carol, Fay, Gail, Helen, Ilene Alice, Dani, Erin	Individual Group	Face-to-face Face-to-face
3-one year after end of EBL programme	Alice, Beth Fay, Helen, Ilene Carol, Dani, Erin	Group Group (unavailable)	Face-to-face Face-to-face
Six months after end of EBL programme	Gail	Individual	Online video

Figure 4.4: Interview timetable

The individual interviews typically lasted about an hour, while the group interviews extended to approximately 100 minutes. These durations were chosen to gather in-depth data without imposing excessive demands on busy teachers, which could have hindered their willingness to participate in the study (Robson, 2011).

The initial round of interviews aimed to acquire detailed information about the participants' beliefs, knowledge, and experiences related to Korean education, PLD, and teacher research (Appendix 11). These interviews occurred before the commencement of the EBL programme. The information gathered from this initial interview served as baseline data to examine the changes participants underwent during the research.

The second set of interview sessions aimed to explore short-term changes in the participants' perception of teacher agency and were conducted shortly after the completion of the EBL programme. Initially, I had planned to conduct individual interviews throughout the study. However, it became apparent that some participants were struggling to engage in the programme, with three unable to attend the final presentation of their classroom research. To better understand their

challenges, I suggested a group interview with these three participants, to which they agreed. This approach proved effective as they had developed a close relationship prior to participating in the EBL programme. I found that I needed to elicit less information from them as they stimulated responses from each other. As a result, I decided that group interviews with close peers would be more suitable for the final interviews.

The third and final interviews occurred one year after the completion of the EBL programme to investigate long-term perceived changes in teacher agency. As planned, I conducted face-to-face group interviews with five participants, but this posed more challenges with the other four. Three participants were unavailable for interviews: one was busy preparing to go on a work abroad programme for teachers, and the other two cited busy work schedules for their unavailability. I emailed them a brief questionnaire, of which one participant completed and returned. One interview had to be conducted six months after the EBL programme because the participant was preparing to leave for the UK to begin a master's degree programme. Additionally, due to health issues, this interview was conducted online via video.

Concerns about potential bias due to the 'interviewer effect' (Denscombe, 2014, p.189) were considered, acknowledging that, as the programme facilitator, I might have been more likely to elicit responses that participants believed would meet with approval. While it cannot be definitively stated that the responses were not influenced by a desire to please the interviewer, it is worth noting that all research responses can potentially be distorted, as in the case of ‘social desirability response bias in questionnaires where people respond in a way that show them in a good light rather than reporting their beliefs accurately’ (Robson, 2011, p.240). Despite efforts to maintain systematic and objective interviewing, real-life constraints can impact the interview process (Cohen et al., 2015). To address this, before the interviews began, I clarified my role as a researcher, aiming to minimise my potential influence and encourage interviewees to freely express their feelings and thoughts. I also relied on non-verbal cues (Robson, 2011, p.240) to 'read' the person. An advantage was that I had built a trusting relationship with the majority of the participants through previous work, shared the same ethnicity, and had a similar social status, which may have facilitated more open and honest responses.

The interview sessions utilised an interview schedule with introductory comments, a list of topic headings with key questions and associated prompts, and closing comments (Robson, 2011, p.285; Appendix 11). If respondents occasionally assumed that I understood their intended meaning (e.g., saying ‘you know...’), I sought clarification or elaboration (Kanuha, 2000). When ambiguities or contradictory statements arose, I attempted to identify the cause, whether it was due to communication issues or genuine inconsistencies within the interviewee's identity or situation (Frosh et al., 2001; Kvale, 2007). I maintained critical awareness of my role and its potential effects, acknowledged presuppositions, and remained open to new and unexpected directions to encourage open and honest responses.

Although I am fluent in Korean, my listening skills are stronger than my speaking abilities. Therefore, I conducted the interviews in English, my first language, but provided participants the option to respond in either English or Korean. All the teachers were capable of communicating in English, but code-switching occasionally occurred when questions required further clarification or when participants felt more comfortable providing in-depth responses in Korean.

4.5.3 Observation

Participatory observations occurred naturally as I facilitated the EBL programme. This approach allowed me to directly observe events in situ, rather than relying on second-hand accounts, and collect 'live' data from naturally occurring social situations (Cohen et al., 2015). My immersion in the programme for five months enabled me to witness the gradual process of change, which would not have been possible with a single interview. Additionally, this approach facilitated the generation of 'thick descriptions' that were ‘strong on reality’ (Cohen et al., 2015, p.552).

However, my involvement as a full participant in the situation under study added complexity to the process. Many observation situations carry the risk of bias, such as selective attention, selective data entry, selective memory, selective encoding and interpretation, expectancy effects, and interpersonal factors (Cohen et al., 2015;

Robson, 2011). To maintain objectivity, I developed a heightened awareness of subjectivity and the need to justify my claims (Robson, 2011). To ensure reliability, I made in situ notes whenever possible and recorded expanded notes in the form of a researcher journal (section 4.5.4) shortly after initial observations. Instead of video recordings, programme sessions were audio-recorded, and field notes were taken. While video can provide a multimodal record of an event, including expressions, body posture, and gestures, along with contextual talk (Jewitt, 2011), my primary interest was in the participants' verbal contributions. Visual cues were supplemented with photographs taken during the study. Using these recording methods helped manage data overload and facilitated a comprehensive analysis of the collected data.

4.5.4 Journal

A researcher journal was used to enable self-reflexiveness and to systematically monitor and reflect on how I conducted the research, my research methods, and my influence on the setting. I adapted Burgess's guidelines (1981, pp.76-78) to include the following elements:

- Detailed accounts of the location and time of observations (where and when), actions and activities that occurred (what and how), and the individuals involved in the situation (who). Photographs and diagrams were included to visually depict patterns of social interaction and spatial relationships observed during the programme.
- Descriptions of the roles I assumed and the methods employed. These accounts helped maintain self-awareness regarding my research conduct and my contributions to the research, influencing how I interpreted and used data.
- A continuous record of questions, hunches, ideas for organising data, and concepts used to guide data collection and analysis.

By documenting these reflections, my research incorporated various aspects that contributed to the research's trustworthiness. Additionally, a session on journal writing was included in the EBL programme to encourage participants to record in

journals as much as possible. Participants' journals served their own purposes, recording data for their individual research rather than being used as a method for data collection for this research. To promote honesty and regular use, participants selectively shared information of their choosing during programme meetings and interviews. Sharing this data provided valuable first-hand accounts of situations to which I might not have had direct access (Burgess, 1981).

4.5.5 Document analysis

A selection of materials generated during the EBL programme, including action research proposals, presentations, reports, worksheets, and photographs, was used in triangulation with other methods. Participants were also encouraged to bring a variety of materials such as video footage, students' work, and pictures to share their progress during their classroom research process.

4.6 Ethics

I adhered to the BERA (2011) code of ethics and obtained ethical approval from the UCL IOE ethics committee before commencing any data collection, including piloting questionnaires and conducting interviews. Participants were provided with information about the research (Appendix 1) and written informed consent (Appendix 12) was obtained before the research commenced. They were informed about the research purpose, the content of the EBL programme, the data collection procedures, the reporting and dissemination of the research (e.g., journal articles, conference presentations, thesis), and the potential benefits and risks (Hennink et al., 2011) of participating in the research. I clarified that the research was not solely intended to contribute to theoretical knowledge but could also benefit the participants, their students, and their school. I received consent for interviews and workshops to be audio-recorded, and I applied a model of continuous consent (Allmark et al., 2009) to provide opportunities for participants to reaffirm their consent throughout the research.

Participating in the research did not count towards their mandatory annual professional development hours, so participation was entirely voluntary. Due to my prior associations with the participants, I contacted them directly without the need to go through schools or gatekeepers, reducing the risk of coercion and pressure from external influences to participate. Participants informed the school that they were taking part in the EBL programme as part of their individually-centred in-service teacher training. Additionally, they were informed of their right to withdraw from the study at any point for any or no reason without prejudice to them, and they had the right to continue participating in the EBL programme without being required to take part in the study.

I complied with legal requirements regarding the storage and use of personal data as stipulated by the Data Protection Act (1998), as outlined in BERA (2011) and the UCL IOE ethics guidelines (2015). Participants were informed about how and why their personal data were being stored and that the data would not be retained longer than necessary for that purpose. Permission was obtained to disclose personal information only to relevant parties, such as relevant academics. Participants were informed of their right to access any personal data related to them. Anonymity was ensured for the participants to the greatest extent possible by using pseudonyms in the transcripts, file names, and discussions related to the research. Identifiable information was removed as much as possible from the quotations used to reduce the likelihood of individual participants being identified. The collected data and backups were stored on devices with secure access codes, kept in a private, secure location. Interviews were conducted in a private, quiet location whenever possible to ensure confidentiality, and participants were offered full access to all of their individual interview transcripts.

4.7 Data Analysis

Data collection and analysis were conducted concurrently to develop strategies for collecting new data and to prevent the accumulation of large datasets that could compromise the quality of the work produced (Miles et al., 2014). Transcription was crucial as it allowed me to familiarise myself with the data and begin the analysis

process. All interviews and observations were audio-recorded and transcribed into Word documents within a few days of recording. The interviews, serving as the primary data, were fully transcribed, while observations, the supporting data, were selectively transcribed. Most participants opted to respond to the interviews in English. Despite the presence of vocabulary and grammar inaccuracies in their English responses, I chose to transcribe them verbatim. This decision was based on my assessment that, despite these inaccuracies, the responses were coherent enough to convey their intended meaning to the reader without significant interference. Others responded in Korean, and as a fluent Korean speaker, I translated all Korean exchanges into English.

Additionally, I maintained a researcher journal to document reflections during and after observations and interviews. This journal included analysis, thoughts, interpretations, questions, and directions for further data collection and analysis (Tuckett, 2005).

4.7.1 Generating themes and codes

I adopted a hybrid approach, employing both theory- and data-driven coding. For this purpose, I utilised MAXQDA software, a tool similar to NVivo, to code interviews and observations. The first phase of my analysis focused on understanding participants' perceptions of their PLD environment prior to their involvement in the EBL programme (Appendix 13). In analysing the initial round of interviews, two primary PLD environments emerged to have the most impact on participants' PLD: formal government-provided PLD and more informal in-school learning. The government-provided PLD included key influences such as mandatory 60-hour professional development, teacher research, and BC-run teacher in-service programmes. Within schools, open classes and informal peer collaboration emerged to be significant. Various types of epistemology and learning approaches, including transmissive, SRL, collaborative, and reflective learning, were analysed for their influence on participants' intrapersonal components and actions, which were then coded.

In coding the second round of interviews, the focus centred on how the programme's fostering of SRL, reflection, and collaboration influenced the intrapersonal components—cognition, motivation, and affect—and intentional action. (Appendix 14). Changes in participants' SRL, epistemology, reflection and collaboration with peers emerged and were coded. As my interpretation evolved, reflection on students, self as a teacher, and teacher-student relationships emerged as key factors in influencing changes in participants. Using the reflection continuum (Chapter 3, p.83, Figure 3.3), which integrates Mezirow's theories of reflection (1991), I coded the data to identify types of reflection and their impact on self-efficacy, motivation, affect, and subsequent actions in both classroom and broader school contexts. The coding from the second set of interviews provided a basis for coding the third set, allowing me to identify areas of sustained change over time.

Once I had coded changes in participants' intrapersonal components and actions across all interviews, I mapped these against the PLD environments-teacher agency conceptual framework (Chapter 3, p.86, Figure 3.4). This helped identify the level of teacher agency for PLD at different stages: before the EBL programme, shortly after, and a year following the programme, thereby revealing the evolution of teacher agency over time.

As an interpretive researcher, my aim was to understand the multiple realities of the participants and to compare their experiences across different times and contexts (Cohen et al., 2015). This comparative analysis, focusing on changes in beliefs, thoughts, and actions before, immediately after, and a year following the EBL programme, allowed me to identify shifts in teacher agency and discern general patterns among the participants. Additionally, by conducting an individual analysis for each participant at these three time points, I sought a comprehensive understanding of each participant's journey, recognising the uniqueness of their experiences. These comparative analyses enabled me to uncover both general patterns and individual variations in the teacher agency trajectories.

4.7.2 Writing the analysis

In the findings and discussion chapters (Chapters 5, 6, and 7), I integrated and interwove participant perceptions, my interpretations, and relevant literature to answer the research questions and explore the development of participants' teacher agency. The written analysis focused on selected examples that captured the essence of the data, including direct quotes from participants. Some examples were chosen because they reflected common viewpoints, while others were selected for their unique perspectives that highlighted individual changes in teacher agency. Literature was employed both to support and to compare the examined evidence during the analysis.

As my interpretations evolved, I strived to adhere closely to participants' accounts and relied as much as possible on their views of the situation (Snape & Spencer, 2003; Cresswell, 2013), while also looking beyond what was explicitly reported. I placed great importance on ensuring that the building blocks leading to my interpretations were transparent to the reader, carefully demonstrating how the research interpretations related specifically to the data provided by study participants (Snape & Spencer, 2003). Throughout the writing process, I continuously engaged in querying and reflecting at the intersection of data, theories, data analysis, and subjectivity (Braun & Clarke, 2019).

My understanding of teacher agency evolved significantly while analysing how it can be developed through an EBL approach involving action research. As I considered the ways forward for teacher agency in the concluding chapter (Chapter 8), this evolution of insights prompted me to broaden my perspectives and explore the role of teacher agency within society. This exploration, focused on addressing today's main educational challenges, highlighted the importance of exercising teacher agency for Education for Sustainable Development (ESD) (Koskela & Kärkkäinen, 2021; Fischer et al., 2022; Bourn, 2022; Bourn et al., 2023) and empowering young people (Durrant, 2020; Bourn & Hatley, 2022; Higham, 2022). By incorporating relevant literature in response to my findings, I was able to highlight the strengths and limitations of this study more effectively, thereby enriching its contributions.

4.8 Establishing trustworthiness in qualitative research

Qualitative research is often criticised for its lack of a 'standard' means of assuring reliability and validity, such as testing of a formal hypothesis and direct replication (Robson, 2011). To address the issue of verification, a set of criteria for testing trustworthiness in social science research developed by Guba and Lincoln (1981, 1986) was applied in this study.

4.8.1 Credibility

To demonstrate the credibility of the data and its interpretations, the study adhered to the following guidelines as suggested by Lincoln & Guba (1986, p.77):

- Prolonged engagement and persistent observation: The EBL programme spanned five months, with the final round of interviews conducted six months to a year after its completion. This duration allowed for an in-depth exploration of pertinent information over one and a half years.
- Triangulation: A range of methods, as detailed in section 4.5, was employed to cross-check data. The substantial amount of data collected throughout the research provided a solid foundation for the conclusions.
- Peer debriefing: The study was reviewed with PhD peers and established academics to obtain external perspectives and address critiques.
- Negative case analysis: Negative instances were actively sought out, and emerging insights were continually refined. Discrepancies in the data were critically analysed to enhance understanding.
- Member checks: Data were revisited with participants in subsequent interviews to verify the validity of the findings. This process allowed for the corroboration or modification of facts and the researcher's interpretations by the participants.

Additionally, the questionnaires and interview schedules were piloted to assess the suitability of their wording and length. This pilot phase was useful in identifying and correcting any ambiguities in the interpretation of questions by both the researcher and the respondents (Cohen et al., 2015; Denscombe, 2014). This step helped

secure the credibility of the research, validating that it measured what it was intended to measure (Oppenheim, 2000).

4.8.2 Confirmability, subjectivity, and reflexivity

An alleged deficiency of the case study method is that it allows more room for researcher subjectivity and bias. It needs to be recognised that no 'position-free project' exists as qualitative data are always the product of a process of interpretation by the researcher (Punch, 2009). In light of this, it becomes important to recognise and examine my position as a researcher, analysing its strengths and weaknesses to maximise advantages and minimise disadvantages.

The intrusion of the self into research is a legitimate position, emphasising not the achievement of neutrality, which is unsustainable, but rather ensuring transparency in the researcher's decision-making processes and clarifying their impact on data collection and analysis. Therefore, practising reflexivity and documenting changes in my perspective were key in this research. As previously mentioned in Chapter 1 (p.26), I perceived myself as both an insider and an outsider, constantly moving along this spectrum (Labaree, 2002) throughout the study. Sharing the same race (Korean), profession (primary school teacher), and gender (female) with the participants, and collaborating in the EBL programme, positioned me as an insider. Conversely, my upbringing, education, and teaching career in the UK, distinct from the participants' experiences in Korea, placed me as an outsider. My insider perspective afforded me a deeper understanding of the group’s culture (Breen, 2007), further enriched by the close relationships previously established with most participants. While this emic perspective raises questions about confirmability, employing a more objective, logical etic perspective as an outsider (Kanuha, 2000) addressed these concerns to some extent.

As the study progressed, I gradually realised how my UK education and career strongly influenced me to adopt an interpretative stance that was deeply critical of environments I perceived as limiting teacher agency, and to some extent, of individuals whom I perceived as exercising limited teacher agency. A fully reflexive

account of the procedures and methods (section 4.5.4), established through an audit trail (Yin, 2003), enabled me to expose my position-taking and to critique my ability to interpret the data beyond my personal standpoints. I became more aware of the need to constantly navigate the tensions between what I perceived as possible in terms of enacting teacher agency and the reality of how participants, influenced by their individual histories, exercised teacher agency to negotiate the policies and politics in which they were embedded.

Additionally, delving deeper into the shifts in participants' teacher agency revealed that the PLD environments I experienced as a teacher also imposed limitations on my ability to exercise teacher agency. This was particularly evident when considering the policy context at the beginning of my teaching career in 1999, a period characterised by the national implementation of literacy and numeracy strategies. Such insights prompted me to reflect on how these and other experiences influenced my approach to designing the PLD programme for this study and their potential impact on participants' exercise of teacher agency. This subject is examined in greater depth in Chapter 8.

Particular attention was paid to the power relations between the participants and myself. Being an independent researcher (i.e., not government-funded) and facilitating a voluntary EBL programme seemed to encourage participants to share their thoughts more openly, particularly on topics like government and school policies. This openness became more apparent as critiques of educational policies and institutional practices increased throughout the study. Power dynamics were more likely to emerge in discussions about the EBL programme and any perceived changes resulting from it. As the programme facilitator, my role might have led participants to overestimate the positives and downplay or under-report any negatives. To address this potential bias, I invested my 'personal identity' (Oakley, 2016) in building relationships with the participants and emphasised my interest in their genuine thoughts and opinions, including any negative aspects. This approach arguably led to more honest and enriching data.

4.8.3 Social desirability

In any research, the issue of social desirability bias arises. This bias refers to the tendency of individuals to present themselves and their social contexts in ways that are perceived as socially acceptable, yet these presentations may not fully reflect their reality. In research contexts, this bias indicates a discrepancy between participants' authentic perceptions of reality and their representations of that reality to researchers (Larson & Bradshaw, 2017; Bergen & Labonté, 2020). Social desirability bias is problematic because it can lead to an overestimation of positive aspects and a reduction in response heterogeneity, ultimately creating a questionable appearance of consensus. Therefore, in self-reporting measures concerning teacher agency, a participant might affirm culturally and professionally acceptable statements while denying less favourable traits. Social desirability bias has been found to manifest differently based on cultural norms, such as the collectivist versus individualist nature of a society, social positions, and personality traits (Johnson & van de Vijver, 2002). Although social desirability bias is an inherent part of my research, I implemented the methodologies outlined in this section to minimise this bias.

4.8.4 Transferability

Case study research often faces criticism for the difficulty in generalising its findings, due to its focus on a single case. This case study, similar to scientific case studies, does not aim to represent a 'sample' for the purpose of frequency enumeration (Yin, 2003), but rather emphasises a thorough understanding of the case in terms of both its uniqueness and its commonalities (Stake, 1995).

Instead of seeking to generalise findings from a case study, it is more practical to consider the extent to which the findings might be transferable to other settings (Denscombe, 2014; Elliott & Norris, 2011). To assist readers in making informed decisions about the relevance of the study's findings to other instances, ‘thick’ descriptive data were collected. This included information about events, processes, and specifics of the case, as well as comparisons with others of its type.

While caution is necessary to avoid improperly applying findings from one context or population to another, Stake (1995) suggests that in-depth study of a single case often reveals certain activities, problems, or responses that reoccur. Therefore, within a bounded case, certain generalisations, termed 'petite generalisations,' can be made. These are generalisations that regularly emerge throughout a case study. Furthermore, a negative case study can prompt a valid revision of broader generalisations, whereas a positive case can increase the confidence that readers or researchers have in their generalisations (Stake, 1995).

4.9 Conclusion

This chapter has aimed to explain how the use of a qualitative interpretivist and constructivist paradigm, coupled with a case study methodology, can facilitate an understanding of the complexities of teacher agency. This approach is grounded in exploring how individuals construct and interpret their environment and make sense of their world (Robson, 2011), thereby enabling insights into the nuanced aspects of teacher agency sought in this study. It also rationalises the use of an EBL programme involving action research, as it can promote emancipatory learning (Mezirow, 1991) by fostering SRL, critical reflection, and collaboration.

Employing the methodological strategies outlined here, the following chapters will provide an analysis of the participants' perceptions of change resulting from their involvement in the EBL programme and the corresponding changes in teacher agency.

Introduction to the findings and discussion chapters

The following chapters analyse the changes in teacher agency as perceived by participants before and after their involvement in the Enquiry-Based Learning (EBL) programme.

In this study, teacher agency for PLD is understood to be realised when teachers take intentional action as a result of the dynamic interplay between the intrapersonal components (cognition, motivation, and affect) and multiple environments connected across time (Chapter 2, p.54). In view of this conceptualisation, the forthcoming chapters aim to explore how environmental factors and temporal dimensions contribute to shaping teacher agency among participants. Chapter 5 establishes a baseline for this analysis by assessing participants' perceptions of various Professional Learning Developments (PLDs) they have encountered, including their current situations. The chapter then examines the effects of the EBL programme on fostering self-regulated learning (SRL), reflection, and collaboration, and how these aspects influenced participants' intrapersonal components and intentional actions shortly after the completion of the programme.

Building on these insights, Chapter 6 examines the short-term manifestations and long-term sustainability of the changes initiated by the EBL programme within the school environment. It details the effects in both the classroom and the wider school context.

In Chapters 5 and 6, my aim was to represent the participants' perceptions of change clearly and coherently. To enhance this clarity, the discussion using the teacher agency conceptual framework, which I developed in Chapter 3 (p.86, Figure 3.4), was reserved for Chapter 7. Here, I discuss the findings from the previous two chapters, employing the conceptual framework to further interpret these findings. The term 'changes to teacher agency' is predominantly used at this stage to integrate and discuss the insights from earlier chapters.

These three chapters will then serve to form the basis for discussing the implications for the future of teacher agency in the final chapter.

Chapter 5: Self-regulated learning, reflection, and collaboration

5.1 Introduction

In this chapter, I examine the short-term changes in participants following their engagement in the Enquiry-based Learning (EBL) programme. I compare their perceptions of self-regulated learning (SRL), reflection, and collaboration—identified in Chapter 3 (pp.77-84) as key factors in enhancing teacher agency for professional learning and development (PLD)—from before the start of the programme to shortly after its completion.

In analysing participants' perceptions of their PLD prior to their involvement in the EBL programme, two primary PLD environments emerged as having the most impact on participants: formal government-provided PLD and more informal, in-school learning. In the first half of the chapter, I examine participants' perceptions of these two PLD environments, which will serve as a baseline for analysing changes in participants over the short and long term. I also explore what PLD participants perceived as the most influential in instigating positive changes, in order to identify both the affordances and gaps within these learning environments.

In the second half, I investigate how the EBL programme, by fostering self-regulated learning (SRL), reflection, and collaboration, brought about changes in the participants.

5.2 Reflections on government-provided PLD

This section examines participants' perceptions of government-provided PLD, exploring its potential opportunities and constraints for SRL and reflection.

5.2.1 Perceptions of government-provided PLD

When participants were asked for their perspectives on teacher PLD in Korea, half of them highlighted the broad range of programmes available for teachers, while the other half voiced specific concerns. For instance, Dani pointed out that pedagogical trends from the US and the UK were being adopted without sufficient consideration for their applicability to the Korean context. She emphasised, ‘these trends are coming from abroad and they are being taken as they are and put into place in Korea … I mean education must be, has to be, based on the culture, but they don’t think of that kind of thing’ (Dani1:12-16). Ilene shared similar views, remarking, ‘it’s a theory and there’s no appropriate way to adapt it in the real classroom … even though the government doesn’t know the answer [they] just force the teachers [to] find it by themselves’ (Ilene1:66-70). From Ilene's comment, it appeared that there was a perceived expectation for teachers to incorporate these trends into their practice, yet they lack clear guidance on how to do so effectively.

Moreover, beyond the challenges of adapting foreign pedagogical trends, comments from some participants reflected a general distrust of authority figures. Erin stated that decision makers in local education authorities (LEAs) were ‘busy with their own promotion... following orders from the Ministry of Education’ (Erin1:88), suggesting that they were more concerned with their own advancement than with meaningful educational reforms. Extending this sentiment of mistrust to the broader government was Alice's comment. She remarked, ‘When I look at what they [those in government] are doing I even think do they have interest in education? … I don’t think they think they can change education’ (Alice1:58). This comment seemed to question whether the government has any real interest in education or believes in its ability to effect change within it.

When asked about the policy requiring teachers to complete 60 hours of PLD annually (hereafter referred to as 'mandatory hours'), participants' perceptions were varied and informative. Half of the participants perceived opportunities within the mandatory hours and engaged in a variety of programmes they believed offered ‘quality’ courses and instructors (Dani1:121; Erin1:34; Gail1:44; Helen1:94). Two participants pointed out the usefulness of these programmes in keeping them

updated with the latest pedagogical trends. Helen commented, ‘a teacher has to be aware of new type of teaching style or theory of teaching’ (Helen1:92), while Ilene remarked, ‘studying changes very quickly especially these days and new technology comes … even if it’s tough I need to develop by myself otherwise I’m going to get behind’ (Ilene1:42-44). These comments suggest the value of mandatory hours in imparting new knowledge and skills.

On the surface, participants seemed to have a degree of choice in how they fulfilled mandatory hours by selecting from a variety of programmes offered online, in schools, and through teacher development institutions. However, these ‘choices’ were constrained by mandates that dictate the required PLD hours. Half of the participants expressed concerns regarding the lack of time available to fulfil the mandatory hours. Reflecting on her PLD decisions, Alice revealed the dissonance between her beliefs and actions, stating, ‘Regarding time, going somewhere is quite difficult. So, I learn online, but if I could study face-to-face in real-time, I think it's much more important’ (Alice1:66). Similarly, Carol discussed the challenges, noting that often teachers could not attend external courses due to time constraints, which led them to choose ‘easy [online] courses, where they can click, click, click’ (Carol1:77). Dani explained that she fulfilled her mandatory hours by participating in school-based programmes, saying, ‘It's in my school, and I don't need to go somewhere. I just sit there, and they [school administration] just count the time’ (Dani1:133). Participants comments demonstrated that while they deemed face-to-face learning through teacher development institutions as more effective, time-saving options like online and school-based programmes were frequently chosen to meet the mandatory hours.

Not all concerns about mandatory hours were centred on time constraints. Erin, an older teacher who reported having more available time compared to the younger participants balancing more work and family responsibilities, commented on the requirement to participate in government-approved programmes:

> each person’s interest may be music, science, so on, but that is not counted in the 60 hours. I’m busy trying to fill it … if this story club counted, I’m probably doing two hundred to three hundred hours a year, but it doesn’t

> count at all. So, teachers fill 60 hours with useless training so there won't be negative effects on the school (Erin1:64-66)

Erin's comment highlights her strong belief that mandatory hours fails to accommodate the diverse interests of teachers and the various ways they could engage in PLD, thereby suggesting that this policy offers limited opportunities for effective learning. Her remark also highlights a broader issue, where policymakers in Korea appear to overlook teachers as multifaceted individuals with diverse interests and motivations, who can self-direct their learning paths.

Carol was particularly vocal in her opposition to the imposed nature of mandatory hours. She firmly expressed her belief that learning should be a choice left to individual teachers, stating, 'Compulsory training courses are not effective for teachers… the teacher should have the final say in everything' (Carol1:43). Even Fay, who appeared to place more value on mandatory hours, stated, 'My willingness is different because of mandatory hours, even though it's very effective and helpful … it feels more like an obligation… the difference between 'I want to' and 'I have to'' (Fay1:112). This imposition seemed to undermine her sense of control over her own learning, which negatively affected her motivation.

Overall, government-provided PLD offered a broad range of opportunities for acquiring new knowledge and skills through various programmes and access methods, thus helping participants stay up-to-date with the latest pedagogical trends and new educational technologies. However, participants tended to perceive this provision as predominantly top-down and transmissive, with little emphasis on fostering SRL and critical reflection. Consequently, this approach appeared to pose challenges for participants who wished to engage in actions aligned with their educational goals.

5.2.2 Influence on epistemology

Despite their reservations about the government-provided PLD, the government's promotion of a transmissive mode of learning seemed to lead all participants to place a high value on the acquisition of academic knowledge. However, there were

differences in their beliefs about how formal knowledge should be applied in practice. For Alice, it appeared that she believed in a universal rule that covered all contexts:

> I learnt something really valuable [in teacher training] but I can't use it fully **…** I make excuses saying students' level is lacking, school environment is an issue. I blame my context and think that's reality but I want to overcome whatever the environment, whatever the variation. I think there might be a general rule. Rather than constantly changing with the environment, whatever the environment, I want something that can be used … a big over-riding rule may be out there … something that covers all, but I don't know what it is (Alice1:28)

Alice's comments implied that the transmissive PLD influenced her belief in a 'general rule' to teaching, suggesting an absolutist epistemology that encourages the belief that knowledge is fixed, certain, and known by authorities (Kuhn, 1991). Her statements, such as 'a big over-riding rule may be out there' and 'I can't use it fully,' further suggest that she believes knowledge comes from authorities rather than herself, and that it can be replicated in practice. However, contrary to her beliefs, she appeared to face challenges when applying received knowledge in practice. She attributed these obstacles on contextual factors, including the students, a characteristic often associated with teachers with low self-efficacy (Bandura, 1997; Tschannen-Moran & Hoy, 2007; De Smul et al., 2018; Schipper et al., 2020). Instead of engaging in reflective practices to judiciously interpret and use knowledge to address her classroom issues, she seemed to continue searching for a theory that 'covers all' situations, which was unlikely to exist. Such a perspective may not encourage the development of metacognitive skills required for reflection, as it does not require any reorganisation on the part of the user.

A couple of participants also appeared to exhibit signs of absolutist epistemology, as they admitted to closely adhering to government-approved textbooks and applying theory to practice in a prescriptive manner (Beth1:64,199; Ilene1:19,46). However, four of the nine participants acknowledged the value of educational theory and mandated textbooks but appeared to view them more as resources to be adapted

(Dani1:28; Fay1:60; Gail1:24; Helen1:49). Dani highlighted the importance of teachers 'manipulating' knowledge to fit the classroom context:

> teachers could get ideas from theory or philosophy, and we can manipulate it for the teachers and for the students. I think it's a good resource … I mean I think theory is theory, it's ideal but real life is not that ideal. We have to change it for the real life (Dani1:28-32).

Dani's comment suggested a more complex and creative approach to translating knowledge into appropriate actions for specific students in particular circumstances (Schön, 1983; Cochran-Smith & Lytle, 1999; Eraut, 2003; Biesta, 2015). Unlike participants with an absolutist epistemology (Kuhn, 1991), who seemed to prioritise the accumulation of fixed knowledge without much reflection, Dani appeared to embrace a more developed evaluative epistemology (Kuhn, 1991). Her approach involved a dynamic knowledge frame (Johnston, 2012), which is based on the belief that knowledge evolves, changes, and is influenced by context and perspective. She seemed to engage in interpretive knowledge use (Eraut, 2003), taking a more agentic role in questioning the appropriateness and effectiveness of received knowledge, demonstrating discernment and discrimination. This approach provided the basis for her understanding of situations and, consequently, grounds for justifying actions (Eraut, 2003). Overall, it appeared that having a more developed epistemology (Kuhn, 1991) facilitated Dani's ability to have a more realistic view of professional knowledge, which better enabled her to address the complex issues of daily teaching.

5.2.3 Perceptions of effective PLD characteristics

When asked to identify effective PLD programmes from their experiences, seven out of the nine participants shared their participation in programmes conducted by the British Council (BC) in Seoul[4]. These courses, facilitated by teachers from the UK,

[4] The other two participants had no experience of BC programmes

Canada, and Australia, were approved by the government for English language teachers and counted towards mandatory hours. While many government-funded PLD initiatives leaned towards a transmissive learning approach, these participants identified the BC programmes as distinct due to their emphasis on enabling reflection rooted in practice. The BC programmes combined teaching methodology input sessions with teaching practices, allowing participants to directly apply their newly acquired knowledge in their classrooms. These teaching practice sessions were followed by feedback with tutors and peers.

Beth shared how this learning process prompted her to appreciate the importance of reflection, saying, ‘Before, I just took a training course for getting some materials, about how to teach, what to teach… I didn't look back on my teaching before, but after that course, after my lesson, I look back on my teaching’ (Beth1:32). Ilene similarly described her new understanding of the importance of reflection, viewing PLD as an ongoing cycle: ‘I think professional development for teachers is like a circle, like reflecting, finding a solution, and doing it again’ (Ilene1:2). Dani also underwent a change in her teaching approach, realising the need to focus more on her students: ‘Before the course, I just thought about myself as a teacher, introduction, development, consolidation, but I never thought about the students… but after that course, I thought about the students' reaction and what they really knew after the class’ (Dani1:66). This comprehensive approach, which integrated knowledge acquisition, hands-on application in participants’ own classrooms, and feedback, appeared to positively impact participants' self-efficacy and motivation for reflection.

Peer feedback, given after teaching practice observations, was reported to have the greatest impact on their reflective process. For Fay, this feedback made her aware of areas needing improvement and where those improvements should occur. She commented, ‘Teachers pointed out what I was lacking, and I never thought about that before because nobody pointed it out… the biggest thing is it helped me get over the illusion that the way I’m teaching is the best way’ (Fay1:32,88). Other participants agreed that peers provided a more objective view of their teaching. Dani stated that without feedback, teachers might not realise that ‘they are wrong because they are not that objective’ (Dani1:48). Alice found that feedback helped her

understand herself better (Alice1:14-16), and Helen mentioned that it helped her to ‘think in a different way’ (Helen1:116). In general, collaborative reflection stimulated and motivated participants to ‘be better teachers’ (Beth1:168), ‘proactively learn’ (Gail 1:74), and work diligently to manage their professional lives (Dani1:56). The participants' comments suggest that engaging in reflection is most effective when done collaboratively.

However, despite these experiences facilitating the reflective process through collaboration and contributing to positive changes in participants, a couple of participants expressed a lack of self-efficacy when it came to instigating change in their students' lives. Beth remarked, ‘I don't have any confidence I can make them [students] change a lot’ (Beth1:64), and Dani stated, ‘Teachers can be one of the resources, but if they [students] don't accept it…’ (Dani1:24). Research shows that such beliefs are likely to negatively influence teacher motivation, the amount of effort they will exert, and how long they will persevere in the face of obstacles (Bandura, 1996).

Even if participants initially experienced an increase in self-efficacy, it appeared to diminish over time. Fay described her struggles to motivate herself to continue applying what she had learned, saying, ‘I tried to [continue with the changes], but, you know, people don't change easily. I tried to remind myself what I learned in ICELT, but… I went back to my previous ways’ (Fay1:54). Ilene also mentioned that once she completed a PLD programme and was out of that learning environment, she tended to revert to her old ways (Ilene1:104).

These comments suggest that the BC programmes, despite being identified by participants as the most effective in instigating change, have a limited influence on teacher self-efficacy. This limitation may stem from the fact that the BC programmes, like other government-funded PLD, are mandated to use standardised processes and criteria for evaluating teachers. SRL, which involves goal-setting, strategy selection, testing, reflection, and corrections to enable metacognitive knowledge of the learning process, has been linked to increased self-efficacy (Bandura, 1997). Therefore, it is possible that reliance on externally set criteria may be less conducive to fostering SRL and critical reflection, contributing to the BC programmes' limited impact on teacher self-efficacy.

Now that I have provided an overview of participants' perceptions of the government-provided PLD environment, I will move onto examining the learning environments within participants' schools, specifically those involving teacher collaboration.

5.3 Reflections on in-school collaboration with colleagues

When discussing collaboration within participants' schools, the comments predominantly fell into two distinct categories: those mandated by external agents and those initiated by the participants themselves. This section examines these categories to identify the different types of collaboration and explore potential sources and factors contributing to the various forms of collaboration emerging from the data.

5.3.1 Perceptions of collaboration with school colleagues

In Korea, all teachers are required to open their classes for observation by colleagues, school principals, and parents twice a year. Although these open classes are intended to promote teacher PLD, participants appeared to feel they offered little value in this regard. For example, Beth talked about the focus on teacher performance when conducting an open class:

> when I did open class most my colleagues are focused on showing something … so we are not an actor or actress but my senior teachers they recommended me to be like an actress… so they give me an idea like 'you should show how to control your students. Everybody's looking at you during the class, it should be the perfect class', so my senior teachers think like that (Beth1:78)

Her comment appeared to reveal that advice from her colleagues, which focused on teacher performance and student control, was influenced by their feeling of being under evaluation. Beth observed that these internalised external values, common

among senior teachers in her school and reflective of trends in both Korean and global educational systems, seemed inappropriate for genuine professional learning. Ilene further described how the sense of evaluation influenced her behaviour, resulting in actions that did little to benefit her students. She explained, 'I try to show something if it's open class. It doesn't matter if the students are learning or not, I just try to give good impression, which is not good for my students' learning' (Ilene1:124).

Adding to the perception that these classes contributed little to their PLD, participants noted that the feedback they received afterwards often lacked constructive criticism. Both Ilene (1:20) and Dani (1:51) remarked that the feedback was generally unhelpful because it predominantly consisted of positive remarks. Ilene (1:51) even commented that she perceived some feedback as 'untrue'. She attributed the challenge of providing constructive criticism in Korea to the prevailing non-critical culture, a trait also observed in other Confucian-heritage societies as discussed in the literature (Kim, 2003; Park & So, 2014; Zhan & Wan, 2016). These studies revealed that feedback discussions in these cultures typically revolved around praising the observed teacher and avoiding publicly challenging their peers, prioritising group harmony over individual expression of thoughts and feelings. It appeared likely that growing up in such a culture has resulted in participants having limited self-efficacy for engaging in critical reflection and little motivation to provide critical feedback.

In addition to open classes, there were instances where school leaders mandated collaboration. One such example, shared by Ilene, illustrated how collaborative learning could be imposed to meet external requirements:

> My former school needed some points so the vice principals gathered five young teachers and said 'oh you guys join this project' …it's forced collaborative team … no-one helped us so we just have so many meetings and the others almost gave up … if the group members are well motivated and they have some common things to study together then I think in that case collaborative work is better than individual but otherwise individual is better. It gives me a lot of stress (Ilene1:92-108)

The demands imposed on schools by the Korean government, enforced through a system of school points, appeared to create adverse PLD conditions for Ilene. In such an environment, Craig (2022) states that school leaders often feel compelled to conform, which leads them to pass their anxieties on to their staff through a more directive and coercive leadership style. In this instance, the vice-principal asserted authority over younger teachers to engage in collaborative learning primarily to fulfil external mandates and gain school points, rather than using it as a tool for promoting PLD. This situation proved frustrating and unproductive for Ilene, potentially diminishing her motivation for future collaborations with colleagues. Other participants described their experiences at previous schools, where they worked under similar leadership styles. In these settings, collaboration appeared to be primarily used to reinforce traditional norms and strengthen hierarchical structures.

Despite encountering government-mandated collaborations, all participants maintained a strong belief in the benefits of collaborative learning and expressed a desire to work more closely with their colleagues. However, they also acknowledged that opportunities for such collaboration were infrequent. When collaborations did occur, they tended to happen within specific sub-groups. For example, Helen, an English language teachers, stated, ‘English teachers talk a lot … they share a lot of information about their classes’ (Helen1:10). Fay, another English language teacher, observed ‘there’s always informal exchange of opinion and experience’ (Fay1:84). In contrast, general classroom teachers like Carol and Gail primarily shared ideas and materials during their regularly scheduled meetings with teachers from the same year group.

5.3.2 Analysis of types of collaboration

Analysis suggests that participants’ comments regarding collaboration within their schools can be organised along a collaboration continuum, as established through the literature discussed in Chapter 3 (p.73, Figure 3.2) and replicated in Figure 5.1.

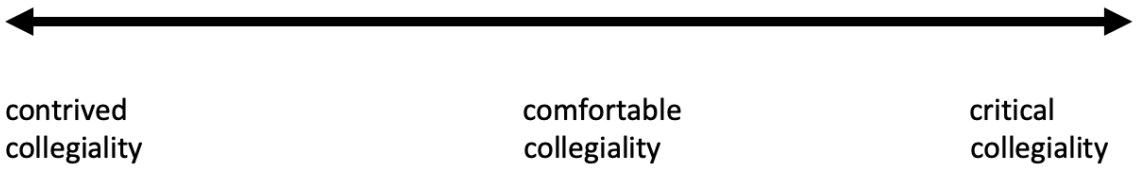

Figure 5.1: Collaboration continuum (adapted from Glazier et al., 2017)

The analysis reveals that participants perceived collaboration in their schools as primarily falling between contrived and comfortable collegiality. Externally mandated collaborations, exemplified by open classes, were seen by participants as being policy-driven, prioritising teacher performance assessment over both teacher and student learning. This resonates with the features of contrived collegiality (Hargreaves, 2001; Datnow, 2011), a strategy frequently imposed by the government to evaluate teachers.

On the other hand, collaborations initiated by the participants, characterised by descriptions of 'sharing' and 'exchanging' information and experiences, fit within the category of comfortable collegiality. These interactions appeared comfortable and collegial, with no mentions of being challenged by others or gaining fresh perspectives (Little, 1990; Peterson, 1994; Kutsyuruba, 2011). While such interactions can aid teachers in overcoming obstacles (Glazier et al., 2017), the data notably lacked mentions of collaborations that extend beyond comfortable collegiality. The subsequent section delves into possible explanations for this observation.

5.3.3 Lack of critical reflection

When participants were asked about their experiences working collaboratively with colleagues in their schools, they all reported challenges in finding teachers with whom they could engage beyond sharing ideas and resources. For instance, Dani felt it would be ‘very hard to find that kind of colleagues’ (Dani1:194), while Alice noted that ‘there aren’t a lot of teachers who think the same’ (Alice1:69). Furthermore, there seemed to be an absence of school leaders in the participants' schools who were committed to fostering critical collegiality. This situation left

participants in a position where they needed to initiate and create such opportunities for themselves.

The primary barrier to cultivating collaboration seemed to revolve around resistance to change. Seven out of nine participants noted that their colleagues did not share their goal of learning for change. For example, Gail indicated that in her school, many teachers were reluctant to adapt their teaching to meet their students' needs, stating, 'there are more teachers who do not change' (Gail1:112). This tendency was often observed among older colleagues, with Ilene remarking, 'the head teachers, elder people, they don't like change, so, it's hard to change even though I'm quite a young teacher' (Ilene1:58). It seemed that the resistance to change among more senior teachers posed a challenge for her, as a younger teacher, to implement changes despite her openness to them.

A prevailing cultural expectation appeared to be that as time passed, there was less need and motivation to actively pursue one's PLD. Fay referred to this as 'mannerism… what they normally do, nothing new' (Fay1:205). Beth believed this complacent attitude towards learning developed after university, stating, 'after graduation from university … they think "I can teach students for a long time without any learning" because we learned all the things we need from university' (Beth1:121). This perspective, implying that learning ceased after university, was not limited to teachers but also shared by school leaders, as evidenced when Ilene reported her principal telling her, 'Why do you study that much? You are older now, you are not a student. Why do you want to learn more?' (Ilene1:139).

Most participants appeared to perceive challenges in finding colleagues who shared their values and vision, particularly in the context of learning to facilitate change. Upon reflection, these perceived barriers to collaborative learning could be attributed to a lack of collegiality among colleagues. This issue could potentially be linked to key policies, such as the requirement for teachers to change schools every few years and the tendency to tie PLD to individual promotions.

Firstly, the mandated policy requiring all teachers, as civil servants, to change schools every five years (Chapter 1, p.19) may hinder the establishment of trust between colleagues. Fay and Beth, in particular, were relatively new to their schools

and expressed difficulties in forming close relationships with other teachers. In her current school, Fay found herself lacking the confidence to initiate conversations about collaborative work:

> In my previous school English teachers always have conversations about teaching and students but in this school, it seems like they are not interested in English teaching because the two English teachers are good but they didn't want to be English teachers. And the other one is busy with her private thing. I'm the only one who wants to improve English skills or something. It's really awkward to suggest something or study together or something because they seem to be not interested. Probably it's my misunderstanding because I never tried it. It was just my sense (Fay1:50)

Fay observed that her colleagues appeared uninterested in collaborative learning due to varying interests and busy personal and professional lives, a sentiment echoed by other participants. Many seemed concerned that suggesting collaboration might burden their colleagues with additional work and disrupt their established routines. It appeared that Fay and her colleagues maintained surface congeniality (Grossman et al., 2001) as they refrained from challenging each other or seeking clarification. This behaviour aligns with the theory that teaching is still influenced by norms of non-interference (Little, 1990) and a culture of individualism (Hargreaves, 2001).

Another barrier to establishing trust and openness among teachers appeared to stem from policies that linked PLD with individual promotion. Many of the participants believed that some teachers engaged in professional development solely for 'promotion' (Alice1:56; Beth1:92; Carol1:63; Fay1:165; Helen1:90; Ilene1:66). This created a sense of distrust and suspicion, with participants perceiving that some teachers pursued teacher development primarily for personal gain rather than for the benefit of their students and the school. Fay (1:94) seemed particularly apprehensive that initiating conversations about collaborative learning could jeopardise her reputation and portray her as self-serving.

5.3.4 Summary of findings prior to the EBL programme

The purpose of analysing the data before participants' engagement in the EBL programme was to establish a baseline for subsequent analyses of changes among participants. Participants' perceptions of PLD provided by both the government and schools revealed the following insights:

- Government-provided PLD offered a broad range of programmes and access methods for teachers to acquire new knowledge and skills, helping participants stay up-to-date with the latest pedagogical trends and new technologies.
- Despite this variety, key PLD policies, such as mandatory hours, created an overall PLD environment that was perceived as top-down and focused on transmissive learning. This environment seemed to negatively influence participants, leading some to adopt an absolutist epistemology, where knowledge is viewed as fixed, certain, and known by authorities (Kuhn, 1991). It also appeared to limit participants' motivation and self-efficacy in becoming creative, self-guided learners.
- Participants perceived some government-provided PLD programmes as effective in instigating changes in their practice by fostering reflection and collaboration, particularly those embedded within classroom-based experiences. However, these programmes appeared to have a limited long-term impact on participants' self-efficacy to effect change in their students, possibly due to a lack of emphasis on promoting SRL and critical reflection.
- Collaborative learning environments within participants' schools included a mix of both contrived and comfortable collegiality but lacked critical collegiality. This absence was linked to a lack of shared values, goals, and collegiality among participants and their colleagues.

Overall, the participants appeared to be operating largely within PLD environments that provided limited opportunities for SRL, critical reflection, and collegiality—identified as key factors in enhancing teacher agency for PLD (Chapter 3, pp.77-84). These findings reaffirmed the need for the EBL programme, which promotes SRL, critical reflection, and collaboration.

I will now proceed to examine the short-term changes in participants after their engagement in the EBL programme.

5.4 The EBL programme: The influence of fostering SRL and reflection

In this section, I explore the influence of the EBL programme on short-term changes in participants' SRL and reflection by analysing data gathered shortly after the completion of the programme.

5.4.1 Teacher-led enquiry

The EBL programme developed for this study differed from government-provided PLD initiatives by primarily focusing on the process of learning rather than evaluating teachers based on standardised criteria. The programme comprised two main phases (Chapter 4, p.107, Figure 4.2): Phase 1 aimed to acquaint participants with action research processes, research methodologies, and data analysis (Appendix 4), while Phase 2 involved participants applying this acquired knowledge through an eight-week research project conducted within their respective schools (Appendix 5). Designed as an experimental form of teacher research, the primary goal of this programme was to empower participants to explore their individual areas of interest and needs. It achieved this by allowing them to freely select their research topics, as depicted in Figure 5.2 (Chapter 4, p.108; Appendix 5).

Theme	Research title	Teachers: G = General classroom teacher S= Subject teacher
Cognitive development	Title: Studying the application of Havruta[5] and its effect on the ability of thinking	Beth (G)
Student cooperation and communication	Cooperative discussion based on the principle of Havruta and its effects Maximising student learning Developing students' communication skills in English through station activities with flipped learning	Carol (G) Helen (S) Gail (S)
Classroom behaviour and management	Fostering the atmosphere of mutual respect and improving student listening skills Teaching mixed-ability maths class effectively What makes effective behaviour (support) for low achievement students?	Dani (G) Ilene(G) Fay (S)
Motivation	How to improve student interest in English through English books	Erin (C)
Teacher development	The importance of teacher listening attitude and language habits	Alice (S)

Figure 5.2: Participant research topics

[5] Havruta is a traditional Jewish way of learning that involves understanding and solving problems through dialogue. This method, which uses interaction processes such as talking, discussing, and debating, had recently been promoted by the Ministry of Education as one of the latest effective teaching methodologies.

As can be seen in Figure 5.2, all participants selected topics related to PLD within the classroom, rather than opting for topics related to the wider school environment, such as collaboration with colleagues. One participant, Alice, chose to explore personal reflective practices regarding her own classroom attitude and behaviour, while the others concentrated on improving student cognition, communication skills, behaviour, and motivation.

The participants began their research projects by identifying issues encountered in their everyday working experiences. This led some of them to reflect on the differences between this form of teacher research and what they considered 'traditional research'. For instance, Fay observed:

> They are both research but different type and different goals … traditional research is like proving some kind of theory in my classroom but action research is finding some problem, finding some solution on this problem (Fay2:129-137)

In Fay's view, traditional research seemed to focus on validating existing academic theories within the classroom setting. In contrast, through this programme, she appeared to realise that teacher research involves identifying problems and finding solutions specific to individual contexts.

Similarly, drawing from her experience of engaging in teacher research during her pursuit of a master's degree, Beth offered her reflections on the differences:

> My professors asked us to pick the 'right' topic… some topics have been researched already or some topics are old-fashioned, some topics are too hard to get good results… but with action research any topic is valuable (Beth2:69)

Beth and Fay appeared to perceive traditional research as a top-down form of PLD that involved applying and confirming theories to add to the knowledge base for teaching (Noffke & Somekh, 2009). In contrast, their current learning experience suggested a bottom-up process, starting from a problem encountered in teachers' everyday working experiences (McNiff & Whitehead, 2002; Noffke & Somekh, 2009).

Other participants commented on the situated nature of teacher research, saying, ‘I chose [the topic] and then I tried to do something with my students towards results I wanted’ (Carol2:51); ‘I found some solution for my problem’ (Fay2:135); ‘I picked the topic I want to learn, it comes from my classroom’ (Beth2:25). The frequent use of ‘I’ and ‘my’ when discussing their classroom research conveyed a sense of self-efficacy and motivation that empowered them to identify and address issues relevant to their unique circumstances.

5.4.2 Navigating enquiry through the cycle of learning model

After participants identified a main goal for their research, they planned a variety of teaching strategies for implementation and selected data collection methods for observation and reflection. An example of this process is illustrated by Ilene, who focused her classroom research on improving the teaching of mixed-ability maths classes (Appendix 6):

> Action one, using webtoons. I told you Korean [maths] textbook have stories but it’s really, really boring. Students suggested using Webtoons so I used it and they liked it. So actually, the students suggested the first action. Action two, it’s from my observation … even if it’s [Webtoons] is really interesting and motivating, some students wanted to finish faster and they ruined the whole atmosphere. So, I told them ‘don’t open the textbook’ … another teacher once told me she didn’t let students open the textbook while she’s teaching … so from my observation and from her advice I made this action two (Ilene2:64)

Ilene’s account highlighted how the cycle of learning (CofL) model (Chapter 4, p.100), which involves a process of planning, acting, observing, and reflecting, provided a structured framework for addressing classroom issues. Initially, Ilene recognised the need to enhance student engagement and address the problem of 'boring' textbooks. Subsequently, she devised and implemented a strategy by incorporating internet cartoons (Webtoons) into her lessons. The observing phase confirmed that while this approach engaged students, it also uncovered another

issue—some students were overly focused on progressing through the textbook rather than listening to the teacher. Reflecting on this, Ilene introduced a new strategy of restricting students from opening textbooks while she was teaching, thus initiating a fresh cycle of planning, acting, observing, and reflecting.

Notably, participants with prior experience in teacher research through master's degree programmes emphasised the flexibility inherent in the cyclical structure of the CofL model, allowing them to adapt and create strategies as needed. For instance, Helen highlighted the freedom she experienced during the EBL programme compared to her master's degree research, emphasising her ability to make immediate modifications to cater to her students' needs:

> During my research I could change things according to what was happening in the class… I could do it by myself, whatever I think is needed for the students, I could adapt that right away and I could see the result and if that doesn't go well, I could change … but the [master's] thesis is quite different because there is a theme I have to focus on (Helen2:7)

Beth similarly described how her master's degree research imposed rigidity, whereas engaging in the CofL model offered more flexibility to change and devise strategies as needed:

> Master's degree, I should have a plan from the beginning till the end but action research [CofL model] shows me … I don't need to have a fixed idea from beginning till the end. I can modify during the research. That is the crucial part. So, I can just try it and then if it is not good, I can fix it later (Beth2:53)

Fay also emphasised the significance of the CofL model's adaptability, which enabled her to easily adjust her planned strategies to suit both her interpretations and the classroom context, saying, 'while I'm doing this research, I can always change my direction … finding some solution on this problem depends on researchers and it depends on the environment so there are no fixed solutions' (Fay2:129-137). Engaging with the CofL model appeared to empower these

participants to take deliberate and systematic actions to resolve specific issues, aligning with Zimmerman's (2000) cyclical model of self-regulation (Chapter 3, p.79).

Observing and reflecting, integral to the CofL model, involved participants collecting feedback from both themselves and their students through various methods, including student questionnaires, interviews, journals, video-recorded lessons, and self-reflective journaling (Appendix 6). This approach, which combines intrapersonal and interpersonal data collection with progress monitoring against set goals, contrasted sharply with the previous reflective practices of eight out of nine participants who primarily relied on their own in-class observations of students. Gail reflected on the inadequacy of relying solely on one method, commenting:

> the survey wasn't enough for me, sometimes they just tick all the answers that teacher wants … but when I see them write [student] diary after the lesson, they wrote how they felt during the class, that helped me a lot to reflect … so, I could improve the next lesson (Gail2:17-25)

For Helen, the diverse data collection methods provided varied insights for addressing classroom issues. She noted, 'after videotaping my class, something strange happened, so, after that class, I asked the students about that during the interviews' (Helen2:48-53). This shift from the participants' usual teaching routines appeared to enhance the awareness and analytical skills of some participants, helping them assess the trustworthiness of the generated data.

5.4.3 Shifts in epistemology, self-efficacy, and motivation

Participants' experiences of engaging in teacher research through the EBL programme sharply contrast with their general perceptions of teacher research in Korea, which appeared to be predominantly negative. In their view, teacher research in Korea was often government-funded and subject to 'many restrictions on what topic and what to include' (Helen2:184). In addition, it was viewed as ethically questionable, with suspicions that teachers might manipulate results to support government policies (Fay1:167; Ilene2:49; Helen2:184). This practice was viewed as a means for teachers to 'win awards' (Alice1:94; Carol1:63) and secure promotions

(Fay1:165; Gail1:62). These comments align with research findings that suggest Korean teachers engaging in government-funded projects often operate within evaluation criteria promoting generalisation of best practices (Park, 2004), with the primary goal of securing promotion (Yoon et al., 1999; Lee, 2010).

Participants' perceptions suggest that teacher research in Korea often involves adhering to an absolutist epistemology (Kuhn, 1991), where knowledge is seen as fixed, certain, and known by authorities. In contrast, feedback from participants suggests that this programme enhanced their understanding of the metacognitive processes of learning by engaging them in a systematic and constructive CofL model. Alice's reflection exemplifies this shift:

> I thought when this programme finishes, I'll become a new person. Answer is there and time is set. But it's not like that…. through this I discovered that it might not be it… this is a process and if it doesn't work then you try and try again … wishing I had students who were better mannered or smarter … [now] I think I can get beyond that kind of thought… I think I can identify better what the students need (Alice2:87, 89)

Before the EBL programme began, Alice appeared to believe in a universal rule that applied to all contexts (section 5.2.2, Alice1:28). However, her comment indicates a shift in her epistemology, from an absolutist to a more evaluatist stance, as well as an increase in her self-efficacy in identifying student needs.

Gail, who consistently experimented with new pedagogies in her class before participating in the EBL programme, appeared to have gained a better understanding of the metacognitive processes of learning:

> I realised that I always try new things but at the end I just finish with 'oh it's good', that's all. But by doing this I could see how I could develop my ideas or how I could reflect my ideas on the next session and next step … before all the ideas were all mingled altogether so I didn't know how to solve it the right way. But after doing this I could see a bit more … this problem I can solve in this way and I can solve this way in the future, so that's the change I think (Gail2:87, 131, 176)

Unlike Gail and Alice, who displayed a certain level of self-efficacy for achieving desired student outcomes before the EBL programme, Beth expressed low self-efficacy in effecting change in students' lives (Chapter 5, p.135, Beth1:64). However, her perspective seemed to undergo a significant change after participating in the programme:

> Before joining this programme … in a year I thought I couldn't change my students much … but this is my previous thinking but [now] I have another different thinking … I could do something for my students … also I can change myself… I can contribute for their development, for their improvement (Beth2:9-19)

Beth's increased self-efficacy in positively impacting her students appeared to be primarily due to her learning to modify and generate knowledge tailored to her individual context:

> [Before] I don't know how to connect my learning with my students' learning but action research [CofL model] can give some way how I put my knowledge I am learning into my lesson, how I connect my learning with my students' learning. It doesn't show the way directly but … you should connect that knowledge to class always and if the knowledge is not suitable for your classroom you can modify it … it [CofL model] tells me that teachers should learn always forever (Beth2:21-25,121)

The comments from Beth, Gail, and Alice suggest that engaging in the CofL model and the SRL process—setting goals, selecting and testing strategies, and reflecting to address deficiencies—enhanced their understanding of metacognitive learning processes. This engagement appeared to influence these participants towards adopting an evaluatist epistemology (Kuhn, 1991) and a dynamic knowledge frame (Johnston, 2012). As a result, their self-efficacy appeared to increase, and they began to view themselves as interpreters and creators of knowledge, capable of positively impacting students' learning.

The programme appeared to offer participants opportunities to experiment and innovate, opportunities that all participants utilised. For instance, Ilene credited the

programme with providing the impetus to change her approach to teaching mathematics, saying, 'I wouldn't take these actions with my kids without this programme. Without it, I'd just struggle to deal with them and complain about the school and my situation' (Ilene2:37). Similarly, other participants were motivated to take risks with new teaching methodologies and strategies (Beth2:35; Carol2:15; Erin2:22; Helen2:13). Helen described this as 'throwing myself into the deep end and seeing how it goes' (Helen2:13), while Erin reported that it was a chance to break free from 'boring activities repeated over and over again,' which she described as 'a significant turning point in my life, not only for my students but also for me' (Erin2:22). These comments suggest that the programme increased participants' self-efficacy to innovate. Each participant was willing to depart from their current, and possibly traditional, teaching practices by taking new initiatives and seeking opportunities for growth through experimentation and creativity in the classroom.

Furthermore, several participants appeared to rediscover their motivation for PLD (Alice2:83; Beth2:21; Carol2:37; Fay2:211) and develop self-efficacy in SRL through classroom enquiry. They articulated their newfound confidence by stating, 'I can always apply the research in my classroom. I have more confidence in using research in my teaching' (Fay2:241), 'doing research isn't as difficult or daunting as I thought, I can do it' (Carol2:97), and 'this programme made me think about diverse ways to help my students and adapt other people's approaches too' (Ilene2:33).

However, while there was evidence that participants were beginning to adopt a more evaluatist epistemology, and that there were positive changes in motivation and self-efficacy in the short term, research suggests that self-regulation skills demand significant cognitive, motivational, and emotional effort and must be cultivated over time (Bandura, 1997; Hadwin, 2008; Usher & Schunk, 2017). The following section examines the challenges participants encountered during the EBL programme, offering insights into the potential sustainability of these changes after the EBL programme concludes.

5.4.4 Challenges to sustaining change

A predominant challenge faced by participants was finding adequate time for classroom research amidst their regular teaching duties. Half of the participants stressed the considerable time investment required for research, with Helen pinpointing the task of gathering and analysing data as particularly challenging. She noted, ‘Taking all the materials and getting evidence was quite a burden because there was a lot of schoolwork and I had to do [student] interviews together at the same time’ (Helen2:3). Echoing the time management challenge, Fay also considered a more organised approach for the future, saying, ‘I did not spare special time for this project. I always thought that I would do it whenever I have time but it never happened. So probably next time I would be more organised, make a timetable’ (Fay2:7). Meanwhile, Alice offered a contrasting perspective. She viewed this pressure as a necessary component of professional growth, asserting, ‘you need that kind of pressure if you want professional development. Even if there is time pressure it’s a price you have to pay… there isn’t anything that is devoid of pressure’ (Alice2:156).

Another challenge that emerged was maintaining participants’ motivation. Beth discussed the range of support mechanisms provided to assist with her research, including the provision of reading materials. She noted, ‘I wanted to read more but when you gave the article it was just up to me [to read it]. … it’s not obligation, so, I think I need some kind of pressure’ (Beth2:185). Similarly, Helen highlighted her difficulty with self-motivation, stating, ‘there was no obligation…it’s just myself satisfaction so I was really eager at the beginning but as time goes by … I have to keep myself on track’ (Helen2:9). These comments suggest that some participants, perhaps conditioned by strict external mandates in their professional lives, struggled with maintaining internal motivation to self-regulate learning.

Despite these issues, which will be further examined in Chapter 6, the data analysis from this section highlighted the benefits of engaging in the CofL model. Its bottom-up, systematic yet flexible nature fostered SRL and reflection. This, in turn, empowered participants to take action based on their understanding of their

contexts, a critical aspect in cultivating teacher agency. The next section examines how collaborative learning within the EBL programme further enhanced this support.

5.5 The EBL programme: The influence of fostering peer collaboration

Following the start of their classroom research projects, participants gathered every two weeks to discuss their progress (Chapter 4, p.107, Figure 4.2). These discussion sessions were organised to ensure that each participant, typically in small groups of three or four, had dedicated time to discuss their research and receive feedback from their peers (Appendix 7). The group was diverse, comprising both English language and general classroom teachers with teaching experiences ranging from five to nearly 30 years. This diversity provided everyone with the opportunity to draw from a substantial pool of teaching knowledge and experience.

The following sections explore how the participants' discussions about their individual research, along with the feedback they received and provided, contributed to changes within the individuals.

5.5.1 Reflective dialogue

While the exchanges participants typically had with their school colleagues mainly involved storytelling and sharing of materials, characteristic of comfortable collegiality (section 5.3.2), the fortnightly discussions centred on their ongoing classroom research appeared to go beyond these usual interactions. One participant, Helen, highlighted this distinction, stating, ’I got evidence … I wrote down [research] logs so I could explain the situation and what happened in the classroom based on that evidence’ (Helen2:131). In these dialogues, participants seemed to articulate both new and tacit knowledge, engaging in reflections and discussions about what they knew and how they acquired that knowledge (Appendix 7).

The majority of participants commented on the value of listening to others discussing their classroom research. For instance, Beth shared how her past experiences enabled her to relate to the research of other participants. She noted:

> Alice and Dani's topic …their school situations are not the same or their students' grade are not the same, their student's problems are not exactly the same but we have much in common … when we are talking together, I have experienced before … this talking process could give us many things (Beth2:75-77)

Her comment appeared to imply that although individual experiences cannot be generalised, the knowledge gained through these small group discussions could be applied to teachers' specific situations. Engaging in reflective dialogue allowed participants to provide 'thick' descriptive data (Snape & Spencer, 2003; Cohen et al., 2015), including detailed accounts of events, processes, results, and the analysis of their individual projects. This process appeared to enable them to make informed judgements about how findings from others' research could be transferred to their own contexts (Elliott & Norris, 2011; Denscombe, 2014).

Participants appeared to find the discussions useful even when they perceived others' research as unrelated to their current research or teaching contexts. Helen, as an English language teacher, provided an example of how she could learn from general classroom teachers' research for future teaching situations. She commented, 'As a subject teacher I was only focused on teaching English but their topics were various and they were focusing on various aspects I didn't think of. I didn't think of doing Havruta in Korean classes … but maybe we can use that into English classes' (Helen2:157). Similarly, Carol, a general classroom teacher initially hesitant about using knowledge from subject teachers' research, eventually saw its potential for future use, remarking, 'after teachers chose the topic … I thought it's not directly relevant to my research but I thought later when I teach English or maybe I should try that in maths … I wasn't sure whether it would work but realised I could do it that way (Carol2:103).

These comments suggest that engaging in diverse research topics has its advantages. Participants seemed to recognise that knowledge was not context

bound, and that subject teachers could learn from general classroom teachers, and vice versa. Through these discussions, participants became aware of how both new and familiar teaching methodologies could be adapted to a variety of teaching situations. This realisation appeared to increase their self-efficacy and motivation to engage in reflection and knowledge restructuring.

5.5.2 Peer feedback

After each participant shared their classroom research, group members offered feedback. For Carol, this feedback proved constructive as it assisted her in navigating her research and overcoming barriers. She expressed, ‘If I'm not sure, someone giving feedback … it's helpful to give direction … when having a problem, an experienced teacher saying how about looking at it this way, it can unblock your path’ (Carol2:113). Alice added that teachers, particularly those with extensive teaching experience, can ‘get in a rut’ and be unable to decipher ‘what is wrong’((Alice2:153). However, through feedback, she could confirm if she was heading ‘in the right direction’ (Alice2:153). These comments aligned with research suggesting that peer feedback supports metacognition and self-regulation while providing the guidance learners need to progress in their learning (Pajares, 1996; Duckworth et al., 2009; Hadwin & Winne, 2010).

Peer feedback also provided participants with mutual support. Ilene commented on how others motivated her to persevere through difficult situations:

> sometimes they say, ‘oh you have a difficult situation, we don’t know the answer,’ but they say comforting words, ‘you are doing well. I think you are struggling with that part but the other part sounds really good, so keep going’, so it helped me a lot. And especially actually you know the ICELT programme teachers, we are more close so also Gail and Helen and me go the same way when we go back home so we talked about like thirty minutes about our daily life (Ilene2:82)

Ilene’s comment illustrated the importance of encouraging and affirming each other’s efficacy, not only concerning their classroom research but also in their everyday

teaching experiences. Participants often continued their conversations beyond the formal discussion sessions, especially with those they were close to.

While much of the peer feedback enabled participants to overcome obstacles by offering solutions and providing encouragement to persist, Gail provided a different perspective. She reflected on how certain feedback, particularly in the form of probing enquiry questions, stimulated her critical thinking skills:

> sometimes, they ask me questions I hadn't thought about, so, I was surprised. Sometimes, I'd say 'oh, I didn't think about that' and they just said 'I was just curious about it' … I spent some time thinking about that problem so that helped me' (Gail2:135)

Instead of providing advice or solutions, feedback in the form of enquiries appeared to expand Gail's thought processes, introducing an element of ambiguity and uncertainty that encouraged her to consider multiple perspectives beyond her own (Glazier et al., 2017). This type of feedback seemed to offer heuristic scaffolding (Holton & Clarke, 2006) through specific problem-related 'why' and 'how' questions. These questions served as a self-correcting mechanism, bolstering Gail's self-efficacy in problem-solving. This transition indicated a shift from comfortable towards critical collegiality. Gail found such feedback valuable, motivating her to provide similar feedback to others. She stated, 'Because I know this helped me a lot... I tried to give feedback by asking some questions' (Gail2:137).

However, despite such instances, there was an overall lack of evidence of participants providing critical feedback. This appeared to be primarily due to the quality of peer feedback, much of which had a problem-solving focus rather than participants challenging each other's practices, perspectives, and assumptions to encourage critical reflection on the value, purpose, and consequences of their actions (Little, 1990; Peterson, 1994; Kutsyuruba, 2011). The following section examines the possible causes for this limited critical feedback.

5.5.3 Challenges to providing critical feedback

Critiquing each other's views and challenging assumptions about common practices proved difficult for participants for a variety of reasons. Carol provided an example of a situation where she felt unable to give ‘open’ and ‘honest’ feedback to a fellow participant she had just met in the programme. She explained, ‘for me, if I’m familiar with the other teachers I’m more open … for example, x, when she talked about giving books [to students] I thought it might be boring … but you can’t say honestly… if I was talking to Beth because we are close, I can say books are boring etc.’ (Carol2:113).

Echoing Carol's sentiments, Ilene recounted an instance where her honest feedback to an unfamiliar participant was not well-received:

> I’m more open to someone I’m familiar with, so, in a group it’s sometimes hard to give frank feedback to the teacher I don’t know well… once I said [gave honest feedback], the person said ‘I don’t think that way. I’ll keep it this way even though it’s not working well’. Then, I don’t want to say any more (Ilene2:102)

Despite all participants sharing a common vision of enhancing their students' and their own learning, it appeared that a lack of trust and familiarity with certain group members created barriers for some individuals when it came to both giving and receiving critiques.

For some participants, difficulties came in the form of doubts about the validity of their critique and how it would be received. For example, Fay voiced her uncertainties, saying, ‘first of all, I’m not sure if my opinion is reasonable or not, and second, I’m not sure if I’m knowledgeable enough to critique that. … I’m not sure I fully understand their research, so, I’m cautious to say something’ (Fay2:83, 89-97). Similar concerns were echoed by other participants. Beth, for instance, wondered, ‘when I give some feedback, is it helpful for them? I don’t think so’ (Beth2:86). Carol also found critiquing others difficult, commenting, ‘because I’m not perfect, it might be right or not’ (Carol2:113).

The apparent lack of self-efficacy and motivation to provide constructive criticism may have led participants to offer more positive feedback and affirm others' solutions to problems, rather than suggesting alternative perspectives. Fay reflected on how the lack of critical feedback from others influenced her own approach, commenting, 'I had some critiques in my mind but it was hard to express them… because all they are saying is good things, if I point out faults I felt that it would be mean' (Fay2:89-98).

Several participants attributed the challenges of providing feedback to the unfamiliar context of having to offer immediate responses after a participant shared their research (Alice2:88; Carol2:107; Erin2:91; Ilene2:88). Ilene speculated that this expectation for quick feedback often resulted in generic responses, commenting 'If they had more time, they could think and provide a better answer, but there's no time, so, they just said common things' (Ilene2:88).

The variety of difficulties felt by the participants could be traced back to a non-critical culture prevalent in Korea and other Confucian-heritage cultures. This cultural context may have conditioned them to prioritise conformity to established norms and group harmony over expressing individual thoughts and exploring alternative viewpoints. This tendency is evident in feedback sessions after open classes, as detailed earlier in this chapter (section 5.3.1). Participants often noted that these sessions leaned towards praise rather than constructive critique. This aligns with research findings that teachers from Confucian-heritage cultures often struggle with expressing differing opinions (Kim, 2003; Park & So, 2014; Zhan & Wan, 2016).

However, a more crucial barrier to critical feedback than cultural issues might be participants' limited experience and knowledge in using metacognitive skills essential for critical dialogue. Research suggests that effective enquiry dialogue involves participants actively engaging with one another's ideas, elaborating on provided reasons, qualifying general statements, and identifying flaws in arguments—all of which necessitate learning and development (Wilkinson et al., 2017; Alexander, 2020). This highlights a potential limitation of the EBL programme. While it was designed to provide opportunities for participants to engage in reflective dialogue with peers by meeting every two weeks to discuss their research projects (Appendix

7), these discussion sessions were not specifically aimed at teaching and practising enquiry dialogue, a point further discussed in Chapter 8.

5.6 Conclusion

In this chapter, the findings suggest that the EBL programme provided increased opportunities for SRL, reflection, and collaborative learning, which are crucial for enhancing teacher agency for PLD (Chapter 3, pp.77-84). Notably, the first two areas appeared to be particularly lacking in the government-provided PLD environments and within participants' schools. In the short term, this enhanced support seemed to have a positive influence on participants' epistemological beliefs, self-efficacy, and motivation. This, in turn, empowered participants to take action based on their understanding of their individual contexts.

However, the analysis so far does not make it clear whether the EBL programme influenced participants to progress beyond content and process reflection to achieve effective learning (Mezirow, 1991). In other words, it does not indicate whether they advanced beyond instrumental learning towards critical reflection. This involves a critical examination of the underlying premises and consideration of the importance of effective learning (Bateson, 1973; Isaacs, 1993; Mezirow, 1991), which is considered essential in this study for achieving high-level teacher agency for PLD (Chapter 3, pp.86-88). There appears to be a need to explore the implications of these findings by further examining changes in participants' reflections and their impact within the school environment. This will be the focus of the next chapter.

Chapter 6: Reflections within the school environment: Short-term changes and sustainability

6.1 Introduction

The purpose of this chapter is to further explore the changes in reflection and the subsequent intentional actions within the school environment, both of which are considered essential for enhancing teacher agency for PLD (Chapter 2, p.52; Chapter 3, pp.80-88). The first half of the chapter examines the short-term effects of the enquiry-based learning (EBL) programme on participants within the classroom environment. The focus then shifts to analysing the programme's short-term impact on participants in the wider school environment, specifically looking at changes in collaborative learning with their school colleagues.

In the second half of the chapter, I investigate the sustainability of these short-term changes, particularly examining if and how they have been maintained in the participants' everyday working environments. To evaluate these changes, I compare and contrast immediate and long-term[6] follow-up data from six of the nine participants who were available for interviews. The analysis assesses sustainability initially within the classroom settings, then extends to examine the sustainability of collaborative learning with school colleagues.

After analysing the evolution of changes within the school environment, the final section of this chapter explores the impact of these changes on achieving participants' educational goals.

[6] For one participant, long-term follow-up data was collected six months after the end of the EBL programme (Chapter 4, p.112). For the other participants, the data was collected 12 months after the programme's conclusion. Therefore, from here on, any reference to participant changes in the long term refers to changes a year after the end of the EBL programme, with the exception of one participant.

6.2 Short-term changes: Reflection within the classroom environment

The analysis in Chapter 5 demonstrated that engaging with the cycle of learning (CofL) model provided participants with opportunities for reflection not typically practiced in regular teaching. This involved gathering and reflecting on both intrapersonal and interpersonal data, including video recordings of their teaching, journaling by both teachers and students, student questionnaires, and student interviews. Such processes promote engagement in both content and process reflection (Mezirow, 1991) and a shift towards adopting evaluatist beliefs (Kuhn, 1991), which are identified as crucial elements in enhancing teacher agency for PLD (Chapter 3, pp.81-88).

From the data analysis, it emerged that this process led participants to change their reflection, predominantly in three interdependent areas: students, self as a teacher, and teacher-student relationship. Subsequent sections investigate the changes within each area and explore their interconnectedness, examining how a shift in one area might affect the others.

This is then followed by an analysis of the findings through the lens of the reflection continuum, drawn from Mezirow's (1991) levels of reflection as discussed in Chapter 3 (p.83, Figure 3.3) and reproduced in Figure 6.1 (section 6.2.4). Moreover, recognising that the levels of reflection can differ among individual participants, potential reasons for these variances are suggested.

6.2.1 Reflection on students

For most participants, gathering and reflecting on student feedback revealed frequent mismatches between participant assumptions about students and the students' own experiences. For example, Carol initially assumed that 'smart' students were engaged and satisfied in her classes. However, upon receiving feedback from student questionnaires, she discovered that this was not always the case. She recounted an incident involving a class prefect, saying, 'I thought she will

like every activity we share but she said she was not so happy, so I was surprised' (Carol2:73).

Ilene also became aware, through student feedback, that her own observation-based assumptions did not align with the students' experiences. She described a carousel lesson in which students worked in groups on a series of different activities for a designated time. Initially, based solely on her observations, Ilene judged the lesson chaotic and labelled it a 'failure' (Ilene2:58). She admitted that in similar situations in the past, she would have 'just abandoned those activities' (Ilene2:58). However, this time, gathering and reflecting on positive feedback from students enabled her to break away from this usual action and consider ways she could improve it for future lessons. Such a change, as proposed by Mezirow (1991), suggested a shift from non-reflective habitual action to action grounded in reflection.

While the examples above illustrated how participants' reflections led to a reorientation of their beliefs concerning specific groups of students and particular instances, Helen described how discrepancies in her assumptions about an entire class of students prompted her to shift the focus of her classroom research. Initially, she had decided to concentrate on promoting collaborative learning with a class that appeared less receptive to this approach compared to others. She had assumed that the students favoured individual reading and writing activities, but data from student logs, surveys, and interviews revealed their preference for competitive activities. She admitted that she was 'shocked' because these assumptions contradicted her observations. As her classroom research began, she reorientated her beliefs about these students and started questioning the suitability of focusing on collaborative learning:

> I thought they were too shy … they were not confident … but it turned out to be like that's more like students' characteristics that cannot be changed at once, so I accepted that that's their characteristic and trait. So then what am I going to focus on? So, I focused on maximising their learning (Helen2:61)

It appeared that for these participants, gathering and reflecting on student feedback stimulated them to question their existing assumptions. Carol and Helen began to question whether compliance from students necessarily indicated effective learning.

Ilene, on the other hand, re-evaluated her belief that a noisy and less controlled lesson signified failure. These discrepancies between beliefs derived from classroom observations and student-reported experiences led them to reconsider the adequacy of relying solely on their observations as the basis for reflection. Instead, these participants sought to understand their students by communicating with them. Through this engagement, they examined the accuracy of their assumptions about the students and the effectiveness of their teaching strategies. According to Mezirow's theory (1991), these changes suggested both content and process reflection.

Through these reflections, participants recognised the importance of gathering student feedback, reflecting upon it, and incorporating it into their practice to better align with students' interests and needs. Carol reported using student surveys more frequently and 'changing, mending' activities based on feedback (Carol2:75). Ilene was motivated to adapt the carousel activity more successfully in subsequent maths lessons and also added, 'I used carousel activities with the other subjects because they [students] suggested it' (Ilene2:70). For Helen, these reflections prompted her to take greater consideration of student interests, leading her to introduce a variety of competitive and collaborative group activities aimed at enhancing their engagement and confidence in using English (Helen, session 8[7]).

Reflecting on student-generated data not only uncovered the difference between participants' perceptions and students' experiences but also raised awareness of other misconceptions regarding their students. Beth described how, before engaging in the CofL model, she 'just deliver[ed] knowledge' without considering that 'students could interact and learn from each other' (Beth2:19). Similarly, Carol reflected, 'I thought I had to lead the children', but realised that when she shared issues raised through student feedback, they 'provided better solutions... they are better than I expected, they are smarter than I expected' (Carol2:23, 27). Ilene expressed similar surprise about her students, stating 'when I did a questionnaire... I didn't expect them to suggest anything, and their suggestions looked really interesting' (Ilene2:72). These reflections reveal a tendency among participants to underestimate their students' capabilities, a pattern also noted in the study by Biesta

[7] Refers to data from EBL programme session 8

et al. (2015). However, reflection on student feedback appeared to lead participants to reorientate these beliefs.

Two participants, Fay and Alice, showed significant changes in their beliefs about their students. Their focus on classroom management as a research topic appeared to prompt them to examine previously unexamined attitudes towards students who displayed disruptive behaviour. Fay admitted that before engaging in the CofL model, she perceived disruptive students as ‘very rude, not well educated, [I] blamed their family …. I think before I took it as a personal insult or personal rudeness or that little kids hate me, and I hate you like that’ (Fay2:144-158). However, by reflecting on student feedback, self-recordings, and teacher journaling, she began to revise her view of students with behavioural issues and, consequently, her approach to classroom management:

> They [students] look more friendly… I start to look behind their behaviour, why do they do that? Why don’t they focus on learning in the classroom? … now I see the same students with different eyes and then think ‘that boy needs help, that boy doesn’t know how to behave better… I have to teach him how to behave better’ and then my reaction is more soft than before … so instead of taking it personally, I think I have to direct them in the right way and then I keep saying to myself, ‘it’s not because he hates me’ … and I feel better, I don’t feel insult from them (Fay2:144-158)

Similarly, Alice, who identified herself as a 'strict' teacher, described a change in her perception of students:

> When I look at my students, it’s not a good thing but I tended to decide that student will be like this, predicting their next action or how they will be as they grow up… I think I can think about that differently [now] … if they are acting in a certain way there is a story behind it, a story we don’t know about. The way I look at children I think has changed... looking at children thinking they all have their individual stories I don’t know about helps me to understand them a little better I think. In the past I got easily hurt by students now I’m hurt less… now I think there might be a visual or auditory or other problems with

> the student … I’m not getting angry but trying to have fun, relaxing (Alice2:104)

Fay's and Alice's comments illustrate how students' misbehaviour strongly influenced their affective state and led them to develop negative assumptions about their students. Before the EBL programme, they appeared to recognise these negative emotions without examining the underlying causes or reasons for these feelings, a process consistent with non-reflective introspection (Mezirow, 1991). This tendency seemed to prompt them to assert control over classroom behaviour through strict regulations and the implementation of negative sanctions (Fay2:184; Alice2:55). This form of non-reflection, which results in adverse behaviour towards students, has been linked to a low sense of self-efficacy in teachers (Bandura, 1997; Tschannen-Moran & Woolfolk Hoy, 2007; De Smul et al., 2018; Schipper et al., 2020).

However, engaging in classroom research enabled them to view the students as individuals and to appreciate the holistic aspects of students' learning. They reflected on the potential causes of misbehaviour, which seemed to positively influence their affective states and enhance their self-efficacy in managing challenging behaviour. For instance, Fay transitioned from viewing negative behaviour as a challenge to her authority to understanding that it might stem from students' unfamiliarity with class norms or learning difficulties (Fay2:176). Similarly, Alice started recognising each student’s unique history and concerns, considering how these factors might influence their behaviour. These reflections appeared to lead both Fay and Alice to shift from an authoritarian approach, where they enforced adherence to set rules, to a more authoritative approach, which involved setting clear boundaries and encouraging students to operate within them.

6.2.2 Reflection on self as a teacher

Increased reflection on students led all participants to engage in deeper self-reflection. Fay’s reorientation of her assumptions regarding disruptive students (section 6.2.1) appeared to initiate reflections about herself as a teacher, particularly

concerning her belief in adopting an authoritarian teaching style. She admitted, 'I always reflect about myself before, but I realised that it was not very correct after I done this research. Probably I misunderstand myself and I thought … controlling or oppressing is best way to benefit all of the students, but I changed a lot' (Fay2:287). She expressed her intention to adopt a less controlling approach in the future, with a focus on better addressing the needs of students struggling academically, stating, 'some kids don't want to get tutoring after school because probably they feel shameful about being in school late … so, I will ask "what can I do for you?" … and then if they have ideas, I can adjust [them]' (Fay2:190).

Similarly, Alice appeared to reassess her assumptions regarding her role as a teacher. Initially, her research focused on changing her students' negative behaviour. However, when this approach proved ineffective, she reframed the problem to examine her own attitude and behaviour towards her students. While reviewing recordings of her teaching sessions, she discovered new insights about herself (Alice2:36). She reported noticing the tension in her body, her rigid facial expressions, and her tendency to raise her voice, using 'not so respectful language' (Alice2:95) when upset. Through this process of self-reflection, similar to Fay, Alice's perception of the teacher's role appeared to undergo a significant change, as she reflected:

> I thought my perspective of the students needed to change first. If I don't change the students won't change… thinking the problem is with them so I have to change them, I thought, was wrong. So, in the end the teacher has to first listen and change their own minds in order for students to change. I needed to be a role model in order for them to change…. no matter how much nagging I did, and in nagging I'm not saying bad things but saying the right things, but in doing so the students didn't change. When I joked around then they responded (Alice2:53)

Alice realised that rather than enforcing regulations and 'nagging' them to comply, her reflective process led her to 'let go of my expectations of students a bit… looking at students in a more relaxed manner, and through that they will learn more' (Alice2:39). Such reflections appeared to demonstrate a change from seeing herself as an authoritarian figure to aspiring to be a 'role model' for her students.

While both Fay and Alice articulated a shift in their beliefs towards adopting a less authoritarian teacher role, self-reflections from other participants revealed varying perceptions of teacher roles. For instance, Carol once believed in an 'ideal' teacher who was a 'wise, brilliant teacher [who] can do everything, teach the class with no problems' (Carol2:93). She described the demands that accompanied this ideal:

> before I thought I had to lead by myself … I always felt pressure… I have to give something and make sure that no-one opts out of doing activities, that was really stressful… I just think I have to do too many things for students. For example, I have to prepare the topic … how can I make them understand and then how can I do next step, next step, constant pressure (Carol2:23, 41)

Before engaging in the EBL programme, Carol's perceptions of what constituted an effective teacher appeared to negatively influence her affective state and self-efficacy. Similarly, Alice's belief in the teacher as an authority figure also seemed to stem from a similar ideal, as she confessed to feeling 'trapped' in the belief that she had to manage every aspect of teaching 'perfectly' (Alice2:36). Other participants mentioned additional pressures, such as the need to 'fix problems by myself' (Beth 2:35-51) and the pressure to 'finish the textbook' (Ilene2:17). All of these comments suggested that the participants' perceptions of the teacher's role were more focused on performance and outcomes than on the process of learning.

Some participants demonstrated an awareness of how their past experiences as students in schools significantly shaped their beliefs about the roles of teachers and students. All the participants shared similar school experiences; they were educated in classes with as many as 60 students, classrooms were described as 'always teacher-centred' (Ilene2:207) where the 'teacher always lectured' (Helen2:223). Beth explained that in classrooms with a high number of students, teachers maintained control through strict rules of 'no moving, no talking' (Beth2:86). In such settings, teachers had unilateral control, while students were expected to remain quiet and listen.

Beth pointed out that, despite changes in classroom conditions with smaller class sizes, teachers still 'stick to the past perspectives' (Beth2:86). Several participants explicitly acknowledged that their own educational experiences had a direct impact

on their teaching practices. For example, Alice remarked, ‘the way I received education I’ve passed onto my students … when they crossed the line, I think I got quite angry… it’s ingrained within me, when I teach, it unconsciously comes out’ (Alice2:238). Similarly, Erin commented, ‘I have unpleasant memories from my childhood where I wasn’t respected as a student … [now] I find myself being really strict with the students’ (Erin2:10). Fay also reflected on her experiences, stating, ‘I was always a good student to my teachers. I never behaved badly to my teachers; I always respect them. I believed that that is the right way to interact with the teacher’ (Fay2:158). These findings appeared to align with research suggesting that teachers’ own educational experiences profoundly influence their understanding of their work and their role as educators (Lortie, 1975; Beck & Kosnik, 2006; Buchanan 2015; Priestley et al., 2015).

In addition to past influences on participants' beliefs about the teacher's role, some participants also highlighted how the current educational environment shapes their perceptions. For instance, Ilene reflected:

> So, I realised they [students] need their own time, like I explain many things [but] it’s not helping them that much… before [EBL programme] I focused on speed … so I just check like how many percent finish the question. Okay, eighty percent have finished so I’ll just say the answer and I will move onto the next question… before I have pressure, they have to finish the textbook in forty minutes but now I let them go free … I can wait for them [to finish] so that’s why I can focus on more quality (Ilene2:11, 15-17)

Previously, Ilene appeared to focus more on the speedy delivery of the syllabus content rather than quality of teaching that focused on tailoring learning to the students' needs and interests. However, engaging in more critical reflection appeared to have a positive influence on her self-efficacy to behave as the teacher she aspires to be and better meet her students’ needs and interests.

By engaging in critical self-reflection, participants seemed to begin emancipating themselves from their past beliefs and experiences, gradually reducing their adherence to external standards. For instance, Carol recognised that 'a brilliant teacher doesn't have to be perfect ... I realised I cannot do everything' (Carol2:21).

This insight prompted her to actively seek and incorporate feedback from her students:

> before [the EBL programme] I did feedback once and didn't think about it much but now depending on feedback I think about making changes … if I'm in trouble I tell my students 'frankly you answered like this, what do you want to do next time?' … so I think I gave many chance to my students to decide by themselves (Carol2:21, 27, 41)

Increased communication with her students through engaging in the CofL model appeared to increase Carol's self-efficacy, allowing her to relax teacher control and support the development of her students' interests and self-directedness. While some participants, like Carol, integrated more student suggestions into their lessons, others incorporated more peer learning activities into their classroom. For example, Ilene noted that 'they [students] learned how to learn by themselves and learn from their peers … sometimes it's more effective, they don't have to rely on only the teachers so it's the develop for the students' (Ilene2:35).

Participants' comments revealed that changes in their reflective practices impacted the power dynamics between them and their students. Both groups began to shift from a fixed hierarchical view of teacher and student roles, where learning was predominantly from teacher to student, to a more dynamic view. In this new perspective, learning could occur not only top-down from teacher to student but also bottom-up from students to teacher, and laterally among students. This shift appeared to lead to participants and students negotiating understanding and jointly creating knowledge to address classroom issues, rather than relating to one another as an authoritative source of knowledge and passive recipient (Jenkins, 2020). It appeared that participants were evolving from being deliverers of knowledge to becoming facilitators of learning, prompting a significant shift in the teacher-student relationship, which is examined next.

6.2.3 Reflection on teacher-student relationship

Enabling students to take a more active role in the classroom decision-making process required a change in the structure and quality of classroom interactions, shifting from one-way teacher knowledge transfer to fostering more open-ended, exploratory, and reciprocal communication. Student surveys and interviews aimed at identifying and resolving classroom issues facilitated the exchange of previously undisclosed information. This allowed students to share new insights, with participants responding based on this shared knowledge. Improved communication led to improved relationships between participants and students, as exemplified by Carol's remark, ‘I feel closer to my students’ (Carol2:27), and Helen and Ilene feeling valued through student feedback (Helen2:17; Ilene2:126), which acknowledged their efforts ‘to make the class better’ (Helen 2:17).

Helen's experience conducting informal student interviews as part of her research project led to shifts in students' attitudes, not only towards learning but also towards her as a teacher. She noted ‘first, they thought teacher was quite scary and they didn’t want to come to me and talk about their daily life … [before] when they meet me they say “Hello, teacher”, that’s all… [now] girls come to me and talked to me about whatever they want’ (Helen2:65). These interactions outside the English language learning context allowed students to view her as a more holistic individual with whom they could interact in a more open and diverse manner.

While many participants noted the positive impact of enhanced teacher-student communication and relationships on student learning, some showed evidence that improved teacher-student communication had benefits beyond facilitating effective learning. Beth’s reflection serves as an example as she compared her teaching experience this year, while engaged in the EBL programme, with her experiences in previous years:

> I didn’t plan it from the start till the end... I just believe in my students… we are doing and we can change things in our own way during the lesson and after the lesson I could see in their face they are proud of themselves, we could do it… even though there is a problem we can fix it together… [before] if there was a problem I usually try to fix the problem by myself but now for

> example they ask to change seating arrangements or I ask ‘what would be a good seating arrangement? … do you think close friends in the same group is ok or not?’ students can give opinions and we decide together (Beth2:35-51)

Beth’s account of her interactions with her students, and her use of ‘we’ rather than ‘I’, suggest that she and her students engaged in meaningful communication, which fostered a sense of pride, community, and ownership of learning among her students. This aligns with Cranton & Carusetta’s (2004) description of an authentic teacher-student relationship, where students are trusted and given a voice in their own education. As a result, Beth noted that this year had run more ‘smoothly’ (Beth2:35-51) and that the students were ‘happy in my classroom’ (Beth2: 31). These reflections suggest Beth's awareness that cultivating a quality teacher-student relationship not only facilitated effective learning but also led to increased happiness (Johnston, 2012).

Similarly, Fay's reflections extended beyond the classroom, emphasising the significance of kindness and personal relationships in enhancing students' overall school life (Fay2:219). In alignment with Beth's perspective, Fay stressed the importance of students' happiness:

> if I see my students are really happy in my classroom I can feel that but if I’ve done something wrong the feedback comes from the students instantly and then that makes me feel discouraged, I’m a bad teacher, I don’t know how to be a good teacher or something… solving my problem makes me react more positively to my students and gives me satisfaction about my career. They have a better teacher. Because students spend almost all day in school, if they are not happy in the classroom their whole life is not happy. So, if I am [happy], I behave better and that will benefit my students (Fay2:137-140)

Fay demonstrated an awareness of the interconnectedness of teacher and student attitudes and behaviour. She recognised that her actions and development as a teacher influenced her students, which, in turn, impacted her own behaviour. Moreover, she reflected on the underlying importance of this connection, recognising, like Alice, that an improved teacher-student relationship enhanced the happiness (Johnston, 2012) and wellbeing (Huppert, 2007; Bingham & Bubb, 2022)

of both herself and her students. Fay's statement that 'if they are not happy in the classroom, their whole life is not happy' reflected a broader perspective on schooling, one that extends beyond learning, echoing Durrant's (2020) viewpoint that school is part of life, not just a preparation for it.

While many participants emphasised improved relationships with students, Alice reflected on the broader importance of human interdependency:

> The strange thing is that I thought I was doing research just on my topic but in the end the way of life, the way I think, say and act, it all has relevance. Of course, it has impact on teaching but for me what was really meaningful was it affected how I taught my kids and how I related to other people which was surprising … this year I'm looking forward to teaching. I'm going to teach sixth grade English and in the past I'd worry about it at the beginning but I think I can do it. [I] feel much more comfortable with teaching (Alice2:55-57)

It appeared that participating in the EBL programme led her to anticipate instrumental changes in her teaching. However, she realised that the experience had a broader influence on her interactions with people in general. Within the context of school life, she seemed to adopt a more positive outlook regarding her relationships with students, students' parents, and school colleagues (Alice2:104). This newfound perspective appeared to increase her affective control, self-efficacy and motivation to teach, even in situations she perceived as challenging, such as teaching sixth grade.

6.2.4 Interpreting the development of reflection

The analysis of findings across the three interconnected domains—students, self as a teacher, and teacher-student relationship—suggests that changes within the classroom environment began with reflections on beliefs about students. These reflections appeared to trigger self-reflections, leading participants to re-evaluate their long-held assumptions about the roles of teachers and students. This, in turn, appeared to result in positive shifts in the teacher-student relationship. As Mezirow & Taylor (2009) point out, transformations can be epochal, characterised by dramatic

or major changes, or they can be incremental. For the participants in this study, the transformation appears to have been incremental.

Examining these incremental changes through the lens of the reflection continuum (Figure 6.1), which is based on Mezirow's theories of reflection (1991), reveals that all participants transitioned from non-reflection to the reflection level in the short term. Additionally, some exhibited signs of engaging in critical reflection.

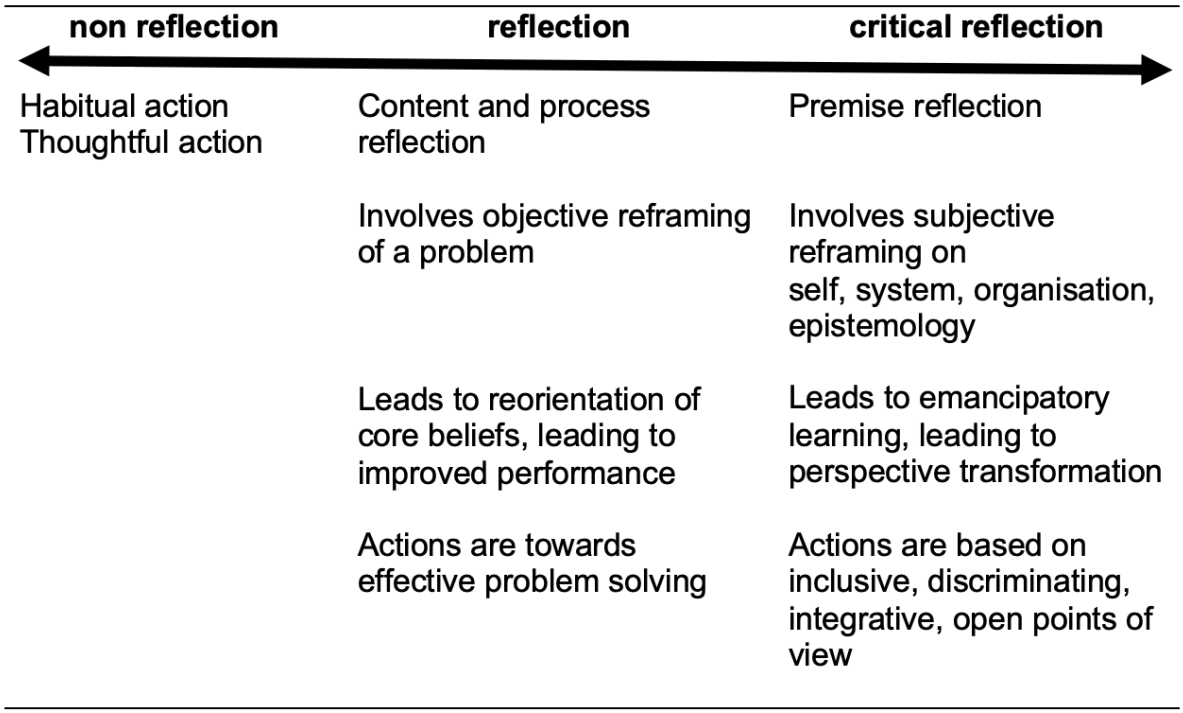

Figure 6.1: Reflection continuum

Before participating in the EBL programme, self-reports indicated that participants' interactions with students were predominantly control-oriented, with a primary focus on achieving set outcomes. However, after engaging with the programme, the majority appeared to transition from this non-reflective stance to a reflective one, involving both process and content reflection (Mezirow, 1991). This shift seemed to lead to an awareness that teaching was not about adopting a fixed 'right' perspective but rather about being open to alternatives (Biesta, 2009; Kennedy, 2015). As a result, participants appeared to construct a more creative and effective classroom learning environment in which students were given a more active role in the classroom decision-making processes.

While most participants appeared to engage in reflections aimed at achieving effective learning, some demonstrated signs of moving towards critical reflection (Figure 6.1). This shift was evident in the more open-ended, exploratory, and thus authentic interactions (Cranton & Carusetta, 2004) between participants and students, enabling them to support and encourage students' individual interests and creativity, and to give students trust and a voice in their own education. Participants seemed to realise that cultivating genuine teacher-student relationships not only facilitated effective learning but also enhanced the happiness (Johnston, 2012) and wellbeing (Huppert, 2007; Bingham & Bubb, 2022) of both students and themselves.

The chapter so far has looked at changes to participants' perspectives within the classroom setting. The next section moves on to examining changes to participants' reflections regarding collaborative learning with school colleagues.

6.3 Short-term changes: Reflection within the wider school environment

Within the EBL programme, participants engaged in collaboration with teachers committed to both their professional growth and the advancement of their students. This interaction seemed to prompt a re-evaluation of the participants' prior views on teachers as a whole (Chapter 5, pp.139-141). Gail discussed her evolving perspective towards more experienced teachers:

> the other four teachers that I met for the first time [on the EBL programme], they were older than us and still did so many things and they tried to apply some trendy ideas or they tried to do something new and I was really surprised because in my school I don't have that types of teachers …. the teachers on the programme, they have energy and want to try something new… they can affect the students … I want to become a teacher like that in the future (Gail2:111-113)

While Gail found herself inspired by the hard-working older teachers she encountered during the programme, she noted the absence of such figures in her

school. When Gail attempted to share innovative teaching strategies and her experiences from her classroom research with her colleagues, not everyone appeared to be receptive:

> I like making different activities and making [activity] stations for the students but if I tell this to other teachers, they don't like it sometimes … some of them were quite jealous about that so I tried not to talk about my lessons to other teachers… it's like she's bragging… some teachers accept my ideas that way so I didn't want to share my ideas (Gail2:37-41)

Several participants also highlighted challenges they encountered when sharing their classroom research experiences with school colleagues. Carol and Helen both felt that their colleagues were disinterested in what they had to say (Carol2:81; Helen2:115), while Fay, fearing judgment, chose not to share her experiences. She expressed concern, stating, 'if I say that I'm doing research they will probably think 'that teacher probably want external prize or something', so, probably it would not give them good impression [of me]' (Fay2:29). These reflections suggest that while participants wanted to work collaboratively with their school colleagues, they perceived resistance or indifference from them.

In contrast, a couple of participants seemed to re-evaluate their prior negative perceptions of collaborative learning with their colleagues. Unlike Gail, Beth's shift towards a more positive view of teachers not only applied to teachers in general but also included her school colleagues:

> I couldn't realise that there are so many teachers who are eager to study without any reward. I didn't trust my colleagues… teachers are very passive, I used to think like this. Teachers learn when they have some reward from education ministry or when they want to get some promotion… but I could break this kind of thinking. There are so many teachers who want to teach their students better… [before] I thought it is hard to find some colleagues who can learn together… [now I think] even in my school there must be the teachers who must be eager to learn something (Beth2:7, 141).

However, despite her newfound openness to collaboration, her school lacked a learning community that aligned with her interests. This situation implied that Beth would have to establish such a community herself. Yet, she expressed uncertainty about the logistics and her role in this task, saying, 'I want to be a member of a learning group, but if I suggest something, I also have to take the lead, so I'm not confident' (Beth2:153).

Alice also displayed a notable change in her attitude towards working collaboratively with her peers in school (Alice2:65). Recognising the benefits of collective problem-solving, she decided to join a pre-existing group at her school:

> the teachers got together and talked about problems relating to class and in the past even if there was such a meeting I wouldn't have gone … [previously] I would have struggled by myself trying to solve problems. Talking about things I realised was important … through talking about the problem [I realised] it's not just me with this problem. … I was able to stop blaming myself, this is a problem that all teachers have … before I blamed the homeroom teacher as well. Why did he make the students like this? But that was my arrogance and prejudice…. I took it as a limit in that teacher's ability. That also made me look back on myself. So having a relationship with my colleagues was a new experience (Alice2:55-57).

Through her interactions, Alice realised that many of her colleagues faced similar classroom challenges. These exchanges seemed to have a positive influence on her affective control and diminish her tendency to place blame on herself and others. Such reflections appeared to enhance her self-efficacy in problem-solving and seeking solutions collaboratively. Importantly, unlike Beth, Alice had the advantage of an existing collaborative learning community within her school, which she was interested in joining. Whether this shift in reflection was sufficient to increase her self-efficacy to the extent of initiating a similar learning community on her own will be explored in the subsequent chapter.

6.3.1 Interpreting the changes

Data analysis from the broader school environment reveals that, even after participating in the EBL programme, seven of the nine participants maintained their usual practice of comfortable collegiality, sharing practices and materials as they had before the programme (Chapter 5, p.139). In contrast, Alice and Beth appeared to engage in increased reflection, articulating their reorientation of beliefs regarding their colleagues. However, only Alice was able to translate this reorientation into action by joining a learning community within her school.

The absence of critical reflection among participants within this context was evident by a lack of reflection on the potential reasons for their negative attitudes towards their school colleagues and the broader importance of collaboration beyond learning outcomes. These views appeared to maintain the status quo rather than develop teacher learning and change through critical collegiality. This is characterised by critical reflection of one's own practices, perspectives, and assumptions as well as those of others (Louis et al., 1995; Hord, 2004; Stoll et al., 2006; Glazier et al., 2017) within a collegiate space that is supportive, respectful and trustworthy (Priestley et al., 2012; Ning et al., 2015; Pantić, 2015; Quinn & Carl, 2015; Woodhouse & Pedder, 2017). While Alice did display some evidence of critical reflection with her statement, ‘in many ways learning together is the way we live’ (Alice2:65), her lack of reflection on prior negative views about collaborating with school colleagues—a contrast to her reflections regarding students—suggested that she engaged in more comfortable collegiality than in critical reflection.

Overall, the impact of the EBL programme on participants seemed more pronounced within classroom settings than in the wider school environment. Several factors may account for this difference. First, participants focused their research on instigating changes within the classroom environment. Consequently, it is not surprising that most observed changes occurred here rather than in collaborative learning with colleagues. Second, and perhaps more significantly, situational factors appeared to present substantial barriers to change within the wider school environment. The absence of a collaborative professional learning culture within participants' schools appeared to limit their self-efficacy in effecting change in collaborative learning with

colleagues. These findings align with research suggesting that teacher efficacy varies based on specific activities and situational conditions, rather than being uniformly consistent across all tasks and settings (Mercer, 2011; Bandura, 2012; Pantić, 2015; De Smul et al., 2018).

6.4 Key findings of short-term changes

The chapter has so far investigated the short-term changes in participants' reflections and actions following their engagement in the EBL programme. By utilising the reflection continuum (Figure 6.1) within both the classroom and school environments, three main findings have emerged:

1. Engaging in the CofL model led to changes in levels of reflection, and these changes positively influenced self-efficacy, motivation, affect, and action

The data suggested that engaging in the CofL model of planning, doing, observing, and reflecting, enabled participants to progress from non-reflection to reflection level within the classroom environment, with some exhibiting signs of critical reflection. These changes were incremental (Mezirow & Taylor, 2009), beginning with a reorientation of beliefs about students. This prompted participants to engage in reflection on themselves as a teacher, which subsequently led to positive changes in teacher-student relationship.

It was found that increased reflection positively influenced participants' self-efficacy, motivation, and affective control, leading to positive changes in action. These changes included better addressing students' needs, incorporating more student-centred activities and classroom management techniques, enhancing open communication and problem-solving with students, and emphasising the quality of learning over quantity to achieve more effective learning outcomes.

2. Individual differences were evident between levels of reflection

The data indicate that while most participants transitioned from a state of non-reflection to reflection, only a few exhibited critical reflection. This deeper level of reflection was characterised by an understanding of the importance of authentic teacher-student relationships (Cranton & Carusetta, 2004), facilitated through open-ended, exploratory interactions between participants and students. These interactions enabled participants to support students' individual interests and creativity, and to give students trust and a voice in their own education. Participants who engaged in this level of reflection became aware that quality teacher-student relationship not only facilitated effective learning but also increased the happiness (Johnston, 2012) and wellbeing (Huppert, 2007; Bingham & Bubb, 2022) of both students and themselves.

3. Changes in reflection were context-dependent, with major shifts observed within the classroom environment and minor changes within the wider school environment

Overall, the impact of the EBL programme on participants appeared to be more pronounced within classroom environment than in the wider school environment. Only a couple of participants demonstrated increased reflection when collaborating with school colleagues. This shift—a move beyond comfortable collegiality—was suggested by a reorientation of their beliefs about their colleagues and an increased awareness of the importance of engaging in reflective dialogue with them. However, only one participant exhibited a behavioural change by joining an existing teacher learning group at their school. The differences in levels of change in participants' reflection and actions between the classroom and the wider school environment can be attributed to the participants' research focus and situational factors.

In summary, the findings so far have shown that participation in the EBL programme led to positive changes in participants' reflections and actions, predominantly within the classroom environment. However, these insights raise questions regarding the sustainability of such changes. It is hypothesised that individuals who engaged in reflection beyond problem-solving for effective learning might be better able to

sustain these changes over the long term. The subsequent sections explores this topic.

6.5 Sustainability of changes within the classroom environment

To examine sustainability within the classroom environment, I compared immediate and long-term follow-up data concerning participants' perceived changes in epistemology, as well as their reflections on student roles, self as a teacher, and student-teacher relationship (sections 6.2.1, 6.2.2, and 6.2.3).

6.5.1 Sustaining reflection

Participants were asked to reflect on whether they had noticed any lasting changes in their attitudes or behaviours since completing the EBL programme. For instance, Fay, who had previously transitioned from behaviour suggesting an authoritative teacher role during the EBL programme (section 6.2.2), commented, ‘before [the EBL programme] I didn’t pay much attention to what students think… [now] I’m aware of my students’ reaction and how they feel and think about my activity’ (Fay3:85-87). She shared that she let go of the ‘illusion’ (Fay3:85-87) of perfect teaching and realised that ‘showing my good teaching style to students does not have as much effect as them actually doing it and learning from their mistakes’ (Fay3:85-87). Her comments suggest a sustained change in her attitude and teaching style, moving from a teacher-centred to a more student-centred approach.

Alice commented that her changed attitude towards her students has continued to enable her to adopt a more ‘relaxed’ approach to teaching (Alice3:37). She reported that she now ‘observe[s] them more objectively, rather than teaching to plan, what happens depends on the students’ (Alice3:68). This change, in turn, appeared to have a positive impact on the students:

> Even students in situations where fighting may break out, they seem more relaxed. For example, in the past during group activity if things didn’t happen within the set time they would get angry…. but now they wait and encourage each other and show a more relaxed attitude (Alice3:37)

Alice's increased reflection suggests a sustained high self-efficacy and motivation to act based on what she believes is best for her students, which was mirrored by others. For example, before the EBL programme, Ilene emphasised quantity in her teaching, aiming to cover as much of the textbooks as possible. However, after engaging with the cycle of learning (CofL) model, she began to recognise the value of the process and the quality of learning (Ilene2:11, 15-17). This change appeared to have been sustained, as she commented, 'I try to have fewer activities so they have more time to talk' (Ilene3:103). Similarly, Beth conveyed increased confidence in deviating from the prescribed syllabus since participating in the EBL programme. She stated, 'I think I have the ability to create my own programme or project… [before] I thought it was too difficult to adjust to my classroom. But now I can be brave to try many things that [other] teachers show me or that teachers share on the internet' (Beth3:84). Notably, Beth's classroom innovations appear to be closely tied to collaborative learning, a topic to be further explored in a subsequent section (section 6.6.2).

The individual experiences of Fay, Alice, Ilene, and Beth collectively highlight a shift in teaching styles, moving from a focus on adherence to external standards to a more dynamic, student-centred approach. This evolution in their teaching methods aligns with the epistemological shift from an absolutist, fixed knowledge frame to a more evaluative, dynamic knowledge frame (Kuhn, 1991; Johnston, 2012). This shift, initially observed in the short term, appears to have been sustained over time. For Beth, this meant incorporating more project work (Beth3:84). Meanwhile, Fay appeared to successfully adapt teaching methodologies she was familiar with to new contexts. Reflecting on this, she detailed how she applied English teaching techniques to enhance her maths lessons, making them more student-centred:

> Nowadays, I ask them to select two questions from the chapter and then make a question card. Half of the group will go around and be a peer teacher who has to explain the same two problems to a lot of other people… when they explain the problem again and again, I knew that they get it, get it totally…. So, it's kind of repeating the principle in learning English, we repeat the same sentences over and over again. I applied it to maths problems and I saw that it was really effective, and students enjoyed that (Fay3:97)

The sustained shift in epistemology was notably evident in Beth's reflections. When asked whether she still accepted expert knowledge without reflection, Beth stated, 'I thought memorising what experts said was important … before [the EBL programme] I read more books, theory, government material… I thought that contained the right answers… education in Korea, teacher training programmes made me just follow the rules academics made' (Beth3:192-203). Her comment suggests that her previous experiences with PLD influenced her to accept and rely on expert knowledge and opinions unreflectively. However, the EBL programme appeared to influence her to critically reflect on how traditional roles and the dynamics between teachers and educational structures both shaped and constrained her perspectives, promoting a dependence on authoritative figures for knowledge. This reflection suggests her willingness to critically assess the underlying assumptions about the education system. Such reflective processes align with the systemic critical self-reflection of assumptions described by Mezirow (1998).

Participating in the EBL programme appeared to enable Beth to make explicit her process of epistemic cognition (Mezirow, 1991). This reframing process was not only directed at solving an immediate problem but also at explicitly identifying her frames of reference for understanding herself as a learner and an educator. This insight seemed to positively influence her self-efficacy as she commented, 'now I can be brave to try many things … when I find ideas, now I can say simply oh I can do it, I want to do it' (Beth3:78-86). Her response marked a major shift in her self-efficacy, especially when contrasted with her beliefs prior to the EBL programme, where she thought, 'before joining this programme … I thought I couldn't change my students much' (Beth2:9-19).

Alice also described how she had previously accepted expert knowledge without question, referring to theoretical educational material as 'truly the right answer… almost like the bible'. She believed that if a theory didn't translate effectively into practice, it was her fault (Alice3:207). This stance suggested that she adhered to an absolutist epistemology (Kuhn, 1991) and believed in a universal rule applicable across all contexts (Chapter 5, p.132). However, after engaging in the EBL programme, her perspective seemed to shift, saying, '[before] regardless of how the students were and the working environment I wanted to utilise everything that I had

learnt… [now] I think I can get beyond that kind of thought' (Alice3:89). A year later, she contended that her former belief was 'not right. That's their theory which is different from my students and how I teach. I can be more selective now. Even if I use it, it's not exactly the same. I can discern more' (Alice3:207). She noted that she now reflects more objectively, enabling her to better cater to her students' needs:

> Before [the EBL programme] I was affected a lot by people, if students were not interested in the lesson, it affected my pride. Now I'm affected less so it's ok. The lesson if it doesn't go well, I think 'next time I can do it differently' … before it affected me a lot which had negative consequences but now I can control it more and take it as something to think about and move on (Alice3:224)

Alice's belief that she can approach future lessons differently, without resorting to the negative sanctions she previously employed before participating in the EBL programme, suggests that she consistently engaged in reflective practices to enhance effective learning. Moreover, her remarks imply a sustained shift in her perspective of learning—moving from viewing it as a finite search for an ideal solution to understanding it as a continuous process.

Overall, evidence suggests that many participants maintained a belief in an evaluatist epistemology. However, there was comparatively less evidence of them sustaining critical reflection, as discussed in the next section.

6.5.2 Challenges of sustaining reflection

In contrast to the daily routine of teaching, engaging in the CofL model required all participants to systematically plan and collect data using various methods (Appendix 6). This approach increased participants' awareness of the limitations of solely relying on teacher observations to inform their actions.

However, a year following the EBL programme, two out of the six participants interviewed—Fay and Beth—appeared to have returned to relying primarily on teacher observations. For instance, Fay remarked, 'I just observed my students

actively participating in the class but I didn't do the survey thing… because usually we don't have time' (Fay3:126). While Fay cited time constraints as a reason for not engaging in interpersonal reflections, Beth believed that more formal student feedback was not necessary. She commented, 'analysing results is stressful' (Beth3:211-219) and that she could see and 'feel' (Beth3:211) from student reactions whether something was working or not.

While Fay and Beth relied on teacher observations as data for reflection, Alice emphasised the importance of self-reflection. She commented, 'depending on teacher's attitude students change. For me I first looked at myself. Before [the EBL programme] I thought the problem were always with students, so I wanted to know how I can change the students' (Alice3:33). For Alice, maintaining a teaching journal was a valuable tool. She noted that writing regularly seemed to promote reflective thinking, saying, 'I write a journal, if there is something out of the ordinary, if I tried something and students reacted a certain way that kind of thing, my attitude, lesson atmosphere, problems … it makes me look back on the lessons, it's a big resource for my next lesson. If there's something that doesn't work I feel I can change it' (Alice:3:33, 74).

Despite signs of such self-reflective practices, there was a noticeable decrease in process reflection (Mezirow, 1991) from Fay, Beth, and Alice. This was evident as these participants probed less into the reasons behind their specific perceptions and actions compared to their reports shortly after the EBL programme. This decline was unexpected, as these three participants had previously shown indications of critical reflection during their participation in the programme. Previously, their insights suggested that cultivating genuine teacher-student relationships not only addressed classroom challenges but also enhanced the happiness (Johnston, 2012) and wellbeing (Huppert, 2007; Bingham & Bubb, 2022) of both students and themselves.

The shift back to relying primarily on teacher observation raises concerns, particularly in the context of fostering student-centred learning environments. While teachers reported successful implementation of student-centred lessons and observed an increase in student engagement, the lack of gathering and reflecting on student feedback limited their opportunities for open-ended, exploratory, and thus

more authentic interactions (Cranton & Carusetta, 2004) with students. This might result in participants:

- Mistaking compliance for genuine engagement (section 6.2.1).
- Overlooking the needs of a minority who might not overtly express their desires and requirements.
- Reducing opportunities for students to assume a proactive, participatory role in classroom decision-making processes by evaluating classroom activities, offering suggestions, and shaping their future learning.
- Limiting the exchange of valid information, which could negatively affect the teacher-student relationship.

In contrast to Beth, Fay, and Alice, the other three participants—Gail, Helen, and Ilene—appeared to engage in sustained process reflection (Mezirow, 1991). They reported using student surveys to understand student interests, evaluate classroom activities, and assess expectations for the academic year (Gail3:38; Helen3:127; Ilene3:109). Although they had not initially shown signs of critical reflection, they were more successful in sustaining process reflection over the long term.

The reason for their continued engagement with process reflection may vary among the participants. Ilene and Helen's ongoing collection and reflection on data generated by students could be attributed to the significant influence of this practice on their reorientation of teacher and student roles during the EBL programme. Gail's sustained engagement seems to be driven by her belief in the value the reflection process as a means to clarify ideas that were previously 'all mingled together' (Gail2: 131). The CofL model appeared to provide her with the metacognitive knowledge needed to systematically organise her thoughts and actions to achieve her goals. She stated, 'Before I start action research, I just tried what I wanted to do but now I try to find the best way, what I should do, and that's the difference' (Gail3:137). She achieves this by triangulating various data sources, including student surveys, student journals, and video recordings of her teaching (Gail3:38). These individual variations can be interpreted through Mezirow's theory (1991), which suggests that individuals are at different levels of readiness for reflective learning that leads to change.

Furthermore, while most participants focused on changes within their classrooms, Gail's reflections indicated her wish to influence the wider education system:

> When I see schools and teachers sometimes they do not want to change. They have their certain stereotypes and they just follow what they've done and what their parents did in the past. I think that I'm not satisfied with this situation as a teacher, with the government curriculum and their ideas or the system that we have in Korea, so I think always want to change in certain ways … desire to study research comes from this idea that I want to change the system, the curriculum in Korea… society changes really fast and it's developing really quickly but education system in Korea especially is changing in small amounts (Gail3:90-94)

Gail's comments suggest that she critically reflected on education policy in Korea and its inclination to preserve traditions and stereotypes, possibly concerning teacher and student roles, rather than fostering change and progress. Prior to the EBL programme, she had already aspired to change the education policy. She did not seem fully aligned with traditionally assigned roles, suggesting she was an emancipated learner (Mezirow, 1991). The EBL programme appeared to provide her with the metacognitive knowledge and experiences to persist towards her goal of 'help[ing] change policy' (Gail3:90-94). She proposed to start with 'small steps' (Gail3: 90-94, 124-127), such as bottom-up classroom research towards achieving her goal. Gail appeared to be progressing towards becoming a transformative learner, recognising the restrictive nature of the Korean educational culture. However, there seemed to be less self-reflection on how the system limited her self-concept and attitudes, aspects Mezirow (1991) identified as essential for transformational learning.

Overall, in the long term, there appeared to be limited evidence of sustained high-level reflection, which is considered essential for high-level teacher agency for PLD (Chapter 3, pp.86-88). With this understanding, I will now shift the focus to sustaining change in the wider school environment.

6.6 Sustainability of changes within the wider school environment

This section examines the sustainability of changes in participants' perceptions and actions towards collaborative learning with school colleagues after completing the EBL programme.

6.6.1 Development of comfortable collegiality

After the EBL programme, the initial data analysis revealed that only a couple of participants, Beth and Alice, found collaborating with their peers on the programme influential in reorientating their beliefs about collaborating with school colleagues. Specifically, Alice appeared to exhibit a notable shift by translating her changed beliefs into action by joining a learning group within her school. A year later, both Alice and Beth maintained their reflections on the significance of enhanced collaboration with peers. Alice expressed an interest in opening her class for peer observations and discussions (Alice3:102,154), while Beth aimed to deepen her engagement with her peers through a learning community (detailed further in section 6.6.2).

In contrast to their initial reactions after the EBL programme, other participants reported a positive shift over time. For example, Helen recognised that the challenges she encountered in her classes were not solely her problems. She recalled, ‘I think I wasn’t eager to talk to the other teachers [before] because that’s my problem and in my classroom that I have to solve’ (Helen3:133). Now, she reported that she engages more actively in informal discussions with her peers, stating, ‘whenever I try some new things and if there is a problem we always gather as a group, like same grade teachers gather in groups and have tea-time’ (Helen3:133-135). Similarly, Fay felt that her openness in the EBL programme led her to be more open with her school colleagues, commenting she was now ‘not afraid of asking for help or advice from them’ (Fay3:138-140). Their comments suggested an increased engagement in storytelling, sharing of teaching materials,

and exchanging teaching ideas with their peers, which indicate comfortable collegiality.

While changes in reflection appeared to enable these participants to share more classroom experiences with their colleagues, for Gail, being relocated to a new school facilitated increased collaboration. She drew a comparison between her previous and current schools:

> Last year there were eight classes in the same grade but now we have four so it's more like family and we can share ideas often … we are all new teachers from other schools so we had to figure it out altogether … once a week we have a meeting and we talk about the kids and how to solve problems… in my previous school some the teachers did not want to try what I had done on the action research project, they thought that I'm bragging about learning… but this year there are only four teachers [in my year group] and they are interested in developing their lessons and skills so it was easier for me to share my ideas, what I learned from action research… the teachers are very open-minded so, when I asked them to try something together they really liked doing that. So ,when I share my idea I feel much freedom and it feels much easier than before (Gail3:64-72)

Through reflective dialogue with colleagues, who were also new arrivals, she seemed to be able to examine assumptions related to content and process learning (Mezirow, 1991) in pursuit of more effective learning outcomes.

While Gail's experience provides one perspective on relocation to other schools, Alice's situation presents a contrasting view. Although she remained in the same school, Alice faced challenges in collaborating with peers after members of the learning group she had joined left the school:

> Teachers have left so it's difficult to get together again… changing members make it difficult to continue. This year I don't know what will happen… it takes time, in reality finding someone you get on with is difficult (Alice3:49, 104-110)

Despite her changed attitude towards collaborating more with school colleagues, it appeared that the shift was not enough to boost her self-efficacy and motivation to establish a new learning community.

While the EBL programme appeared to benefit most participants, prompting increased collaboration and idea exchange with peers, this collaboration mainly manifested as comfortable collegiality. Although this collegiality is seen to promote teacher agency for PLD, it is unlikely to enable high-level teacher agency (Chapter 3, pp.86-88). Instead of deepening their collaborations within their own schools, many sought out external opportunities. For instance, Fay mentioned participating in formal mentoring programmes and forming informal collaborative learning groups with teachers from other schools (Fay3:55-59). Ilene and Helen also reported similar engagements (Ilene3:25; Helen3:69). However, there was an exception to this trend, which I will now move on to examine.

6.6.2 Development of critical collegiality

After collaborating with peers in the EBL programme, Beth appeared to reorientate her beliefs, stating that there must be teachers in her school who were 'eager to learn' (Beth2:141). However, she expressed reservations about forming and organising a collaborative learning group with her colleagues (Beth2:153). A year later, she reflected on her past stance, saying that was 'me in the past' (Beth3:37), indicating she no longer held those reservations:

> [Now] I have a 'try' attitude. If there's something that interests the students and I, I try it, and I go observe other people if I'm interested in something … now without dread I can open my class and go to other classes, I can easily ask people to come to meetings … I asked other teachers if I could observe their class in my free period if I was interested in what they were doing and I went if they agreed… I had teachers I could chat to [before] but now I feel I can chat about educational things as well… some people are interested, others not. In the past I was afraid if they were not interested in what I was saying, I was hurt. Thinking they wouldn't be interested I didn't try… now

> whether they are interested or not I can be open about what I'm interested in… I don't think I feel hurt that much. If they feel the same I'm really happy and say 'let's do it together' (Beth3:118-128)

Beth's resilience to differing opinions from colleagues might stem from her more objective view of their reactions, seeing them not as personal rejections but as differences in perspective. Her resilience, despite environmental constraints, was further highlighted when she shared that she had initiated a 'slow reading' programme with some teachers, but they were 'separated because of the principal so I have to try to find others in my year' (Beth3:60-2). She believed that 'people who are interested in the same topic can form a community' (Beth3:128). Beth's mindset and actions align with characteristics of individuals possessing high self-efficacy (Bandura, 1990; Zimmerman, 2013; Schunk & DiBenedetto, 2014). She seemed to exhibit: i) high levels of motivation and perseverance, even when faced with obstacles in collaborative learning; ii) a desire for cognitive growth, setting challenging goals such as collaborating with peers; iii) effective self-regulation of her affective state, maintaining emotional control when interacting with colleagues holding different views.

Several factors may have contributed to Beth's transformation. She critically reflected on her past educational experiences and recognised their negative influence on her self-efficacy. She stated, 'I thought there was no good teaching model and I always wanted to do something new but didn't know how. I don't have experience and there's nowhere that taught it, so, I couldn't try it I thought' (Beth3:241). Now, rather than focusing on the constraints in her environment, she appeared to become more aware of the affordances available to her:

> small ideas that colleagues next to me have, even though I wasn't directly taught by them they could be mentors but I didn't realise… throughout the years sharing ideas from other teachers I can see a variety of ideas so I don't need to follow the same idea from the government curriculum … courage I need courage… experiences and sharing, those things helped me to try new ideas… it gets easier to try, more courage, less stress. Just in my mind 'I can do it'. In the past I asked myself 'can I do it?' The question still comes to my

> mind at first but these days I think ‘it looks fun, I want to do it’ (Beth3:90-100, 243)

Beth’s comment suggested a significant shift in self-efficacy, enabling her to actively engage in collaborative learning with colleagues. This shift seemed to stem from her effective application of the knowledge she acquired through engaging with the CofL model, which contributed to her newfound belief that she could make a positive difference in student learning. Another important factor in this change might be her belief in learning as a social process. Before the EBL programme, she described teaching and learning as 'living together with students' (Beth1:24). For Beth, interactions with students and colleagues appear to have played a central role in reshaping her perspectives.

In contrast to Beth, other participants seemed to have more difficulties converting their changed beliefs into actions. Alice provided insight into her ongoing reflective process:

> I always feel that there is something lacking… yet I don’t extend myself. What I know through other people, through action, I don’t utilise… it’s not that I’m not progressing but I realised through the [EBL] programme that I’m not putting into action what I’m thinking … I don’t have experience of gathering with other teachers and taking action. I’m still in that state of just thinking (Alice3:174)

Alice added that she believed continual external guidance was necessary to translate her beliefs into action. She noted ‘outside stimulation, I feel I have to follow rather than lead… I think I need a specialist direction’ (Alice3:174). Even Beth, who displayed high self-efficacy, expressed a desire for more external support:

> We need someone who has more confidence than us… someone who can give us direction. Being unsure together not knowing where to go, someone who knows something… you try and try but you get to a point when you feel it’s not going well, I don’t have the ability to get it on the right path again… when there is a guide there is a feeling of completion, but the projects I

> started the ending fizzled out, came to nothing. I always feel sad when that happens (Beth3:176-188)

However, despite her desire for additional external support, Beth appeared to successfully translate her reflections into action. She attributed this not only to her experiences in the EBL programme but also to her age and working environment:

> Rather than just because of the [EBL] programme … I don't know if it's the school I'm in or that it's the advantage of age. I haven't felt that I had the freedom to do what I wanted in the past. Before I worried whether teachers or parents would dislike it, I have to do what everyone else does, mustn't try something strange on my own, that kind of thing to suppress a lot of what I wanted to do. When I arrived at this school, I felt I could do what I wanted, not sure if it was the school letting me be free to teach or my age (Beth3:144, 234)

Beth's transformative learning in relation to working collaboratively with colleagues appeared to be influenced by a variety of factors. These included her ability to effectively apply knowledge acquired from the EBL programme within the classroom context, her engagement in critical reflection on past educational experiences, her age, her current working context, and her belief in learning as a social process. Together, these factors seemed to lead to a significant shift in Beth's self-efficacy, enabling her active engagement in collaborative learning with school colleagues.

The data analysis reveals that participants consistently maintained moderate levels of reflection within the classroom. With only one exception, they also continued to engage in comfortable collegiality with their school colleagues. While the EBL programme appears to have positively influenced participants by fostering SRL, reflection, and collaboration, there appears to be a lack of critical reflection, which is considered essential in this study for achieving high-level teacher agency for PLD (Chapter 3, pp.86-88). Biesta (2009, 2021) emphasises that teaching requires critical reflection on education's purposes. He argues that education fundamentally involves making informed, wise judgments about what actions are educationally and ethically desirable (Biesta, 2009, 2021). This perspective prompts an exploration of the

participants' reflections on their educational goals and their purpose, as seen in the following section.

6.7 Impact of sustained changes to achieving participants' goals for education

The first session of the EBL programme began with a discussion on the purpose of education (Appendix 4). During this dialogue, participants expressed alignment with one or both of the educational purposes identified by Biesta (2009): subjectification, which allows individuals to become more autonomous and independent through education; and socialisation, which integrates individuals into society via educational processes. A year after the EBL programme, when asked the ultimate purpose of learning, the participants' reflections again gravitated towards achieving the goals of subjectification and/or socialisation (Biesta, 2009). Fay, while admitting that she had not given much thought to the ultimate purpose of learning, related it to her current role as a parent. She expressed her wish for a teacher who could enable her children to 'grow their knowledge and their personality and get along with their peer group' (Fay3:262), thereby reflecting a general integration of qualification, subjectification, and socialisation.

Other participants offered more in-depth insights into their educational goals and purposes. Beth contrasted her past experiences as a student with her aspirations for her students. She shared that she did not want her students to 'barely get through twelve years [of school] like me… I always felt bored and sleepy. Teacher was up front and I was at the back it was always boring and process of memorising, boring. But now I've come to enjoy learning. I hope there will be lots of students like me' (Beth3:256).

Similarly, Alice highlighted the importance of students finding joy in learning: 'I want students to realise that learning is enjoyable and continuous… something that brings them joy in life' (Alice3:251). She linked this goal to her own path, explaining, 'I like learning, but whether I enjoy teaching... it's not something I chose for myself… the reason I'm here could be because I have nowhere else to go, because when I was

younger, I didn't really think about what I truly wanted' (Alice3:278-288). The reflections of Beth and Alice on their own experiences as students seemed to channel their drive to encourage and support individual student interests, thereby reflecting subjectification.

Ilene's reflections associated her experiences with SRL during the EBL programme with the skills she believed her students would need in the future:

> I want to teach them how to develop by themselves like me. Through the [EBL] programme I could learn how to teach better and like in a student-centred class maybe they could learn how to organise the knowledge better... the better teacher's goal is to make the students learn by themselves… in this new era students need that power, memorising knowledge is not that important since you can search the Internet. … for the future students should learn how to organise and how to make their own ideas … so maybe they'll find their future way by themselves (Ilene3:246-254)

Gail related her educational goals to the broader cultural landscape, commenting:

> Students always compare themselves to other culture and think that another culture is better than what they have… society is so comparative but now I think it's time for students, all people to focus on what they can do and what they have… [unemployment] will be severe in the future so they should find jobs in other countries … I think they can use their own culture as their source of ideas … I think I can encourage their creativity, make them realise that they can develop their creativity (Gail3:96-108)

Ilene's and Gail's reflections primarily addressed the purpose of education from the perspectives of current and future educational challenges, rather than in the context of their past experiences as students. However, their focus on promoting the growth of individuals into more autonomous and independent beings also aligned with subjectification.

Helen differentiated the roles of secondary and primary school teachers. She suggested that while secondary teachers might prioritise the academic side of teaching, her focus as a primary school teacher was on fostering students' holistic

development. This includes addressing students' emotional challenges, attitudes, and interpersonal relationships (Helen3:268-270), pointing towards the socialisation function of education. Beth, whilst aiming for subjectification, also appeared to be aiming for socialisation, saying, 'I want to be happy with my students in the classroom… spending time together democratically' (Beth3:247, 262).

The noticeable absence of comments regarding the qualification function, where improved individual education is linked to a better national economy (Biesta, 2009), suggests that the participants, as educators, were critically reflecting on the potential negative impacts of the current Korean educational environment on individuals. This reflection suggests a subtle pushback against the prevailing emphasis placed by the government on using education for human capital development. The primary focus of the participants appeared to be on developing subjectification and socialisation, which may help move towards achieving the balance among the three educational purposes that Biesta (2009) advocates for.

However, there seemed to be a particular focus on developing individual capacities and dispositions, with less consideration given to the students' roles within society and how they might contribute to a better society. While this focus may better equip students to live in a rapidly changing and competitive world, it may not adequately prepare them to address the escalating environmental and social issues. There appeared to be a lack of consideration for achieving Education for Sustainable Development, an important theme in education as highlighted by the United Nations' '2030 Agenda for Sustainable Development' and its 17 interrelated sustainable development goals (United Nations, 2015). This suggests a need for reflection on the broader purpose of education and an expansion of the discourse on teacher agency to include a more comprehensive consideration of their roles within society, as will be further discussed in Chapters 7 and 8.

6.8 Key findings on the sustainability of changes

The investigation into the sustainability of changes, as perceived by participants, revealed three main findings:

1. Change from non-reflection to the reflection level sustained within the classroom environment

Within the classroom environment, all participants appeared to sustain many of the changes that resulted from increased reflection while engaging with the CofL model. This appeared to primarily motivated by an epistemological shift from an absolutist to an evaluatist perspective (Kuhn, 1991) and a reorientation of teacher and student roles. These changes seemed to enable participants to continue implementing more innovative student-centred activities and to focus on the quality of learning.

However, there was evidence of regression in participants' engagement in process reflection (Mezirow, 1991), characterised by an overall decrease in the generation of student feedback and three of the six participants reverting to relying solely on intrapersonal sources for reflection. This reduction in reflection, which led to fewer opportunities for open-ended, exploratory, and thus more authentic interactions (Cranton & Carusetta, 2004) between participants and students, could potentially have a negative impact on both student and teacher learning and wellbeing.

2. Individual variation within the wider school environment due to a variety of factors

While more participants reported an increase in their dialogue with school colleagues, these exchanges generally remained within the confines of comfortable collegiality. In contrast, one participant experienced a transformative shift in perspective through her participation in the EBL programme. Over time, this change became evident in her active pursuit and creation of opportunities for collaborative learning with colleagues, including the formation of a new learning community within her school. This transformation appeared to be influenced by a variety of factors, including her ability to effectively apply the knowledge acquired from the EBL programme within the classroom context, her engagement in critical reflection on past educational experiences, her age, her current working context, and her belief in learning as a social process. Collectively, these factors contributed to a significant

shift in this participants' self-efficacy, enabling her to actively engage in collaborative learning with school colleagues.

3. Focus on developing individual capacities with limited critical reflection on education's broader purpose

The analysis showed that participants aligned with the socialisation and subjectification functions of education (Biesta, 2009), suggesting a subtle opposition to the Korean government's primary focus on education for human capital development.

However, the findings also revealed that the educational aims of the participants were centred on enhancing individual capacities and dispositions for effective learning. Although cultivating these qualities is crucial as they better prepare students to live in a rapidly changing and competitive world, it may not adequately equip them to address the escalating environmental and social issues, such as those related to sustainable development (United Nations, 2015).

The next chapter will synthesise data from Chapters 5 and 6 to discuss the influence of the EBL programme on participants' teacher agency for PLD and to outline the contributions of this study to the field.

Chapter 7: Discussion of findings and contributions to the field

7.1 Introduction

The purpose of this chapter is to consolidate the findings from the previous two chapters and examine how teacher agency for professional learning and development (PLD) can be developed through an enquiry-based learning (EBL) approach involving action research. This exploration will enable a discussion of the implications of the findings for the future development of teacher agency, which will be briefly explored at the end of this chapter (section 7.3) and more extensively in the subsequent concluding Chapter 8.

Discussing the findings from Chapters 5 and 6 in this chapter will enable a richer, more nuanced understanding of how teacher agency for PLD operates within the constraints and resources of the social, institutional, and policy settings in which teachers work. Through this, I aim to address a gap in understanding the specific ways in which teacher agency is enacted in organised teacher education settings (Soini et al., 2015; Heikkilä et al., 2020; Kauppinen et al., 2020) and to clarify the study's contributions to the field of teacher agency. To achieve this, I start by integrating the findings alongside the first research question presented in Chapter 1 and further developed in Chapter 4:

1) How can teacher agency for professional learning and development (PLD) be developed through an enquiry-based learning (EBL) approach involving action research?
    a) What are the participants' perceptions of teacher agency in relation to their own PLD before taking part in the EBL programme?
    b) What are the perceived changes to their teacher agency shortly after taking part in the EBL programme, and what is the impact of these changes within the classroom and the wider school environment?

c) A year after the EBL programme, have any changes been sustained, and if so, what is their impact?

In the first section of this chapter, I synthesise and discuss the changes in teacher agency using the PLD environments–teacher agency continuum, which is drawn from the literature and introduced in Chapter 3 (p.86, replicated as Figure 7.1). The section is organised into four parts, starting with an examination of the participants' levels of teacher agency for PLD prior to the EBL programme. It then explores the changes in teacher agency and how these were influenced by variables of time, context, and individual factors.

In the second section, I discuss how the study contributes to the field of teacher agency, highlighting how it builds upon and extends existing literature. First, I expand upon the PLD environments–teacher agency continuum (Figure 7.1) to create more detailed frameworks for various levels of teacher agency: low, moderate, and high. These frameworks could serve as diagnostic and assessment tools to assist teacher educators and school leaders in integrating teacher agency as a learning goal within PLD initiatives. Furthermore, this section explores the study's contribution to a deeper understanding of teacher agency, especially its dynamic interplay between the individual and the environment connected across time. In the final section, I move onto address the study's potential limitations.

7.2 Discussion of findings

In this study, PLD is understood as a self-driven process that enhances teachers' professional knowledge, skills, attitudes, and beliefs, aiming to improve teaching practices and subsequently enhance student learning and wellbeing. The review of literature on PLD, presented in Chapters 2 and 3, suggests that teacher agency plays a crucial role in achieving effective PLD (Alexander, 1987; Nolan & Molla, 2019) and in fostering sustainable educational change (Eteläpelto et al., 2013; Toom et al., 2015).

This investigation led to an in-depth examination of teacher agency by integrating insights from various research on agency and teacher agency. This exploration highlighted a close interdependence between the individual (e.g., knowledge, skills, motives) and the environment (e.g., teacher educational environment, school culture, policy settings). Further review of the literature on teacher agency (Priestley et al., 2015; Eteläpelto et al., 2013; Chapter 2) revealed a gap in understanding the impact of individual internal dimensions on teacher agency, highlighting the need for a deeper understanding of how these internal dimensions affect teacher agency.

Building on this, I drew on Bandura's concept of agency (1986) and Mezirow's theories of critical reflection within his theory of transformative learning (1991) to examine these internal dimensions of teacher agency more closely. Combined with Priestley et al.'s (2015) ecological understanding of teacher agency, the synthesis of these theories culminated in the following definition of teacher agency:

> Teacher agency for PLD is realised when teachers take intentional action as a result of the dynamic interplay between the intrapersonal components (cognition, motivation, and affect) and multiple environments connected across time, to enhance their learning and work practices, ultimately with the aim of improving student learning and wellbeing (Chapter 2, p.54).

Informed by this definition, I developed a conceptual framework to analyse the impact of different PLD environments on teacher agency. Consequently, the PLD environments–teacher agency continuum was developed in Chapter 3 (p.86), drawing upon Kennedy's (2014) PLD models. This framework offers a nuanced and comprehensive view of how transmissive, malleable, and transformative learning environments can influence teacher agency. Specifically, it explores the potential effects of these PLD environments on intrapersonal components of cognition—encompassing self-regulated learning (SRL), self-efficacy within this process (Bandura, 1997), and critical reflection—along with motivation and affect, which shape intentional actions. The framework (Figure 7.1) illustrates how the combined effects of intrapersonal components (i) and intentional actions (ii) indicate the level of teacher agency for PLD (iii), which ranges from low to high. This framework will guide the analysis of changes in teacher agency for PLD in the subsequent sections.

PLD environments	Teacher agency for PLD		iii) Levels of teacher agency for PLD (i and ii) and outcomes for education (Biesta, 2009; Kennedy, 2015)
	i) Intrapersonal components (cognition, motivation, affect)	ii) Intentional action	
Transmissive PLD: e.g., training model, contrived collegiality	• Holds an absolutist epistemology, leading to non-reflection and instrumental single-loop learning • Low levels of self-efficacy, motivation, and affective control to resolve classroom issues	**Action towards one's PLD:** • Consumes knowledge and looks to outside 'experts' • Focuses on individual learning and practices little collaboration with colleagues or students **Classroom practice:** • Applies received knowledge, modifying actions to fit existing assumptions • Gives up on struggling students • Uses strict regulations and negative sanctions	**Low level** leading to qualification
Malleable PLD: e.g., comfortable collegiality	• Holds an evaluatist epistemology, leading to reflection (content and process) and instrumental single/double-loop learning • Moderate levels of self-efficacy, motivation, and affective control to resolve classroom issues and collaborate with colleagues	**Action towards one's PLD:** • Shares classroom ideas, materials and practices with colleagues • Focuses on comfortable, immediate, short-terms issues that allow for easy-to-reach solutions • Tends to reorientate beliefs before seeking a solution but engages in little critical reflection on the value, purpose and consequences of actions **Classroom practice:** Uses knowledge interpretively to achieve effective problem solving	**Moderate level** leading to socialisation
Transformative PLD: e.g., enquiry-based learning with critical collegiality	• Engages in SRL and critical reflection on self, system, organisation, and epistemology • High levels of self-efficacy, motivation, and affective control to: achieve set goals; translate knowledge into appropriate actions for individual contexts; persevere in the face of obstacles; take part in or lead change initiatives	**Action towards one's PLD** • Produces knowledge through engaging in SRL • Sets intrinsic goals • Engages in critical reflective dialogue with others **Classroom practice:** Takes action based on open and discerning points of view to achieve effective learning and wellbeing of students	**High level** leading to subjectification

Figure 7.1: PLD environments–teacher agency continuum

(from Chapter 3, p.86, Figure 3.4)

7.2.1 Teacher agency prior to the EBL programme

The analysis of data collected before the start of the EBL programme revealed that government-provided PLD offered a broad range of opportunities for acquiring new knowledge and skills through various programmes and access methods, thereby helping participants stay up-to-date with the latest pedagogical trends and new educational technologies. However, this PLD environment was perceived as heavily top-down, predominantly promoting a transmissive learning approach. This was particularly evident in key PLD policies, such as the mandatory hours which required teachers to complete 60 hours of government-approved professional development annually. Such policies appeared to adversely affect participants' self-efficacy, motivation, and affective beliefs, often leading them to select for the most convenient programmes to meet external mandates, instead of choosing those that align with their educational beliefs.

In the analysis of findings, a top-down transmissive approach was also evident in government-funded teacher research. Participants recounted previous experiences in which methodologies for researching their own practices were imposed on them. They seemed to be encouraged to produce positive affirmations of approved and preferred teaching methods instead of questioning the appropriateness and effectiveness of the knowledge they received. Such questioning is thought to be crucial for developing a deep understanding of situations and, consequently, for justifying actions (Eraut, 2003). These findings align with research suggesting Korean teachers engaging in research through government-funded projects often operated within evaluation criteria that promoted the prescriptive use of best practices (Park, 2004), with the primary goal being to secure promotion (Yoon et al., 1999; Lee, 2010).

This top-down PLD environment appeared to lead some participants towards adopting an absolutist epistemology, which asserts that knowledge is fixed, certain, and known by authorities (Kuhn, 1991). Additionally, it appeared to foster instrumental learning that primarily focuses on identifying cause-effect relationships (Mezirow, 1991), resulting in single-loop learning that lacks reflection on the foundations of existing beliefs (Argyris & Schön, 1974). This approach seemed to

offer little opportunity to foster SRL and critical reflection, consequently restricting participants' motivation and self-efficacy to evolve as creative and independent learners. Collectively, these findings suggest that much of the government-provided PLD provides limited affordances for teacher agency.

However, within the government-provided PLD, certain programmes appeared to offer a moderate level of affordances for teacher agency. One example, as mentioned by the participants, was the British Council (BC) professional development programmes. These programmes encouraged participants to implement positive changes in their classrooms by promoting reflective collaboration with peers. However, they appeared to have a limited long-term impact on participants' self-efficacy to effect change in their students. This may be due to the BC programmes, similar to other government-funded PLD, being mandated to use standardised criteria for evaluating teachers. Such reliance on externally set criteria likely hinders the promotion of SRL and critical reflection, thereby contributing to the programmes' limited influence on teacher self-efficacy.

Within the school environment, participants' reports suggest that they experienced a mix of contrived and comfortable collegiality. Examples of contrived collegiality included open classes as mandated by government policies and teacher collaboration enforced by school leaders. These appeared to reflect a top-down system that uses collaboration primarily to fulfil administrative purposes and to implement external mandates (Hargreaves, 2001; Datnow, 2011). It appeared that this form of collegiality, focused on accountability and teacher performance, offered limited opportunities for nurturing intrapersonal processes like reflection, self-efficacy, motivation, and affective control towards achieving participants' desired learning goals for themselves and their students. Taken together, these indicated a low level of teacher agency.

Comfortable collegiality was evident in half of the participants' schools, with teachers engaged in sharing classroom practices, ideas, resources, and advice. However, the lack of critical collegiality, particularly due to the absence of initiatives from school leaders, placed the responsibility on teachers to initiate and cultivate such opportunities themselves. The participants perceived several barriers to this

engagement, including the lack of shared values, goals, and a sense of collegiality. Taken together, these factors indicate a moderate level of teacher agency.

Combining these findings, the analysis of data through the lens of the PLD environments–teacher agency continuum (Figure 7.1) reveals that participants perceived the government-provided PLD environments and their schools' learning environments as offering limited opportunities for engaging in SRL, reflection, and collaboration. Consequently, this influenced them to exercise low to moderate levels of teacher agency, rather than higher levels.

Against this context, the EBL programme provided a PLD environment that fostered SRL, reflection, and collaboration. This enhancement resulted in increases in teacher agency, which exhibited temporal, contextual, and individual variations, as will be discussed in the following sections.

7.2.2 Temporal variations in teacher agency for PLD

The following sections discuss findings from short-term and long-term changes as perceived by the participants.

7.2.2.1 Short-term changes

The EBL programme facilitated participants' understanding of metacognitive processes through a cycle of learning (CofL) model. This SRL process, which includes setting goals, selecting and testing strategies, and reflecting to address deficiencies, supported participants in building metacognitive knowledge about themselves as learners and about the formulation, evaluation, and revision of theories and models through investigation and analysis. White and Frederiksen (2005) indicate that this process enables learners to see themselves as self-aware, self-improving learners.

Participants' feedback indicated that their active engagement in collecting and interpreting classroom data fostered a self-questioning research orientation and a

sense of ownership over the creation of knowledge, both crucial for managing dynamic classroom situations. This approach corresponds with an evaluatist epistemology (Kuhn, 1991), which involves understanding knowledge as a continuous process of evaluation and consideration of various perspectives. Furthermore, these changes align with Bandura's (1997) concept of cognitive development, which involves not only understanding factual knowledge but also metacognitive skills, such as evaluating the adequacy of one's thought processes.

Building metacognitive knowledge of learning appeared to positively influence participants' self-efficacy and the other intrapersonal components of motivation and affect, enhancing participants' coping capabilities and their reliance on personal perspectives as the basis for understanding and translating knowledge into appropriate actions. These changes included questioning and testing theories, initiating new strategies, fostering creativity in classroom practices, and generating knowledge to achieve desired goals for themselves and their students.

The impact of engaging in the CofL process as part of SRL was evident in the classroom environment, most notably in reflections regarding three interdependent areas: students, self as teacher, and teacher-student relationship. Before the EBL programme, self-reports suggested that participants' relationships with students were predominantly based on maintaining control, a tendency largely driven by the goal of achieving predetermined outcomes. However, evidence showed that changes in reflection emerged as participants began to question their adherence to views largely shaped by classroom observations and systemic perceptions, including a deficit view of students' abilities and capabilities.

The reorientation of participants' belief about students appeared to prompt self-reflection. Before engaging in the EBL programme, participants tended to view themselves as both authority figures exercising unilateral control and as idealised figures who felt compelled to do everything for their students. Engaging in reflection led them to critically reassess these previously unexamined values, assumptions, and beliefs rooted in Korean educational culture. This process aligns with critical reflection, which involves subjective reframing—a critical analysis of the psychological or cultural assumptions that inform one's experiences and beliefs (Mezirow, 1991). These changes in reflection had a positive influence on

participants' intrapersonal components, leading to higher self-efficacy and motivation to construct a more individualised understanding of the student and teacher roles.

The positive impact on the intrapersonal components led to changes in intentional action within the classroom. This shift resulted in a greater adoption of learner-centred pedagogy (LCP), demonstrated through the implementation of more student-focused activities, enhanced classroom management strategies, and a shift in emphasis from covering the syllabus to enhancing the quality of learning. It also encouraged increased open communication and collaborative problem-solving with students, giving them a more active role in evaluating activities, making suggestions, and shaping their own learning experiences. In this new dynamic, participants and students began to collaboratively address classroom challenges, moving beyond the traditional model of the teacher as the sole authority and positioning students as active contributors rather than passive recipients (Jenkins, 2020).

LCP, which prioritises learners in the educational process, is recognised as a 'best practice' across various educational systems (Bremner et al., 2022). This approach emphasises the importance of student narratives that highlight the agentive aspect of learning and the active roles students assume in their learning environments, a strategy known to enhance learner agency (Johnston, 2004). Such agency is considered essential for nurturing independent learning (Manyukhina & Wyse, 2019) and is thought to be vital for student wellbeing (Johnston, 2004). Furthermore, adopting LCP is believed to create an optimal learning environment where students not only develop through interactions with teachers but also where teachers remain open to learning from their students (Mercer, 2018; Larsen-Freeman, 2019). It appeared that participants in this approach began to understand that teaching involves more than adhering to a fixed 'correct' perspective; it involves being open to alternative viewpoints and approaches (Biesta, 2009; Kennedy, 2015). Overall, these changes in reflection and intentional action, indicated a shift from a low to moderate level of teacher agency.

While most participants appeared to engage in reflections aimed at achieving effective learning, some demonstrated signs of moving towards critical reflection by showing a deeper understanding of the importance of authentic teacher-student relationship (Cranton & Carusetta, 2004). This reflective insight enabled participants

to recognise that supporting student interests and creativity, fostering trust, and empowering students to have a voice in their education improved the happiness (Johnston, 2012) and well-being (Huppert, 2007; Bingham & Bubb, 2022) of both students and themselves. Together, this indicated a high level teacher agency.

7.2.2.2 Sustainability of changes

A comparative analysis of immediate and long-term follow-up data revealed that participants successfully sustained many of the short-term changes. Initially, they had moved away from strictly adhering to external standards, embracing more creative, innovative, and risk-taking approaches. This shift towards a more evaluative and dynamic knowledge frame (Kuhn, 1991; Johnston, 2012), as evidenced in the short-term findings, was maintained over the long term. All participants remained aware of their changed attitudes towards teacher and student roles, enabling them to implement more student-centred lessons that focused on enhancing the quality of learning by addressing student needs and interests. Participants continued to incorporate innovative practices, such as project work, adapting teaching methodologies to new contexts, and taking a more objective view of academic theories. This indicated that participants maintained a moderate level of teacher agency.

However, despite these positive developments, sustaining high-level reflective practices and thereby maintaining a high level of teacher agency presented challenges. Notably, there was a decrease in the generation of student feedback, with half of the interviewed participants reverting to relying solely on intrapersonal reflection methods (e.g., classroom observations). This shift signifies a reduction in process reflection, which involves critically assessing the effectiveness of one's thinking, feeling, and acting (Mezirow, 1991). Such reflection involves the continual use of self-regulatory skills to navigate challenges, stress, and distractions (Bandura, 1997; Usher & Schunk, 2017). Consequently, the decline in process reflection led to fewer opportunities for open-ended, exploratory, and thus more authentic interactions (Cranton & Carusetta, 2004), where both students and teachers learn from each other. Additionally, the decrease in such interactions may adversely affect

student agency, which is essential for fostering independent learning (Manyukhina & Wyse, 2019) and student wellbeing (Johnston, 2004).

The limited evidence of sustained high-level teacher agency among some participants, who demonstrated high teacher agency in the short term, might be attributed to a range of factors. Mezirow (1991) emphasised that a learner's commitment to reflective action is influenced by how effectively they have personalised and integrated their learning experiences. This includes understanding epistemic and sociocultural forces that shape their perspectives, as well as recognising the challenges posed by actions inspired by emancipatory learning. He suggested that understanding the need for change on an intellectual level is insufficient; it also requires emotional strength and will to move forward, particularly when these changes conflict with established perspectives. This suggests that despite some participants' initial indications of high teacher agency, they may have struggled to maintain this level over the long term due to insufficient emotional resilience and willpower to fully assimilate their new perspectives into their everyday teaching practices.

These findings align with the research by Bendtsen et al. (2022), which suggests that the outcomes of a learning process are influenced not only by the goals and arrangements of a PLD programme but also by how these objectives interact with other factors. Studies on sustained PLD (Timperley et al., 2008; Porche et al., 2012; Hardy et al., 2018; Bendtsen et al., 2022) highlight the crucial role of collaboration and collegial relationships in fostering sustainable professional growth. In this study, the participants, lacking the support of the EBL programme's learning community over the long term, faced challenges in maintaining the changes necessary for high-level teacher agency. This situation emphasises the need for ongoing support, such as leadership promoting teacher collaboration and collegial support within schools — elements notably absent in the participants' environments. Such support appears essential for providing the emotional resilience and willpower participants required to incorporate new perspectives into their daily teaching and sustain a high level of teacher agency over time.

The findings over the short and long term suggest that changes in participants' teacher agency within the classroom environment support the dynamic and temporal

nature of agency. This perspective indicates that a person's agency, instead of being a fixed disposition that can be utilised in any given situation, is a process that unfolds over time (Bandura, 1986; Emirbayer & Mische, 1998; Mercer, 2011; Eteläpelto et al., 2013; Priestley et al., 2015).

In the short term, the EBL programme facilitated an increase in participants' teacher agency from low-moderate to moderate-high levels by fostering SRL, reflection, and collaboration. However, while participants successfully maintained these changes at a moderate level over the long term, sustaining a high level of teacher agency proved challenging without ongoing support.

7.2.3 Contextual variations in teacher agency for PLD

The analysis of data across different contexts revealed variations in how participants exercised teacher agency, consistent with literature suggesting that environmental factors influence and shape teachers' professional capacities and resources for action (Eteläpelto et al., 2013; Pantić, 2015; van der Heijden et al. 2015; Kauppinen et al., 2020). Major shifts in teacher agency were identified within the classroom environment, while relatively minor changes were noted in the wider school environment regarding collaboration with school colleagues. As discussed in Chapter 6, these differences might be attributed to the participants' research focus on classroom settings rather than on collaborative learning with colleagues. Moreover, the challenges of peer collaboration, which often involve complex power dynamics, differ from those encountered in student interactions.

Participant self-reports highlighted that interactions with school colleagues typically involved storytelling and material sharing, indicative of comfortable collegiality and demonstrating moderate teacher agency. In contrast, within the EBL programme, peer discussions centred on ongoing classroom research, facilitating more in-depth interactions than those usually seen in schools. These discussions involved articulating new and tacit knowledge gained from data collection and analysis, along with the provision of constructive feedback. Such collaborative efforts seemed to enhance reflection and SRL, whereby participants co-constructed learning with

peers, integrating it with their own experiences to inform present and future actions. Additionally, these findings align with research suggesting that learning communities offer richer knowledge resources than individuals (Bandura, 1991; Pajares, 1996; Schraw et al., 2006), crucial for revising and enhancing knowledge related to strategies, tasks, goals, and beliefs (Hadwin, 2008).

Despite the EBL programme's role in positively influencing participants' general perceptions of teachers, its impact on their collaboration with school colleagues was limited. In the short term, most participants maintained a level of comfortable collegiality, continuing to share practices and materials as they did prior to their involvement in the EBL programme. However, two participants showed increased reflective practices in this area. They reoriented their beliefs about colleagues and realised the value of engaging in reflective dialogues, which helped them reassess assumptions about their students' and their own learning. Yet only one was able to translate this change in perspective into concrete action by joining a learning community within her school, thus moving towards higher teacher agency.

In the long term, most participants seemed to increase their engagement in activities like storytelling, sharing teaching materials, and exchanging ideas with peers, which indicated increased engagement in comfortable collegiality. However, shifts in their school environments, like relocation to a different school or the departure of colleagues to other institutions, seemed to influence their degree of collegial engagement. Despite these changes, the overall findings suggest that, aside from one participant (as will be discussed in the next section), all other participants maintained a moderate level of teacher agency in their collaborations with school colleagues.

Across various environments, there was a noticeable lack of critical collegiality, which is indicative of high teacher agency. Within the EBL programme, this shortfall was primarily attributed to the nature of peer feedback. A detailed analysis revealed that most interactions were problem-solving in nature but fell short in challenging each other's practices, perspectives, and assumptions—a crucial aspect for fostering critical reflection as outlined by literature (Little, 1990; Peterson, 1994; Kutsyuruba, 2011).

Data indicated that advancing towards critical collegiality requires training in both giving and receiving critical feedback. Hadwin (2008) suggests that essential to this learning is instrumental support through open-ended questions that encourage participants to reflect on tasks, articulate learning goals, and adopt as well as revise strategies for enhanced self-regulated learning. Such support may enable participants to offer critical feedback effectively in various contexts, both formal and informal, with familiar and unfamiliar individuals, thereby fostering a community of practice aimed at high-quality learning and teaching.

However, even when equipped with these skills, the exercise of teacher agency can be hindered by situational factors. Priestley et al. (2015) emphasised that even teachers with strong agency can face obstacles in environments lacking robust collaborative cultures. This highlights the crucial importance of fostering a collaborative learning culture within schools, characterised by support, respect, and trust among colleagues (Priestley et al., 2012; Ning et al., 2015; Pantić, 2015; Quinn & Carl, 2015; Woodhouse & Pedder, 2017). Moreover, the school culture, particularly the degree of collegiality and leadership promoting it, is influenced by the broader policy context and the prevailing educational environment. These aspects, and their impact on teacher agency, are further explored later in this chapter (Section 7.3.3).

7.2.4 Individual variations in teacher agency for PLD

The research findings highlighted individual variations in participants' level of teacher agency, aligning with previous studies that suggest teacher agency is exercised in highly individualised ways (Ryder et al., 2018; Tao & Gao, 2017; Ashton, 2021). In the short term, within the classroom environment, the majority of teachers exhibited a moderate level of agency, as shown by their evolving beliefs about student and teacher roles. This evolution led to a wider adoption of LCP, aimed at enhancing effective learning. However, some participants displayed a shift beyond this instrumental approach and engaged in critical reflection indicative of higher levels of teacher agency. They recognised that building authentic teacher-student relationships not only contributes to effective learning but also fosters the happiness

(Johnston, 2012) and wellbeing (Huppert, 2007; Bingham & Bubb, 2022) of both students and teachers. However, this difference in level of teacher agency seemed to decrease over time.

The case of one study participant presents an exception to this general trend. Her involvement in the EBL programme seemed to induce a perspective transformation, prompting her to initiate opportunities for collaborative learning and to form a new learning community within her school. Her actions align with research suggesting that agentic teachers at the school level recognise the importance of collaborating with colleagues to enhance their teaching practices and student learning (Hattie, 2012; Vähäsantanen, 2013; van der Heijden et al., 2015; Hadar & Benish-Weisman, 2019). Such teachers take the initiative in organising collaborative discussions about teaching practices and actively engage in professional development. She exercised teacher agency by creating opportunities with her colleagues, thereby shaping and transforming her learning environment. This shift in her reflections and actions indicates a transition from a low to a high level of teacher agency within this context.

The distinction between this one participant and others in the study can be better understood through Mezirow's theory (1991), which suggests that commitment to reflective action is influenced by the degree to which learners personalise and integrate their new understanding of the epistemic and sociocultural forces that shape their perspectives. For this participant, the high degree to which she personalised and internalised learning from the EBL programme appeared pivotal. Her engagement in the CofL model and collaboration with colleagues dedicated to student learning appeared to significantly enhance her self-efficacy in working with peers. This was notable even in the face of challenges such as the lack of interest in collaboration from some colleagues.

As discussed earlier (section 7.2.2.2), Mezirow's transformative learning theory (1991) highlights that individuals vary in their readiness for reflective change. This readiness, characterised in this study by how participants recontextualised and integrated knowledge and experiences from the EBL programme, appeared to be influenced by their past learning histories, current work environments, and future aspirations. This aligns with research asserting that a multitude of individual factors affect teachers' ability to exert their agency (Eteläpelto et al., 2015; Biesta et al.,

2015; Kayi-Aydar, 2015; van der Heijden et al., 2015; Vähäsantanen, 2015; Lai et al., 2016; Tao & Gao, 2017; Ekşi et al., 2019; Kauppinen et al., 2020).

In the case of this participant, the ecological perspective further highlights the dynamic, interconnected nature of teacher agency across various contexts and timeframes. This perspective necessitates examining the interplay between her past influences and experiences, her present engagement (including judgments about current context limitations and opportunities), and her future orientations (encompassing hopes, fears, and desires) (Emirbayer & Mische, 1998; Biesta et al., 2015; Priestley et al., 2015). Firstly, she engaged in SRL and critically reflected on how her previous educational experiences shaped her teaching beliefs. Secondly, in her current role, the school environment provides her with the freedom to capitalise on opportunities for collaboration and growth, which she identified and pursued. Her interactions with students and colleagues have significantly influenced her evolving perspectives. This influence is evident in her view of learning and education as a social process and her association of classroom happiness with facilitating democratic interactions with students. Thirdly, these views not only reflect her present orientation but also seem to influence her future approach to teaching and learning. Together, these factors appeared to enable her to exercise high teacher agency.

7.2.5 Summary of key findings

The discussion of findings highlighted several key ways in which the EBL programme, by offering a PLD environment that fostered SRL, critical reflection, and collaborative learning, enhanced affordances for teacher agency. This enhancement influenced participants' intrapersonal components and intentional actions in ways that contributed to the development of teacher agency, detailed as follows:

- **Influence on intrapersonal components:** The EBL programme positively influenced teacher agency by improving cognitive processes, especially in the areas concerning SRL and reflection. This enhancement had a positive influence on self-efficacy and other intrapersonal components of motivation and affect.

- **Influence on intentional action:** The shifts in these intrapersonal components led to positive changes in intentional action within the classroom. Teachers increased their use of LCP, incorporating more student-centred activities and classroom management techniques. The quality of teacher-student interaction improved, with increased problem-solving with students and a greater focus on the quality of learning.
- **Short-term changes to teacher agency:** The combination of factors outlined above led most participants to transition from low-moderate to moderate-high levels, primarily focusing on achieving effective learning. Some participants appeared to engage in critical reflection, indicative of high teacher agency. This was characterised by a deeper understanding of the importance of authentic teacher-student relationship in enhancing not only effective learning but also the happiness and wellbeing of both students and the teachers themselves.
- **Long-term sustainment**: While all participants maintained moderate levels of teacher agency over the long term, sustaining high levels proved to be challenging in the absence of continuous collaboration with colleagues and collegiate support.
- **Contextual variations:** Major shifts in teacher agency were identified within the classroom environment, while relatively minor changes were noted in the wider school environment regarding collaboration with school colleagues. Collaborative learning within the EBL programme had a positive impact on participants' reflections and positively influenced participants' general perceptions of teachers. However, for most participants, this did not lead to a significant increase in collaboration with colleagues in their individual school settings.
- **Individual variations:** Differences in the levels of teacher agency among participants were identified and linked to individual's readiness to recontextualise and integrate knowledge and experiences from the EBL programme. This readiness varied based on factors such as past educational experiences, age, the current working environment, and future aspirations.

In the subsequent sections, I summarise the key characteristics of low, moderate, and high levels of teacher agency and position the main findings in relation to the

key literature in the field of teacher agency. This will clearly demonstrate how this research contributes to existing theoretical and empirical knowledge.

7.3 Expanding the understanding of teacher agency

By integrating the empirical findings from this study (Chapters 5 and 6), I build upon the initial conceptual model of teacher agency (Figure 7.1). This expanded model provides a more nuanced understanding and positioning of teacher agency within both classroom and wider school environments. Figures 7.2, 7.3, and 7.4 identify and explain the key characteristics of intrapersonal components and intentional actions, positioning teacher agency at low, moderate, and high levels.

It is important to note that the original conceptual framework (Figure 7.1) depicted the levels of teacher agency on a continuum from low to high. While each of these levels is now presented in separate tables to allow for detailed descriptions (Figures 7.2, 7.3, and 7.4), it is essential to understand that teacher agency should still be thought of as existing on a continuum, not as separate, discrete levels. Moreover, although these figures can aid in identifying levels of teacher agency, the dynamic nature of teacher agency suggests that an individuals' level of teacher agency cannot be generalised and is likely to vary depending on context and time (Emirbayer & Mische, 1998; Biesta & Tedder, 2006; Mercer, 2012; Priestley et al., 2015; Larsen-Freeman, 2019).

	Observable teacher actions	Suggested state of cognition	Suggested state of self-efficacy, motivation, and affect
Epistemology	• Relies on outside 'experts' for knowledge • Relies solely on intrapersonal data (e.g., teacher observation) as a source for reflection • Applies received knowledge with little reflection on its suitability to the context • Repeats or abandons activities based on false assumptions	• Holds absolutist, fixed knowledge frame • Believes in the use of knowledge without reflecting on its appropriateness in practice • Acts as consumers of knowledge	• Lack of self-efficacy, motivation, and affective control in resolving classroom issues
Student and teacher roles	• Conducts teacher-centred lessons which transmit knowledge to students • Focuses on covering the syllabus and output rather than on the quality of teaching and learning • Problem-solves without student input • Seizes control of classroom by setting strict regulations, imposing negative sanctions, using anger and scolding • In the face of obstacles, gives up, emphasises teacher control, blames oneself or students	• Accepts generalised, unquestioned perceptions of students (e.g., believes students can't learn from each other or provide solutions to problems) • Accepts a systemic view of teacher role: - viewing the teacher as authority - idealising the teacher who does everything 'perfectly' for their students	• Lack of self-efficacy in coping with classroom issues • Lack of affective control, manifesting as feelings of animosity towards students or from students, stress, and feeling 'trapped'
Student-teacher relationship	• Communicates to transfer knowledge and check understanding • Majority of interaction is simple one-way communication, from teacher to student and from student to teacher	• Accepts a systemic view of teacher-student relationship: - outcome focused - limited by a strict hierarchy and concrete rules	• Lack of self-efficacy, motivation, and affective control in influencing student learning
Teacher-teacher relationship	• Demonstrates contrived collegiality through implementing external mandates to fulfil administrative purposes • Demonstrates little initiation or perseverance in engaging in reflective dialogue or collaboration with colleagues • Shows little collegiality, trust, support amongst members	• Accepts systemic and organisational views of teaching: - maintaining harmony over risking critique and conflict for professional learning and development - focusing on gaining extrinsic rewards	• Lack of self-efficacy and motivation to engage in reflective dialogue with colleagues • Lack of affective control, characterised by a fear of being misunderstood and rejected from others

Figure 7.2: Low level teacher agency characteristics

	Observable teacher actions	Suggested states and processes of cognition	Suggested state of self-efficacy, motivation, and affect
Epistemology	• Engages in self-regulated learning through the use of tools such as the cycle of learning model: plan, act, observe, reflect • Generates, reflects on, and takes action based on a variety of intra- and interpersonally generated data: teacher observations, teacher journals, student surveys, video recordings • Uses formal and practical knowledge suitable to the individual context	• Holds an evaluatist, dynamic knowledge frame • Recognises that knowledge can be dynamic and multi-dimensional (i.e., can occur bottom-up, top-down, sideways) • Understands metacognitive knowledge of learning	• Moderate self-efficacy, motivation, and affective control in resolving classroom issues
Student and teacher roles	• Caters more to student-reported, rather than teacher-perceived, interests and needs • Facilitates student-centred lessons that cater to student interests and needs • Perseveres when faced with obstacles • Applies extra effort and creative strategies to support student learning • Engages in problem-solving with students, aiming for effective learning • Uses student-centred classroom management techniques	• Questions generalised perceptions of students and reorients views based on evidence • Views students as holistic individuals with unique educational and personal backgrounds that influence their attitudes and actions in relation to learning • Questions systemic view of the teacher role to construct a more individualised view of self as a teacher	• Moderate self-efficacy and motivation to teach effectively and make a difference in student learning • Some to moderate affective control (e.g., not feeling insulted by students, managing stress)
Student-teacher relationship	• Seeks student feedback on lesson content and processes • Engages in increased open communication between the teacher and students • Gives students more active role in the classroom decision-making processes to achieve effective learning	• Recognises the importance of communicating with students as a means to reflect on assumptions pertaining to the content and process of learning • Questions and reorientates the teacher–student relationship from distant and hierarchical to a more open and trusting relationship	• Moderate self-efficacy and motivation to influence students' and one's own learning • Moderate affective control, evidenced by being acknowledged by students and feeling close to them
Teacher-teacher relationship	• Engages in comfortable collegiality through sharing ideas, materials, practices • Engages in reflective dialogue that promotes reflection on own assumptions in defining the problem, in order to take more effective action to solve them • Joins teacher professional development and learning group(s) • Opens own classes for observation and seeks opportunities to observe others	• Practices self-awareness of thoughts and feelings towards colleagues • Reorientates assumptions about school colleagues (e.g., many teachers are eager to learn, including colleagues in my school) • Recognises the importance of engaging in reflective dialogue with colleagues as a means to reflect on assumptions pertaining to students' and one's own learning • Little critical reflection on one's own and others' perspectives and practices	• Moderate self-efficacy and motivation to engage in reflective dialogue and/or work more collaboratively with colleagues • Moderate affective control, such as ceasing to blame oneself or others • Moderate self-efficacy in leading and organising collaborative learning with colleagues

Figure 7.3: Moderate level teacher agency characteristics

	Observable teacher actions	Suggested state of cognition	Suggested state of self-efficacy, motivation, and affect
Epistemology	• Produces and consumes knowledge	• Engages in critical self-reflection and critical reflection on epistemic assumptions, leading to perspective transformation -realising that the education system has constrained the way one views teaching and learning • Engages in critical reflection on the value and purpose of teaching, which encompasses development on both individual and societal levels across environmental, economic, and social dimensions	• High self-efficacy, motivation, and affective control to translate knowledge into appropriate actions for individual contexts
Student/Teacher/ Teacher student relationship	• Engages in open communication with students, demonstrating discriminating points of view towards achieving effective learning and well-being of students, themselves, and society	• Engages in subjective reframing of how one's own past educational experiences and present contexts have shaped and limited the development of one's point of view of teacher and student roles • Recognises that teacher-student relationship has a key influence on the development of students' and one's own learning, happiness, and wellbeing • Recognises the interconnectedness of one's relationship with others (e.g., students, parents, colleagues) and its significance to teaching and life in general	• High self-efficacy, motivation, and affective control, believing one can positively influence students' and one's own life
Teacher-teacher relationship	• Risks being open about own interests to engage in critically reflective dialogue for professional learning and development • Demonstrates strong collegiality based on trust, respect, and support among members • Leads and organises change initiative (e.g., forming learning community with colleagues)	• Questions the values, purposes, and actions of what other teachers and educators do	• High self-efficacy, motivation, and affective control to work collaboratively with colleagues

Figure 7.4: High level teacher agency characteristics

The figures presented do not aim to provide a comprehensive understanding of teacher agency. Rather, they highlight specific areas identified by the study as having potential for valuable shifts in intrapersonal components and intentional action. These areas include epistemology, student and teacher roles, student-teacher relationship, and interactions among teachers.

These frameworks could serve as diagnostic and assessment tools, aiding teacher educators and school leaders in integrating teacher agency as a learning goal within PLD initiatives. As diagnostic and assessment tools, the frameworks outline observable teacher actions in the first column, while the subsequent two columns detail key characteristics of intrapersonal components. Based on the findings of the study, these latter sections suggest the possible underlying state and processes of intrapersonal components such as SRL, reflection, self-efficacy, motivation and affect, that may drive the observable actions.

Utilising these descriptions allows for the identification of individual teachers' levels of teacher agency. Although there are distinct differences between low and moderate levels, the high level includes many characteristics of the moderate level, with a crucial distinction: the moderate level targets effective learning and development at the individual level, whereas the high level encompasses development on both individual and societal level (discussed further in section 7.3.3 and Chapter 8).

These insights can be used within PLD initiatives to foster changes in intrapersonal components, thereby influencing intentional actions—a core aspect of teacher agency (Chapter 2, p.52). In addition to serving as diagnostic and assessment tools for teacher educators and school leaders, these frameworks also enable teachers to self-assess and reflect on their levels of teacher agency. Thus, by fulfilling these functions, the frameworks contribute to the empirical knowledge base in the field of teacher agency.

7.3.1 Developing cognition and holistic understanding

The study highlighted that the individual has a central influence on how they perceive and negotiate teacher agency. Therefore, how agentic an individual feels can be said to be strongly influenced by key intrapersonal components such as cognition, motivation, and affect (Mezirow, 1991; Bandura, 1997; Larsen-Freeman & Cameron, 2008; Mercer, 2012).

Focusing on cognitive development, this study particularly emphasised the development of SRL and critical reflection. Within the study, the CofL model, with its SRL approach of setting goals, planning, implementing, and reflecting on diverse data, provided participants with the tools to develop metacognitive knowledge. This included an understanding of one's learning process, as well as how theories and models are developed, assessed, and modified through thorough investigation and analysis. Moreover, this engagement seemed to encourage participants to embrace an evaluatist epistemology (Kuhn, 1991), and to adopt a dynamic knowledge frame (Johnston, 2012). These approaches emphasise an evolving perception and method towards knowledge, highlighting the importance of ongoing learning and adaptability. These findings align with Bandura's view (1991, 1997), which considers human agency as involving learners who actively make decisions and engage in a systematic, constructive process. Bandura also suggests that cognitive development extends beyond the acquisition of factual knowledge; it includes the development of metacognitive skills that require critical reflection on the effectiveness of one's own thought processes.

EBL enabled participants to engage in content and process reflection (Mezirow, 1991), which led to a reorientation of their beliefs regarding student and teacher roles and improvement in the teacher-student relationship. This transformation was observable through participants applying a range of learning strategies, which resolved identified classroom issues and fostered student learning—a quality that Hattie (2012) identified as indicative of teachers being change agents. The changes in beliefs regarding epistemology, and teacher and student roles, align with findings from other studies that adopt a cognitivist approach to understanding teacher agency. These studies conclude that the extent to which teachers enact their agency

is influenced by their beliefs, their knowledge, and their personal interpretations of that knowledge (Eteläpelto et al., 2015; Adebayo, 2019; Wagner et al., 2019; Namgung et al., 2020; Bonner et al., 2020).

Furthermore, the study revealed that relying solely on epistemology development theories (Kuhn, 1991; Johnston, 2012) for analysing teacher agency development was insufficient. While these theories demonstrated that SRL tends to equip individuals with the tools and capabilities to educate themselves and exercise teacher agency towards effective learning, teacher agency extends beyond the instrumental aspect of becoming aware of one's learning processes and solving problems. It also involves reflection on the premise itself and a thoughtful consideration of the importance of effective learning. Guided by Mezirow's theories on critical reflection (1991), this study broadened the understanding of how cognitive development can empower teachers to exercise a higher level of agency. Applying Mezirow's theory showed that engaging in critical reflection led some participants to exhibit a higher level of teacher agency, aimed at achieving happiness (Johnston, 2012) and the wellbeing (Huppert, 2007; Bingham & Bubb, 2022) of both students and teachers.

Cong-Lem's (2021) systematic review of research on teacher agency highlights that while empirical studies employing a cognitivist approach emphasise rational discourse, only a few explored other intrapersonal components, such as the role of emotions in developing teacher agency (e.g., Benesch, 2018; Miller & Gkonou, 2018). Diverging from this trend, this study adopts a holistic approach to understanding teacher agency, examining not only the influence of the EBL programme on cognitive processes like reflection and self-efficacy (Bandura, 1997), but also how these processes impact motivation, and affect. This viewpoint integrates various interrelated intrapersonal components, which collectively contribute to intentional action. This perspective aligns with research suggesting that agency is not the result of a single factor but is instead exercised when supported by multiple, interconnected causes (Bandura, 1997; Larsen-Freeman & Cameron, 2008; Mercer, 2012).

The study illustrated that EBL can positively influence individuals' SRL, reflection, self-efficacy, motivation, and affect. For one participant, a strong connection was

identified between increased reflection and self-efficacy, leading to transformative learning and the exercise of high teacher agency in collaborative learning with school colleagues. These insights highlight the importance of fostering reflection to enhance self-efficacy and also reinforce the concept that self-efficacy is a key resource for achieving high-level teacher agency (Bandura, 1997; Holden et al., 1990; Multon et al., 1991; Stajkovic & Luthans, 1998).

7.3.2 Collaborative learning

The study discovered that although there were variations in how participants exercised teacher agency, collaboration was crucial for its development and maintenance. Notably, learning experiences leading to significant changes often involved collaboration with students in classroom settings. Such collaborations played a key role in altering participants' perceptions of teacher-student roles and relationships. When it came to collaborative learning with teachers, the participants commented that peers offered alternative perspectives and provided support for change. These findings align with research which suggest that the quality of peer relationships significantly influences teacher agency (Soini et al., 2015; Kauppinen et al., 2020).

However, it should be noted that providing opportunities for collaborative and collegial relationships, as seen in the EBL programme, was insufficient for fostering critical collegiality among participants. This aligns with research that highlights effective enquiry dialogue involves individuals actively engaging with one another's ideas, elaborating on provided reasons, qualifying general statements, and identifying flaws in arguments—all of which necessitate learning and development (Kennedy, 2013; Wilkinson et al., 2017). This suggests that while collaborative environments are crucial for fostering reflective practices, learning how to participate in critical dialogue is equally important in achieving a high level of teacher agency.

Over time, there was a noticeable decline in critical reflection, indicating that ongoing support is crucial for sustaining high levels of teacher agency. This need for support aligns with findings from numerous studies that emphasise the importance of

collaboration and collegial relationships for sustainable PLD (Timperley et al., 2008; Porche et al., 2012; Hardy et al., 2018; Bendtsen et al., 2022). These studies collectively point to the essential role of supportive structures within schools.

In addition, it is also essential to acknowledge that while schools play a key role in creating an environment conducive to fostering and enhancing teacher agency, they function within specific ecological environments. Understanding these environments and their influence on teacher agency is essential, as is discussed in the following section.

7.3.3 Structural and cultural conditions influencing teacher agency

The findings from this study illustrate that a PLD environment grounded in EBL can enhance teacher agency for PLD. The study has shown how enhancing individual capabilities, especially cognitive capacity, positively affects teacher agency. This enhancement has enabled participants to foster a positive learning atmosphere in classrooms and, to some extent, within their departments or schools, through increased collaborative learning with peers. The participants demonstrated ability to modify their working environments aligns with existing research, which suggests that teacher agency is not simply the outcome of external forces, but the individual acts intentionally to affect the environment (Bandura, 2001; Billett, 2001; Mercer, 2011; Pantić, 2015; Eteläpelto et al., 2013; Ryder et al., 2018; Kauppinen et al., 2020).

This study illustrates that involving teachers in their own learning processes through enquiry can enhance teacher agency, in line with existing research (Timperley, 2011; Stoll et al., 2012; Kennedy, 2014; Cordingley, 2015; Darling-Hammond et al., 2017). Beyond supporting the existing literature, it contributes deeper insights into how enquiry based PLD, in this case, the EBL programme involving action research, affects teachers' intrapersonal components and intentional actions. These insights are significant as they shed light on a valuable PLD approach that can enable teachers to better prepare students for a rapidly changing and competitive global landscape. However, the study also reveals insufficient evidence of high level teacher agency, likely due to a lack of critical reflection.

Mezirow (1991) stated that critical reflection, a key component of the transformative learning process, remains primarily an individual endeavour, involving a genuine enquiry that seeks to challenge and rethink entrenched mindsets. However, this study highlights that critical reflection, which is essential for attaining a high level of teacher agency, is not straightforward; it is significantly influenced and often limited by broader structural and cultural conditions. According to Priestley et al. (2015), while individual capacities and capabilities are crucial and may be considered necessary for achieving teacher agency, they are not sufficient on their own. They argue that teacher agency must be realised within specific contexts, influenced by existing cultures of thinking, working, and doing, as well as by broader structural conditions. Therefore, fostering teacher agency is not only a matter of enhancing teachers' capacities and capabilities through education and PLD. Even teachers with significant capabilities can encounter environmental obstacles that impede or complicate the exercise of teacher agency. Thus, Priestley et al. contend that the aspiration for teachers to act as agents of change is unlikely to effect a real transformation in educational processes and practices without addressing cultural and structural factors.

This study's findings, particularly in the context of Korea, highlight the policy-driven emphasis on teacher quality as a means to improve student outcomes and thereby enhance national economic competitiveness. This approach aligns with Biesta's (2009) notion of the qualification function of education, which associates better education with a stronger national economy. Analysis of the data suggests that this emphasis has led to a PLD environment in Korea that offers a broad range of opportunities for acquiring new knowledge and skills, helping teachers stay up-to-date with the latest pedagogical trends and new educational technologies. However, a predominantly top-down PLD approach by the government, which favours a transmissive learning style, was seen to offer limited opportunities for SRL and critical reflection, and therefore limited affordances for teacher agency.

This study suggests that critical reflection is pivotal for exercising high levels of teacher agency to achieve good teaching. Numerous educators maintain that good teaching should involve making wise educational judgments about what is educationally desirable and ethical (Biesta, 2009; Eteläpelto et al., 2015; Pantić,

2015). This involves not only enhancing individual capacities but also broadening the discourse on teacher agency to include a wider consideration of teacher roles within society. This expanded perspective encompasses not only the enhancement of individual teaching skills and student learning but also a broader recognition of the role of teacher agency in society. It is suggested that such discourse should be integrated into pre-service and in-service PLD, educational policies, and school frameworks. Key topics for this discourse include rethinking the ultimate goals of learning (Earley, 2022; Earley & Greany, 2022) and addressing the imperative of a sustainable future (Bourn, 2016; Aboytes & Barth, 2020; Durrant, 2020; Koskela & Kärkkäinen, 2021; Fischer et al., 2022; Higham, 2022). These issues will be further examined in the forthcoming concluding chapter.

This section has highlighted the contributions of this study to the field of teacher agency. However, researching such a dynamic phenomenon presents numerous challenges and limitations, which are discussed in the following section.

7.4 Limitations

Studying teacher agency involves accessing individuals' judgments, intentions, evaluations, and their practical actions. As Edwards (2015) states, gaining a comprehensive understanding of these aspects is challenging, and there are limitations to what can be achieved through social research. Acknowledging these challenges, I adopted an approach that involved considering each participant as a whole person, influenced by their unique past experiences, current working environments, and future aspirations. This holistic perspective informed my interpretations of their self-reported perceptions and actions.

The primary method for data collection in this study was through individual and group interviews, conducted in three distinct phases. While this methodological choice allowed for in-depth insights into the participants' experiences, thoughts, and actions over time, the trustworthiness of participants' reports can be subject to question. Influences such as social desirability bias (Larson & Bradshaw, 2017; Bergen & Labonté, 2020) might have led participants to offer more socially

acceptable responses instead of ones reflecting their true experiences. Additionally, limitations in language to articulate their reflections on the process or a cultural tendency towards collectivism, which discourages individuality, could have resulted in under-reporting of changes. Despite these potential biases, the reported changes in reflection were generally supported by corresponding changes in actions, and reported decreases in reflection were indicated through self-reports of reverting to previous behaviours. These findings collectively suggest the reliability of the participants' reports.

Another area for consideration relates to concerns raised by Bell et al. (2011) regarding the appropriateness of assessing levels of reflection, which are particularly relevant when considering the implications for teacher agency. This connection is crucial because the ability to reflect critically is an integral aspect of teacher agency in this study. In encouraging individuals to exercise high levels of teacher agency, there is a risk of overly focusing on achieving specific outcomes, potentially detracting from the developmental process of teacher agency. In this study, however, I contend that this was not the case. The increase in teacher agency among most participants, from low-moderate to moderate-high levels, driven by increased reflection, is significant. This shift entails a reorientation of core beliefs when addressing problems. Viewing transformation as a process of ‘becoming’ (van Lier, 2004), characterised by the re-envisioning, reordering, and reconstruction of knowledge, self, and environment (Lysaker & Furuness, 2011), any progression towards critical reflection and increased teacher agency is of significance. However, the study's approach of categorising reflection and agency changes as low, moderate, or high, may not fully capture the breadth of reflection present in individuals’ thoughts. A more detailed spectrum might be needed to accurately identify nuanced changes in reflection, encompassing learning that has been expanded, modified, or transformed, and its subsequent impact on teacher agency.

In addition, learners may face difficulties in accepting and acting upon the newfound clarity that comes with perspective transformation. Mezirow (1991) suggests that this challenge can arise due to conflicts with established perspectives, self-deception, a lack of knowledge on how to act on the new perspective, or situational factors that hinder action. Mezirow also emphasises the importance of recognising that

individuals may vary in the level of teacher agency they aim to achieve, depending on different contexts and purposes; therefore, they may not always aspire to maximise their agency.

The findings presented in this study do not offer easy formulas for developing teacher agency. In fact, understanding teacher agency as a dynamic and developmental phenomenon presents a challenge for educators in terms of applying these insights practically to foster teacher agency. An important aspect to consider when interpreting these findings is the study's small sample size, coupled with the fact that all participants, being enthusiastic and committed teachers who volunteered for the study, might not fully represent the broader teacher population. Furthermore, it is important to acknowledge the influence of the EBL programme's design on participants' teacher agency. In the upcoming concluding chapter, I reflect on how my perspective, changed as a result of conducting this study, might influence my approach to designing PLD programmes in the future. Additionally, I examine other factors that should be considered alongside PLD programmes to effectively impact teacher agency.

7.5 Conclusion

This chapter discussed the findings from Chapters 5 and 6 to examine how teacher agency for PLD can be developed through an EBL approach involving action research. The integration of these findings facilitated the identification of several key ways in which the EBL programme, by fostering self-regulated learning, critical reflection, and collaborative learning, enhanced affordances for teacher agency for PLD and facilitated its development.

The EBL programme had a positive impact on teacher agency by enhancing cognitive processes, particularly in areas related to SRL and reflection. This enhancement positively affected self-efficacy and other intrapersonal components of motivation and affect. Changes in these intrapersonal components led to positive shifts in intentional actions within the classroom. Teachers increased their use of LCP, incorporating more student-centred activities and classroom management

techniques. They also enhanced communication and engaged in problem-solving with students, focusing on the quality of learning by better meeting students' needs and interests rather than simply covering the syllabus. In addition, while the EBL programme positively influenced intrapersonal components and intentional actions in ways that contributed to the development of participants' teacher agency, it was found that the increase in teacher agency exhibited temporal, contextual, and individual variations.

By integrating the findings of this study, I have expanded upon the initial conceptual framework of teacher agency developed through the literature review in Chapters 2 and 3. These developed frameworks offer a deeper, more nuanced understanding of teacher agency for PLD within the classroom and broader school environments. The frameworks identify and explain the key characteristics of intrapersonal components and intentional actions, positioning teacher agency at low, moderate, and high levels. These frameworks could serve as diagnostic and assessment tools, aiding teacher educators and school leaders in integrating teacher agency as a learning goal within PLD initiatives. Additionally, they provide teachers with a means to self-assess and reflect on their own levels of teacher agency.

This study highlighted the essential role of cognitive development in enhancing teacher agency. Diverging from the prevailing cognitivist approach in teacher agency research, which often overlooks other intrapersonal components (Cong-Lem, 2021), this study adopted a holistic approach. It examined the influence of the PLD environment not only on cognitive processes like SRL, reflection and self-efficacy (Bandura, 1997) but also on how these changes affect motivation, affect, and ultimately, intentional action. This perspective, which views agency as the outcome of various interconnected factors, aligns with existing research suggesting that multiple, interconnected causes support the exercise of agency (Bandura, 1997; Larsen-Freeman & Cameron, 2008; Mercer, 2012).

Moreover, this chapter explored the study's contributions towards a deeper understanding of teacher agency, particularly its dynamic interplay between the individual intrapersonal components, intentional action, and the multiple environments connected across time. After participating in the EBL programme, analysis revealed an increase in participants' teacher agency to a moderate level.

However, exercising high level teacher agency, especially over the long term, was found to be challenging without support at the school and policy levels. These findings align with Priestley et al.'s study (2015), which suggests that while individual capacities and capabilities are crucial and may be considered necessary for achieving teacher agency, they alone are not sufficient. This highlights the need for comprehensive support for teacher agency, extending beyond formal PLD to include support at both school and policy levels, a topic that will be the focus of the forthcoming concluding chapter.

Chapter 8: Conclusions and ways forward

8.1 Introduction

In this final chapter, I consider the implications of the findings for the future development of teacher agency. By integrating the study's main findings with relevant literature, this chapter proposes practical strategies to enhance teacher agency for professional learning and development (PLD). This form of teacher agency is considered crucial for effective PLD—a self-driven process that enhances teachers' professional knowledge, skills, attitudes, and beliefs to improve teaching practices, and ultimately, student learning and wellbeing. Although the study is contextually situated in Korea, the global trends in standardisation and accountability in education (Leijen et al., 2020; Cong-Lem, 2021; Cochran-Smith et al., 2022; Mills et al., 2022) suggest that these findings have worldwide applicability.

This study aimed to understand how the internal dimensions of individuals influence the intentional actions that constitute teacher agency. Specifically, it explored how cognition—encompassing self-regulated learning (SRL), self-efficacy within this process (Bandura, 1997), and critical reflection—along with motivation and affect, shape intentional actions. This concept, previously underexplored in the literature (as discussed in Chapter 2), was investigated by examining changes in these areas among participants engaged in an enquiry-based learning (EBL) programme involving action research. The findings reveal that EBL can positively influence teacher agency for PLD, particularly by enhancing cognitive capacities. However, the study also found that without supportive environmental conditions outside the programme, participants struggled to sustain high levels of teacher agency over time. Therefore, creating supportive work environments is essential for fostering effective teacher agency.

Through this study, I have deepened my understanding of the multidimensional nature of teacher agency, recognising its various interconnected aspects—intrapersonal, interpersonal, environmental, and temporal. This complexity suggests that no single strategy alone can foster the development of teacher agency.

Consequently, the first part of this chapter discusses a range of strategies that could collectively enhance teacher agency for PLD. These strategies include teacher-led enquiry, collaborative learning, and critical reflection, applicable at different organisational levels, including within PLD programmes and school settings.

The findings of this study, which suggest a tendency among participants to focus on developing students' individual capacities, coupled with significant global changes since the study's inception in 2015, most notably the coronavirus pandemic, have greatly influenced my understanding of teacher agency. This evolving perspective has led me to reflect on the design of the EBL programme and consider how the insights gained might shape my future approach to designing and facilitating PLD programmes. These reflections have also prompted a deeper contemplation on the underlying purpose of education, as discussed by Biesta (2009), and have led me to engage with Earley & Greany's (2022) question, 'Learning for what?' In the second part of this chapter, such considerations and discussions around my work lead me to examine the role of teacher agency more broadly within society.

In addressing one of today's main educational challenges—equipping individuals and societies to confront escalating environmental and social issues (Sarid & Goldman, 2021)—I have turned to literature published in the later stages of this study. This literature allows me to explore teacher agency within the context of Education for Sustainable Development (ESD) (Koskela & Kärkkäinen, 2021; Fischer et al., 2022; Bourn, 2022; Bourn et al., 2023) and in empowering young people (Durrant, 2020; Bourn & Hatley, 2022; Higham, 2022). Given the 'civilizational threats' identified by Higham (2022), which highlight challenges to the global economy, democracy, and the environment, it becomes increasingly vital to explore ways to support teachers in realising the transformative potential of their actions and interactions. Such support is crucial in helping students develop the mindset and skills necessary to contribute to a better society.

Finally, the chapter suggests directions for future research and concludes by summarising the contributions of this study to the field of teacher agency.

8.2 Environments supporting teacher agency for PLD

This study suggests that changes in teacher agency are specific to individual teachers and their respective work environments. To support the development and exercise of high level teacher agency for PLD, it appears essential for educational and professional settings to address the various components that constitute teachers' agentic systems (Manyukhina & Wyse, 2019). Given the holistic and relational nature of teacher agency, a multidisciplinary approach seems necessary. A useful recommendation may be for educators to create learning environments and select strategies that are adaptable to the diverse and evolving needs of individuals across different contexts and over time.

While numerous studies (Pantić, 2015; Priestley et al., 2015; Woodhouse & Pedder, 2017; Durrant, 2020; Jenkins, 2020) have identified school-level support as a key factor in developing teacher agency, this study took a different approach. It engaged teachers from various schools in Seoul, chosen to attract motivated individuals and to offer developmental opportunities outside of school settings. The findings of the study imply a need for collegiate support within schools to sustain changes in teacher agency, suggesting that a school-based EBL programme involving participants from the same school could foster more enduring changes. This approach may be ideal whenever possible, and I will endeavour to engage in school-based PLD in the future. However, in addition to school-based PLD, I argue that it is essential to provide opportunities for individual teachers outside of their school settings, especially for those in schools where leadership may not support engagement in PLD that fosters teacher agency. Additionally, selecting teachers from different schools takes advantage of the benefits of heterogeneous learning groups that collaborate across diverse professional expertise and contexts (Cochran-Smith & Lytle, 1999; Townsend, 2014; Kauppinen et al., 2020). The shift in participants' perceptions—from generally negative views of teachers to more positive attitudes towards working with school colleagues—validates this approach.

Nevertheless, the study's findings suggest that relying solely on PLD programmes outside of school settings is not sufficient to develop teacher agency effectively over time. This finding aligns with Bendtsen et al. (2022), who suggest that the outcomes

of a learning process depend not only on the goals and arrangements of a PLD programme but also on how these objectives interact with other factors. Therefore, the following sections will highlight three interconnected approaches—teacher-led EBL, collaboration, and critical reflection—that can be implemented at various levels, outside, within, and across schools. These approaches are designed to empower educators to create learning and working environments that support the ongoing development of teacher agency for PLD, thereby having a lasting impact on students.

8.2.1 Teacher-led EBL

It is suggested that an effective way to foster teacher agency is to reconnect teachers with their personal knowledge and to value their experiences. This study focused on implementing a teacher-led EBL approach, which emphasises the voices of teachers and facilitates learning within their specific work environments. The findings from this study align with those from various studies (Cochran-Smith & Lytle, 1999; Dillon et al., 2011; King & Nomikou, 2018; Wagner et al., 2019), demonstrating that teacher-led EBL significantly influences teachers' perceptions of their teaching and their roles as educators. This influence, as found in this study, can potentially lead to transformative experiences (Mezirow, 1991; Lysaker & Furuness, 2011).

EBL can empower teachers to become self-regulated learners, fostering the development of metacognition, the ability to learn how to learn. This aspect is emphasised as a key component of lifelong learning in the educational policies of various countries (Stoll, 2020). The study found that equipping teachers with knowledge and tools for conducting research, such as the cycle of learning (CofL) process of planning, acting, observing, and reflecting, allows practitioners to better interpret and evaluate information. This enabled participants to shift from an absolutist view, where knowledge is viewed as fixed, to an evaluatist perspective, characterised by dynamic knowledge frame that is constantly reassessed and critiqued (Kuhn, 1991; Johnston, 2012). These findings are in line with Hadar and Benish-Weisman’s (2019) large-scale quantitative study on teacher agency, which

concluded that possessing certain knowledge and skills is critical for realising teacher agency. Without these, teacher agency could remain underdeveloped or latent.

In evolving educational environments, EBL can equip teachers with the capacity to exercise teacher agency, which includes professional knowledge and skills, strategies for professional learning, and personal attributes such as reflexivity, emotional awareness, self-awareness, and self-confidence (Eteläpelto et al., 2013; Biesta et al., 2015). Being agentic involves embracing necessary changes to address complex educational challenges (Heikkilä et al., 2020; Stoll, 2020). Teachers as change agents are lifelong learners, adopting enquiry-oriented methods to improve and adapt their work to new insights at both the classroom and school levels (van der Heijden et al., 2015).

These findings may have implications for leadership. For example, leaders within schools can significantly influence the fostering of teacher-led enquiry by creating a culture of enquiry. This involves enabling teachers and focusing on learning as a daily practice for everyone in the community, ultimately benefiting students (OECD, 2019). Such leadership can transform schools into learning organisations. According to Stoll (2020), these organisations are ideal for addressing changing external environments and facilitating organisational change, innovation, and improvements in student outcomes. Schools as learning organisations are characterised by seven action-oriented dimensions, as outlined by Stoll (2020):

- Developing and sharing a vision centred on the learning of all students.
- Creating and supporting continuous learning opportunities for all staff.
- Promoting team learning and collaboration among staff.
- Establishing a culture of enquiry, innovation and exploration.
- Embedding systems for collecting and exchanging knowledge and learning.
- Learning with and from the external environment and larger learning system.
- Modelling and growing learning leadership.

Engaging in effective teacher research may be best achieved through collaboration, such as through school-university partnerships, research learning communities, and networks of schools working together (Earley & Greany, 2022). For instance,

Godfrey's study (2020) on school-university partnerships focused on collaborative peer enquiry. In this study, the staff from the UCL Institute of Education (IOE) provided a review of the literature on effective feedback, conducted workshops to explain the overall rationale for the evaluations, and described how theories of action would underpin data collection and analysis for targeted school staff. Additionally, the study introduced a new language from academia, which was used among the school staff to discuss evaluation, learning, feedback, and related topics. A revisit to the participating schools over a year later showed that school leaders had adopted this language to describe their reflections on the ongoing progress in implementing the changes they had introduced to their school policies and practices (Godfrey, 2020).

8.2.2 Collaborative learning

Throughout this study, I have discovered that teacher agency is relational, a finding consistent with other studies (van der Heijden et al., 2015; Soini et al., 2015; Philpott & Oates, 2017; Kauppinen et al., 2020). The study revealed that learning alongside peers and students is vital for creating conditions that promote emancipatory learning and develop teacher agency, which can lead to more effective teaching. This aligns with the historical and cross-disciplinary view that human individuals are relational beings, requiring the presence of others for development (Lysaker & Furuness, 2011).

The study's findings support Priestley et al.'s (2015) assertion that collegial working is essential for enhancing teacher agency. Data showed that even when participants developed teacher agency within the EBL programme, its enactment was often hindered by a lack of collegiality and collaborative culture within their schools. This corroborates Priestley et al.'s (2015) argument that establishing the right conditions and processes for teacher collegial practices increases the likelihood of constructively developing teacher belief systems, professional discourses, and professional knowledge, contributing to a more expansive form of teacher agency.

This study found that within the EBL programme, peer discussions centred on ongoing classroom research, facilitating more in-depth interactions than those usually seen in schools which typically involve storytelling and sharing materials—characteristic of comfortable collegiality. These discussions involved articulating new and tacit knowledge gained from data collection and analysis, along with the provision of constructive feedback. Therefore, it is presumed that in schools functioning as learning organisations (Stoll, 2015) and providing a supportive, respectful, and trustworthy collegiate space, teachers are more likely to engage in similar reflective dialogue. However, the study's findings, in line with Hargreaves & O'Connor's (2018) research, also suggest that critical collegiality—especially involving the challenging of others' practices, perspectives, and assumptions—does not arise on its own. This is consistent with research that highlights effective enquiry dialogue requires learning and development (Kennedy, 2013; Wilkinson et al., 2017).

Various approaches can be employed to enhance critical collegiality among teachers. One such approach could involve engaging teachers as observers in local school PLCs and then critically reflecting on their experiences. This can help them differentiate between critical collegiality and comfortable collegiality (Glazier et al., 2017). Additionally, learning to employ dialogic teaching methods, such as enquiry dialogue (Wilkinson et al., 2017), could be another effective strategy. Aimed at improving teachers' argument literacy, this practice encourages individuals to interact with and build upon each other's ideas, articulate reasons, qualify statements, and identify flaws in arguments. Wilkinson et al.'s (2017) study highlights that, despite inconsistencies between teachers' beliefs and their practices, learning to engage in enquiry dialogue led to significant improvements in teachers' ability to facilitate enquiry dialogue and in the quality of students' argumentation during discussions. These outcomes hold promise for the use of dialogic pedagogy to enhance teachers' skills in challenging the practices, perspectives, and assumptions of their colleagues.

Learning to engage in enquiry dialogue can also enable teachers to collaborate more effectively with students, which this study found critical in influencing changes in participants' beliefs about student and teacher roles. Enquiry dialogue often draws on Alexander's principles of dialogic teaching (2006, 2020). Alexander states that

dialogic teaching harnesses the power of conversation to captivate students' interest, stimulate their thinking, deepen their understanding, expand their ideas, and facilitate the construction and evaluation of arguments, in addition to offering social and emotional benefits. He identifies six principles of dialogic teaching, which enable the fostering of a collaborative culture and ethos in the classroom (Alexander, 2020, p.131):

- Collective: The classroom serves as a platform for joint learning and enquiry, where students and teachers collaborate to address learning tasks together.
- Supportive: Students feel free to express their ideas without fear of embarrassment, hesitation, or judgment, and they assist each other in reaching common understandings.
- Reciprocal: Participants actively listen, share ideas, pose questions, and consider alternative viewpoints.
- Deliberative. Participants discuss and seek to resolve different points of view, they present and evaluate arguments and they work towards reasoned positions and outcomes.
- Cumulative. Participants build on their own and each other’s contributions and chain them into coherent lines of thinking and understanding.
- Purposeful. Classroom talk, though sometimes open-ended, is nevertheless structured with specific learning goals in view.

By applying these principles, dialogic teaching aims to achieve reciprocal, co-constructed learning between the teacher and students. Alexander emphasises that dialogic teaching is not just a pedagogy for developing critical thinking; it is also a means to empower students for lifelong learning and democratic engagement in society (further discussed in section 8.3.3).

8.2.3 Critical reflection

Individuals actively engage in selecting and shaping their own perspectives, beliefs, and learning experiences, a process influenced by the historical and cultural contexts of their lives (Snape & Spencer, 2003; Cresswell, 2013; Cohen et al., 2015;

Merriam & Tisdell, 2016). This study illustrates the concept through participants' reflections on how their past and present educational experiences have shaped their understanding of the roles of teachers and students. These reflections appeared to offer a degree of emancipation from existing constraints, thereby enhancing teacher agency. However, similar to the findings of Priestley et al. (2015), participants in this study seemed to demonstrate a limited understanding of education's broader purposes, focusing mainly on enhancing individual learning. Biesta et al. (2015) argue that such a narrow vision can limit teachers' potential to promote quality education. This insight has led me to understand that developing a high level of teacher agency involves not only advancing individual professional capacities but also situating teachers' roles and actions within the broader purposes of education and their contributions to society.

In exploring teacher agency through this study, I have realised that my own past experiences posed challenges in aligning my teacher agency with the broader purposes of education. My career began in 1999 at a struggling inner-city school in the UK, where as a novice teacher, I heavily relied on the newly implemented and prescriptive literacy and numeracy strategies. Later, as a teacher educator in Korea, I engaged in PLD programmes that emphasised adherence to standardised processes and criteria. These experiences shaped my view of teaching as primarily focused on achieving effective individual learning and development within established boundaries.

During my PhD studies, I began to appreciate not only the importance of education fostering individual learning but also its wider societal impact. However, when designing the EBL programme, I had not fully grasped the complexity and significance of these broader perspectives, leading me to address the purpose of education in isolated sessions within the programme. Insights from this study have led me to realise the importance of integrating discussions about developing individual capacities into the broader context of educational purposes throughout teacher education programmes.

Mezirow (1991) argues that through critical reflection, individuals gain the ability to think independently, thereby liberating themselves from conditioned assumptions about the world, others, and themselves. This process is crucial for empowering

individuals to act as engaged citizens in a democratic society, capable of making responsible moral decisions. However, the findings of this study suggest that achieving this goal is challenging without robust professional discourse, not only within teacher education programmes but also across various levels, including schools and policy-making arenas. Mezirow (1991) contends that such discourse should challenge established presuppositions and their sources, fostering discussions about the broader purposes of education and the contributions teachers can make to society. This suggests that high teacher agency involves moving beyond utilitarian and instrumental views of education to a more sophisticated understanding of educational values and purposes.

Biesta (2015) emphasises that education should go beyond equipping students to function effectively in a society 'as is' and should enable them to contribute to a society that 'might be' (Biesta et al., 2015, p.634). Building on this concept, Biesta (2020) further elaborated that education, in terms of subjectification, involves 'qualified' freedom (Biesta, 2020, p.95), linking democracy to the constraints communal living imposes on individual freedom. He highlighted the current ecological crisis as an example of the need for limits on individual engagement with the world. Extending this thought, Biesta (2021) proposed an approach to education that is neither excessively controlling nor entirely permissive. He suggests helping students overcome self-centred ways of thinking and acting by offering them experiences they may not have sought or even realised they needed (Biesta, 2021).

This perspective complements Archer's (2000) view on human agency, which is grounded in the capacity to reflect on and evaluate social contexts, envision creative solutions, and collaborate for transformative change (Archer, 2000). Together, these ideas highlight the importance of fostering an educational environment that not only supports individual growth and freedom but also ensures that this growth aligns with and contributes to societal goals and needs. This understanding leads me to explore teacher agency within the context of Education for Sustainable Development (ESD).

8.3 Extending the concept: Teacher agency for ESD

The concept of ESD has emerged as a significant theme in education over the past two decades. This is evident from initiatives such as the United Nations' (UN) 'Decade of Education for Sustainable Development' (2005-2014) and '2030 Agenda for Sustainable Development' with its 17 interrelated Sustainable Development Goals (SDGs) (United Nations, 2015).

Sustainable development (SD) has been defined in various ways, but the most widely cited definition comes from the UN's Brundtland Commission. In 1987, the Commission defined sustainability as 'meeting the needs of the present without compromising the ability of future generations to meet their own needs.' Similarly, while ESD lacks a universally agreed-upon definition, it is generally regarded as an educational approach that addresses SD issues across three sustainability dimensions: environment, society, and economy (Bourn et al., 2023).

Bourn and Hatley (2022) highlight that the SDGs, launched in 2015, provide a valuable educational framework, especially articulated in Target 4.7 of the SDGs. Numerous governments, including those of Korea and the UK, have committed to the SDGs, and specifically to Target 4.7, which states:

> By 2030, ensure all learners acquire knowledge and skills needed to promote sustainable development, including among others through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship, and appreciation of cultural diversity and of culture's contribution to sustainable development (Bourn & Hatley, 2022, p.5)

Bourn & Hatley (2022) argue that Target 4.7 calls for more than just environmental, peace, or human rights education in the classroom. It also implies the need to re-evaluate the purpose of education, to recognise it as a public good that empowers learners to co-create change, foster innovation and creativity, and actively contribute to sustainability and collective human wellbeing.

In recent years, Korea, influenced by a former prominent national figure who served as UN Secretary-General, has formally integrated SD into its education curriculum as part of Global Citizenship Education (GCE). Bourn (2022) notes that the Korean government's approach to GCE prioritises equipping learners with the knowledge and skills necessary for the global economy of the twenty-first century. This has led to the promotion of a unique model of global citizenship, emphasising engagement in learning about global issues in neoliberal terms for economic competitiveness. Echoing this, Lee (2022) observes that the recent formal integration of GCE into the curriculum has allowed little room for teachers to engage beyond a technical level, tending to confine teachers to transmitting knowledge and values without deeper engagement. These observations highlight the importance of supporting teachers in viewing ESD not just as information to be transmitted, but as a transformative tool for shaping students' worldviews.

The examination of teacher agency for ESD involves a wide range of issues (e.g., Chapter 8 in Durrant, 2020), which are too extensive to be fully addressed in this study. Consequently, the following sections will focus on how formal teacher education and schools can support teachers in exercising agency towards ESD to help students contribute to a sustainable future.

8.3.1 ESD

Sustainability represents a multidimensional approach encompassing various phenomena. In educational research, it is often conceptualised as a three-dimensional model that includes the environment, society, and the economy, all of which are intricately interrelated (Koskela & Kärkkäinen, 2021). In the context of SD teaching and learning, the environmental dimension covers all living organisms, resources, and life-support systems. The economic dimension focuses on jobs, income, and aims for appropriate development. Meanwhile, the social dimension addresses communal living and highlights the importance of peace, equality, and human rights (Koskela & Kärkkäinen, 2021).

Aboytes and Barth (2020) assert that ESD contrasts with other instrumental learning approaches due to its robust transformative nature. It aims to empower individuals by fostering critical thinking about established values and social norms, promoting sustainable principles and ethics, and challenging unsustainable practices. Research indicates that effective ESD should equip teachers with the ability to think critically, handle uncertain information, assess values, envision potential futures, and profoundly impact both their professional environment and personal lives (Koskela & Kärkkäinen, 2021; Fischer et al., 2022).

Recent studies offer valuable insights into how teacher education can enhance teacher agency for ESD. For instance, Koskela & Kärkkäinen's study (2021), focusing on student teachers in a Finnish ESD curriculum course, found that participants generally had a narrow understanding of SD, primarily focusing on the social dimensions and less so on the economic and environmental aspects. Similarly, Bourn et al.'s study (2023), which examined student teachers from four different universities worldwide, found variations in their comprehension of ESD. Specifically, those from UCL IOE included environmental, social, and economic issues in their understanding, while their counterparts from University X, Pakistan, and two Turkish universities focused primarily on environmental issues. This difference is attributed to varying institutional contexts, with IOE integrating a more comprehensive range of SD components into its teaching and research. It was also highlighted that most student teachers did not perceive ESD as a tool for transforming students' worldviews, indicating a disconnect from the broader scholarly discussions on ESD outcomes. Consequently, Bourn et al. (2023) recommend for teacher education programmes to incorporate ESD as a comprehensive approach or philosophy throughout the curriculum, allowing student teachers to explore ESD content across various modules and engage in ESD processes and assessments.

These findings highlight the need for teacher education programmes to emphasise a holistic perspective on SD aspects, thereby enabling teachers to acquire a more comprehensive understanding (Koskela & Kärkkäinen, 2021). This understanding involves not only knowing the content they teach but also perceiving ESD as a tool for transforming students' worldviews and steering them towards achieving

sustainable futures. However, as this study indicates, the effectiveness of such learning, especially through formal PLD programmes, requires support at the school level, as examined in the next section.

8.3.2 Developing values and ESD in schools

Earley & Greany (2022, p.275) present critical questions for educational reflection: ‘Learning for what?' and ‘Leadership for what?' These questions aim to prompt leaders and teachers to reflect and act against the transformation of schools into places narrowly focused on a standards-based curriculum and test preparation. It is argued that such a shift necessitates school leaders finding the strength to be bold in the face of high-stakes accountability and to cultivate safe, supportive cultures for their teachers, where effective practices and meaningful relationships can flourish (Brown et al., 2022; Earley & Greany, 2022).

In line with this, values-led school development initiatives, grounded in a clear vision and a shared set of values, can enable educators to engage more deeply with the purpose of education. Examples of such initiatives include 'Citizen Schools' (Glatter, 2022), Round Square (Higham & Djohari, 2018), and the Index for Inclusion, which is described as ‘a guide to school development led by inclusive values’ (Booth & Ainscow, 2016, cited in Higham & Booth, 2018). Higham & Booth's (2018) research on the Index for Inclusion highlights its role in offering a 'universe' of inclusive values—such as trust, community, and sustainability—as an underpinning for school improvement. In the context of this study, these particular values have played a crucial role in fostering teacher agency.

Currently, this shift towards values-led education involves integrating ESD into the school's ethos. Bourn & Hatley (2022) state that education, with a clear awareness of its purpose for the common and public good and a focus on critical analysis, can achieve the transformational and systematic change needed to address global challenges. Bourn (2016) emphasises that a whole-school and holistic approach to sustainability education is likely to have a greater and more lasting impact on students. This approach requires strong and committed support from senior

leadership within the school, enabling leaders and teachers to promote activities across various school areas and involve a range of stakeholders (Bourn, 2016).

In this whole-school approach, research suggests that teaching and learning about SD should extend beyond formal settings to include educational experiences that employ student-centred approaches and inductive teaching methods in authentic environments, enabling students to engage in first-hand experiences (Jeronen et al., 2017; Hofman-Bergholm, 2018; Koskela & Kärkkäinen, 2021). Bourn (2022) discusses such examples, highlighting educational initiatives that have utilised UN's SDGs as a foundation for learning about global sustainability issues. These initiatives focus on providing resources and ideas for school lessons and online activities for both teachers and students. For instance, the Get Up and Goals Project, which ran from 2017 to 2020, was funded by the European Commission and involved twelve European countries, including the UK (Bourn, 2022). It promoted students' active participation in their communities towards creating a more peaceful and sustainable world, aiming to inspire teachers and students to actively engage in SD efforts in a real and meaningful way.

Furthermore, international organisations like the UN and The United Nations Educational, Scientific and Cultural Organization (UNESCO) consistently emphasise the need to place young people's voices and needs at the heart of SD programmes. In alignment with this perspective, Bourn & Hatley (2022) assert that young individuals possess first-hand experience of the educational challenges discussed at global forums and aspire to play a role in shaping the decisions that impact their future. Therefore, it is imperative to create opportunities for youth voices to have a meaningful influence on educational decisions.

8.3.3 Empowering students as change agents

Exercising teacher agency involves taking intentional action to make education, as Durrant (2020, p.136) puts it, 'enlightening, engaging, and transformational, opening up new ways of seeing the world, being in the world, and changing it for the better'.

Essentially, teacher agency entails teaching in a manner that cultivates change agency in students.

Young people are increasingly recognised as significant agents of social change worldwide. They have played a pivotal role in the climate emergency movements and actively participated in campaigns such as Black Lives Matter and MeToo (Bourn, 2022). Many young people have been particularly active in campaigns addressing the climate crisis, driven by an understanding that climate change will affect them more than any other demographic. Greta Thunberg, in particular, has gained substantial publicity and support due to her resonance with the views of many young people (Bourn & Hatley, 2022). Moreover, young people's effective use of social media has not only captured the imagination of their peers but also attracted the attention of policymakers (Bourn, 2022).

Durrant (2020) states that the nature and continuity of young people's influence is shaped during their schooling years. Within education, Higham (2022) argues that adults must lead in new and inclusive ways. He advocates for the reconstruction of educational systems that are centred on cultivating young people's knowledge, skills, and dispositions, enabling them to succeed in areas where adults have failed, grounded in an ethic of collective engagement, dialogue, and transformation. Higham (2022) recognises various approaches to achieve this, such as the Index for Inclusion (Higham & Booth, 2018) and the International Baccalaureate (IB) curricula (International Baccalaureate Organization, 2010). Additionally, I would add Alexander's (2020) dialogic teaching as a valuable method for engaging young people in addressing urgent social issues.

In summary, there is strong evidence that developing teacher agency for ESD plays a central role in enhancing society's capacity to tackle some of today's most pressing challenges. However, Fischer et al. (2022), in their systematic literature review based on a qualitative analysis of 158 peer-reviewed English language publications, argue that despite various efforts to integrate ESD into mainstream education, it has not been broadly implemented across all educational levels. They advocate for a more systematic inclusion of ESD in teacher education and emphasise the commitment of school leaders and teachers. While these suggestions are valid, Priestley et al. (2015) note that teacher educators, school

leaders, and teachers, despite their potential to foster teacher agency, are subject to specific ecological conditions that can either support or limit their agency. Therefore, promoting teacher agency for ESD at both school and policy levels remains a dual challenge that is important to address.

8.4 Further studies

Teacher agency, as a construct, possesses inherent complexity that challenges researchers and warrants further investigation for a deeper understanding. Based on the findings of this study, I propose the following areas for future research at both the individual and school levels.

This study suggests that EBL programmes can significantly influence the development of teacher agency. A key aspect highlighted is the role of SRL and metacognition in developing teacher agency. Despite conducting a literature search, little progress appears to have been made since King and Kitchener's (1994) remarks on the scarcity of research concerning teachers' explicit awareness of their metacognition and epistemological understanding. Introducing teachers early in their careers to the concept of learning as a knowledge construction process, and emphasising the importance of active learner participation, could prove beneficial. By positioning the learner and learning at the centre of the teaching process, educators are likely to engage more in reflective processes related to pedagogical knowledge, thereby potentially enhancing their capacity for critical reflection.

The holistic view of teacher agency taken in this study showed that the development of reflection significantly influenced affective control, which in turn appeared to positively impact behaviour. However, most reflection research attempts to separate emotion from cognition, aiming to extract pure thought without considering the experiential and emotional aspects of learning. This research highlights the need to acknowledge the implications of emotions for teacher agency, supporting suggestions by others to broaden the cognitive perspective on critical reflection boundaries to include non-reflective and emotional aspects (Kroth & Cranton, 2014; Benesch, 2018; Miller & Gkonou, 2018).

Additionally, the findings demonstrate that a supportive school culture is crucial for influencing the changes in the level and sustainability of teacher agency. Comprehensive longitudinal studies that investigate how values-led schooling, characterised by an enquiry-based and collaborative culture, influences the development and sustainability of teacher agency would be valuable. Multi-year studies could focus on how changes can be messy and uneven over time, and whether individual changes lead to broader social change.

When considering teacher agency for social change, Fischer et al. (2022) note that few studies explicitly address how findings from ESD research can be translated into practice. Following this, it is suggested that future research could concentrate on the practical implementation of ESD, particularly how it can be collectively applied with students.

8.5 Conclusion

This study has addressed certain knowledge gaps in the area of teacher agency for PLD by providing nuanced insights into how teachers, as individuals, operate within the constraints and resources of their social, institutional, and policy environments. Drawing on Bandura's (1986) conception of human agency, Mezirow's theory of critical reflection (1991), and Priestley et al.'s (2015) ecological perspective of teacher agency, this study has developed conceptual frameworks to better understand teacher agency. Specifically, it focused on understanding the dynamic interplay between the individual's internal components, intentional actions, and multiple environments connected across time.

The analysis and discussion across Chapters 5 to 7 cumulatively demonstrates how EBL programmes, like the one designed for this study, can positively impact teacher agency for PLD. Such programmes can foster meaningful progression in teachers' PLD and enable lasting changes in their practice. This outcome is significant as it provides deeper insights into the effects of enhancing teacher agency through an EBL approach, and how teachers can be empowered to better prepare students for a rapidly changing and competitive global landscape.

Through data analysis using the developed frameworks for teacher agency, this study makes several contributions to the field, with implications for teacher educators, school leaders, teachers, and policymakers. The contributions are summarised as follows:

- The findings add support to and extend the individual-centred and sociocultural approaches to understanding teacher agency, enabling a deeper and more holistic understanding of how the interplay of individuals' intrapersonal components, intentional actions, and their environments over time contributes to the development and exercise of teacher agency for PLD.
- The study highlights the essential role of cognitive development, particularly the development of SRL and critical reflection in collaboration, in enhancing teacher agency for PLD.
- The qualitative case study approach allowed for thick descriptions, leading to in-depth analysis of participants' intrapersonal processes and actions. This facilitated the development of detailed conceptual frameworks of teacher agency that could assist teacher educators and school leaders in incorporating teacher agency as a learning goal within PLD initiatives. These frameworks could also be used by teachers for self-reflection in developing their agency.
- The study suggests that facilitating high levels of teacher agency, which have a lasting impact on students' learning and wellbeing, requires a multidisciplinary approach. This approach includes teacher-led EBL, collaborative learning, and critical reflection, implemented at various levels to enhance the growth of teacher agency for PLD.
- The overall lack of participants' engagement in critical reflection within the study highlighted the need to expand the understanding of teacher agency beyond individual student growth, considering its broader implications within society. It suggests that this involves exploring teacher agency within the context of ESD and incorporating a values-led approach to teacher education.

This study has deepened my understanding of the multifaceted nature of teacher agency, its significance in effective PLD, and what might help or hinder its development and enactment. It contributes to the field by providing a more holistic and nuanced understanding of teacher agency for PLD than is typically represented

in the literature. This contribution is not just theoretically meaningful but also provides practical guidance.

Teachers play a vital role in education, but their impact can often be limited to a technical capacity due to the prevailing influence of neoliberalism. Adopting a multidisciplinary approach to teacher education, as outlined, may empower teachers to exercise greater teacher agency in their classrooms and schools. This empowerment could enable them to recognise the impact of their actions on their own PLD, as well as on the learning of their students and colleagues.

Furthermore, it is important for teachers to critically reflect on the relationship between how they exercise teacher agency in the classroom and school, and the broader societal outcomes. Exercising teacher agency for societal change does not necessarily involve political activism that is distinct from classroom practice. If what happens in the classroom, school, and society are viewed as directly and intricately connected, then exercising teacher agency can lead to change not just at the individual level but also at the societal level.

Therefore, as this research suggests, teacher agency should be considered within a broader context. Empowering teachers to realise the full transformative potential of their agency may help them to see their roles as integral to societal and political change. With better support, it is hoped that teachers will engage more effectively in values education and ESD, thereby enabling them to exercise teacher agency to prepare students to contribute to a better society for themselves and for others, both now and in the future.

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Appendices

Appendix 1: Information sheet

Research title: Developing teacher agency through a professional learning approach involving action research

Who is conducting the research?

My name is Soh Young Lee and I am currently a PhD student at University College London Institute of Education (UCL IOE), placed number 1 for education worldwide in 2015 QS World University rankings.

I am inviting you to take part in my PhD research project that aims to explore teacher perceptions of professional learning involving action research in the Korean context.

I very much hope that you would like to take part. This information sheet will try and answer any questions you might have about the project, but please don't hesitate to contact me if there is anything else you would like to know.

Why am I doing this research?

My interest in teacher professional development learning involving action research stems from experience of working as a teacher trainer in Korea for the past decade and from conducting numerous classroom-based research. I am interested in how action research may help you develop professionally.

What are the benefits of taking part?

This research is a private professional learning programme run as part of my PhD research. The programme cannot be accredited by any educational institution but will be adapted from an established action research professional learning programme at the UCL Institute of Education. As a PhD researcher I am interested in gaining knowledge about teachers engaging in action research but equally important is the benefits that you could gain personally from being involved including:

- widening and consolidating your knowledge and experience of conducting research through action research workshops;
- taking ownership of your own professional learning by deciding on all aspects of the research yourself (e.g., research questions, data gathering, analysis) without having to worry about being assessed;
- collaborating, receiving support and feedback from your peers and facilitator (me) throughout your classroom action research project;
- opportunity to add to teaching knowledge, establish networks and professional learning communities in the future by sharing research findings with the wider educational community.

What will happen if you choose to take part?

To enable you to engage in classroom action research at the beginning of the programme I will run a small group research workshop consisting of nine primary school teachers working in Seoul. You will learn about action research and different ways of conducting research. You will then start your action research project where you will gather data from your own classroom. Throughout the project the group will meet to discuss the projects, receive and give feedback. The details of the professional learning programme are as follows (exact dates and times will be confirmed nearer the time of the programme):

Aspects	Detail
Dates and times Details of programme	Professional learning workshops Aug-Sep 2016: five two-hour action research meetings on the following topics: introduction to action research; identifying a focus for research and formulating research questions; data collecting methodology; analysing data; reporting results. Action research project Oct-Nov 2016 (8 weeks): gathering and analysing data from own class Oct-Nov 2016: one two-hour meeting every two weeks to discuss findings Presentation of findings December 2016 (3 weeks): 2-3 participants share their findings to the group and receive feedback each week 2017: teachers to volunteer to present their action research projects in their school and at an educational conference
Location	Hankuk University of Foreign Studies (한국외국어대학교)
Participants	Nine Korean primary school teachers
Programme facilitator	Soh Young Lee

In order to gather data for the PhD research project, you will be asked to consent to the following:

Dates	Method	Details
May 2016	Questionnaire	Sent via e-mail Aims to gather background information on your education, professional development and present working context Information will be used to inform planning of the professional learning workshops and help outline the topics for the first interview
Aug-Dec 2016	Observation	The professional learning meetings will be audio recorded observation notes take by the facilitator (me)
July 2016-July 2017	Interviews	Three individual face-to-face interviews per teacher Topics include experiences, knowledge and beliefs about education, teaching, learning, professional development and action research Each approximately 1 hour, audio recorded. At location of your own choosing (e.g., your school) Exact times to be decided with each individual teacher

All the interviews and observations will be audio recorded and each interview will be fully transcribed for analysis.

Will anyone know you have been involved?

Please inform your school to make sure that it is okay for you to take part in an action research professional development programme as part of a PhD research and as part of your individual professional development.

When I report on the research, I will ensure that you are not identified. No reference to personal names will be used. Gathered data and back-ups will be stored on devices with a secure access code, kept in a private secure location. Interviews will be conducted in a private and quiet location whenever possible to ensure confidentiality. Access to the gathered data will only be given to relevant persons including a transcriber and relevant academics. The data will be kept until it is judged that it is no longer necessary.

What are your rights?

You have the right to withdraw from the study at any time. You do not have to give a reason for withdrawing from the research and there will be no negative consequences if you decide to withdraw. You will still have the right to carry on with the professional learning programme without taking part in the PhD study.

What will happen to the results of the research?

You can request to see any transcripts of your interviews. Before the final thesis a summary of the findings will be sent to you and you will have a chance to comment on any descriptions or interpretations that you believe are inaccurate or mistaken.

The results will be shared at conferences, in journal articles and in a PhD thesis. You will be sent information on how to access the final thesis.

Do you have to take part?

It is entirely up to you whether or not you choose to take part. I hope that if you do choose to be involved then you will find it a valuable experience.

Thank you very much for taking the time to read this information sheet.

If you would like to be involved, please complete the following consent form and return to xxxxx@xxxxx by _____.

If you have any further questions before you decide whether to take part, you can reach me at the above e-mail address.

This project has been reviewed and approved by the UCL IOE Research Ethics Committee.

Appendix 2: 'The Action Researcher' (TAR) module aims and outcomes

Aims

All participants will:

- Develop action research methodologies drawing on research and literature on research methodologies;
- Make connections with the literature, Teachers' TV programmes, television documentaries and other materials and resources to develop educational practitioners' critical understanding of educational research methodologies;
- Explore and problematise different action researcher approaches using web pedagogies and multi-media;
- Contribute to the development of a learning community of practice;
- Critically engage practitioners in their own small-scale education setting-based investigation;
- Work collaboratively with a network of education practitioners in different contexts, e.g., teachers in the classroom, support managers, FE tutors, librarians;
- Use conceptual literature and visual narratives which link individual research projects with continuing professional learning and practice improvement;
- Consider alternative viewpoints about action research methodologies and engage with professional and academic discourse;
- Explore options for innovative practice in their setting which establishes change;
- Critically analyse and evaluate the effectiveness of their own action research projects.

Expected Outcomes

- All participants will develop professional knowledge and academic experience which will enable them to:
- Critically select appropriate methodologies for participants' own setting-focused research project;
- Understand and problematise different methodological approaches to action research;
- Plan and design a piece of educational action research;
- Contribute to and draw upon the community of research practice;
- Make connections between the scholarly literature, audio and video media, their own potential research and the wider issues related to continual professional learning and practice improvement.

Source: UCL IOE TAR module handbook 2015/16 pp.7-10

Appendix 3: Enquiry-based learning programme aims and outcomes

Aims

All participants will:

- Develop action research projects drawing on research and literature on research methodologies;
- Critically engage practitioners in reflection in their own small-scale education setting-based investigation;
- Contribute to the development of a learning community of practice;
- Explore options for innovative practice in their setting which establishes change;
- Critically analyse and evaluate the effectiveness of their own action research projects;
- Link individual research projects with continuing professional learning and practice improvement;
- Consider alternative viewpoints about action research methodologies and engage with professional and academic discourse;
- Explore options for innovative practice in their setting which establishes change;
- Critically analyse and evaluate the effectiveness of their own action research projects.

Expected outcomes

All participants will develop professional knowledge and academic experience which will enable them to:

- Critically select appropriate methodologies for participants' own setting-focused research project;
- Reflect critically and implement planned action for change to solve identified issues in the classroom;
- Contribute to and draw upon the community of research practice;
- Make connections between their own potential research and the wider issues related to continuous professional development and the ultimate purpose of education in general.

Adapted from UCL IOE TAR module handbook 2015/16 pp.7-10

Appendix 4: Enquiry-based learning programme sessions

Topic	Session focus
1. Action research within practitioner enquiry and educational research	• What is the purpose of education? Sharing values • What is practitioner enquiry? • Why action research? Pros and cons • The kinds of topics that are investigated in action research • Action research vs. applied research • The relationships of action research to reflective teaching
2. Research methodology Planning your research	• Finding your focus—selecting a topic and developing research questions • Where do your teaching philosophies and beliefs fit in? • Research questions—different types of research questions, developing and refining your questions • Writing a research proposal—context, focus and questions, rationale, benefits, evaluation of outcomes, action plan • Reflection—reflective practice through journal writing
3. Research Methods 1	• Ethics • Data collection—methodology, methods • Observation—how, what, recording observations • Questionnaire/surveys
4. Research Methods 2	• Interviewing • Transcribing • Classroom documents • Recording data—audio, video, maps, photos
5. Analysis, validating research, dissemination	• Share developed method of data collection • Coding • Validating your research • Disseminating your research

Adapted from the following sources:

- UCL IOE Masters level module 'The action researcher: Exploring issues and contexts'.
- Burns, A. 2010. Doing action research in English language teaching: A guide for practitioners. Routledge.
- McNiff, J. & Whitehead, J. 2006. All you need to know about action research. Sage Publications.

Appendix 5: Participants' action research projects

Name	Research title and research questions
Gail	Title: Developing students' communication skills in English through station activities with flipped learning • How do I help students to focus on communicating meaning in English, not pronunciation? • What types of station activities help students focus on communicating in English? • How does flipped learning help students to focus on communicating in English?
Beth	Title: Studying the application of Havruta and its effect on the ability of thinking • How can I help my students to be more creative? • How can I help them to think more critically?
Erin	Title: How to improve student interest in English through English books Through students reading English books: • how do I encourage students to feel that English class is fun? • how do I encourage students to gain confidence in English? • how do I encourage students to participate more during English class?
Dani	Title: Fostering the atmosphere of mutual respect and improving student listening skills • How do I encourage students to listen more to each other in class?
Carol	Title: Cooperative discussion based on the principle of Havruta and its effects • How can I make my class be learner-centred through Havruta? • How can I maximise student talk rather than teacher talk?
Helen	Title: Maximising student learning (changed from 'Student interaction in class') • How can I help students to cooperate with each other in class?
Alice	Title: The importance of teacher listening attitude and language habits • How do I change my negative listening attitude towards students? • How do I change my negative language habits in the classroom?

Ilene	Title: Teaching mixed-ability maths class effectively • How can I maximise student studying time during maths class? • What are high level students doing when they finished their work early? • What are low level students doing when they have difficulty on their work?
Fay	Title: What makes effective behaviour support for low achievement students? • What activities do lower level students participate actively? • Do they like to work with high-level students or with similar level students? • How effective is teacher and peer praise for low level students to stay focused in class?

Appendix 6: Example of research project outline

Participant name (pseudonym): Ilene

1. Research/Project area (working title)

Teaching mixed-ability class effectively

2. Research questions

- How can I maximise student studying time during maths class?
- What are high level students doing when they finished their work early?
- What are low level students doing when they have difficulty on their work?

3. Rationale-why is this project important to you and your students? How does this research support school or educational policy goals and concerns? How does it support your professional development?

The reason I think this project is important is that half of my students are worried about their math skills. And I feel difficulty when I teach them math because there is a big gap between lower level students and higher level students.

I believe this research support the educational policy ‘No one left behind’ and ‘prohibition of prerequisite learning’.

In addition, this project would support my professional development because I need to reflect my teaching and do an action consistently.

4. Evaluation of outcomes—list the ways you will know whether the research has been successful (e.g. better test scores, more positive attitude to group work)

Better math test scores, more positive attitude to math of students could be outcomes to show my research has been successful.

5. Methods—what data will you generate and use to support your analysis and evaluation?

I already got students lesson 1 test result, and two sets of survey result. I will have students take a test for each lesson, use survey when I need to check my action’s effectiveness, and use interviews to find out deeper answers.

6. Action plan/timeline (see example below. You will need to complete this within eight weeks – so be realistic here!)

	recon	wk1	wk2	wk3	wk4	wk5	wk6	wk7	wk8
		Action 1			**Action 2**			**Action 3**	
vid record									
interview									
questionnaire									
written feedback(Test)									
teacher journal									

- Recon- Identify main problem to solve
- Cycle: Plan-act-observe-reflect
- Methods: Decide how you will monitor actions in each cycle

Cycle 1:

- Engage student interest and explain the main concept of the lesson through using Webtoons at the beginning as a whole class for ten minutes;
- then let students solve math textbook, workbook, worksheet on their own speed
- prepare differentiated task depend on their level
- make the atmosphere help each other.

Cycle 2 and 3 to be decided after reflecting on cycle 1.

7. Resources needed-(e.g. literature, colleagues, equipment)

- I need to search former study case to deal with mixed-level students.
- I can ask the same grade colleagues the way they teach math in their classes.
- I need to buy a tripod for a phone to record my class better.

Appendix 7: Excerpt from a peer discussion session from the EBL programme

Date: 1st November 2016 (Session 7 out of 10)

Context: The following is a shortened excerpt taken from a two-hour fortnightly discussion meeting. Participants are about halfway through their action research project (week 4 of 8). Each participant in a group of three or four has about ten minutes to talk about their research and the others give feedback.
In the excerpt below Helen as an English subject teacher in a group of three is talking about her research. Her research is with a Year 6 class focusing on student interaction and collaborative learning.

Transcript
Helen: How can I enhance English communication in class? What I thought was the problem was lack of class participation, but I interviewed some of the students and they didn't think that is the problem. They thought they were participating, they thought they were participating well especially in a group they thought they were ok. But compared to other classes they are not participating well with each other but still they think there's no problem. I did some questionnaire and I analysed it. What I thought were problems were mainly three parts. So maybe their relationship with their friends, they're reluctant to talk to each other, or relationship with the teachers so they might feel me and homeroom teacher both and classroom atmosphere … I recognise that they are not participating well because they are not close to each other and it turned out they want to talk with their close friends because their groups are already set up in this class. I coloured who is close to whom it turned out that boys are almost all close to each other except for one boy but girls they have very strict groups so only three of them are close only four of them are close.

Beth: So how can you figure out who is close to somebody?

Helen: By questionnaire. Who do you want to sit with? For the question can I do something for you—three of them said I want to sit with close friends. So maybe I can sit them with their close friends… I wanted to provide more fun activity for them so I had a questionnaire with them. I thought they liked individual study but it turned out they don't like individual studying and they don't like role play and they don't like writing. So maybe I can provide more interesting activities for them. I was surprised that students like PowerPoint game—bomb game…

Beth: Did you do questionnaire with other classes? Can you compare the results?

Helen: I only got this classes' result, but it turned out that the class with more interaction they had different kind of characteristic.

Gail: What about the sitting arrangement they want to sit with close friends. Other classes?

Helen: Yes. But their characteristic was quite different and their fun activity was different. Some classes liked role play very much but this class doesn't. They're introvert. So, I cannot change their characteristics so how I encourage them to speak more? I interviewed some of the kids and I said, 'why aren't you answering aloud in front of class?' and they answered 'we are afraid of making mistakes' so that was the real problem actually.

Beth: So, no teachers can solve this problem in a year. How can you get rid of their fear?

Helen: I was thinking I can make activities easier and simpler so everyone can answer and add creative activities not with one answer they can give their opinions and ideas and all of them are fine. Compared to other classes their English level is not that low, but they answered themselves like I'm not good at English. Most of them answered I'm in-between high and low but six of them said low. Some classes even though their level is very low they answered they are very confident. Especially this class has low self-esteem. So maybe this can be the key to get students more involved in the class. It is really hard because they don't respond to me, and I cannot drag them into activities. I don't know what they are thinking. I also asked the role model of this class, he's really quiet. He's not tall he's very thin and he's nice to everybody. It's quite interesting that they want him as a role model. He gets good scores in every subject, but he is not willing to help others, I think. He was very negative about cooperative learning. In this kind of age they have peer pressure if the model student was active, they would be more active. This model student is very quiet and shy.

Appendix 8: Mid-course feedback

1. To what extent do you agree or disagree with the following statements? Put one X in each row.

1. To what extent do you agree or disagree with the following statements? Put one X in each row.

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
This action research for professional development programme has met my expectations so far.					
Session 1 'What is action research?' was useful					
Session 2 'Reflections – Dewey, Schön, Brookfield' was useful					
Session 3 'Methods 1-ethics, trustworthiness of research, observations' was useful					
Session 4 'Methods 2- interviews, surveys' was useful					
Session 5 'Qualitative data analysis' was useful					
Resources-PPTs, readings, worksheets were appropriate					
I was able to understand the input sessions					
Group discussions on individual teacher's action research project has been useful					
I feel I have appropriate amount of information to conduct an action research project					
I feel that there is support available (course tutor and peers) if I need it					
I feel more confident about conducting an action research project than before					
I feel motivated to conduct my own action research project					

2. How has the course met your expectations so far?

3. Has the course been different from your expectations? If so, how?

3. We are about half way through the course. What are your expectations for the rest of the course?

4. Are there any other comments you would like to make?

Thank you for completing the feedback ☺

Appendix 9: Guidelines for discussion sessions

Purpose of discussions sessions

- Share knowledge
  - results, analysis of research
  - research methods
- Give critical feedback
  - research questions
  - problems
  - actions
  - methods
  - analysis

Outcomes

- Engage in critical reflection-broaden perspectives, explore alternative approaches and explanations, question universal or personal assumptions/beliefs
- Further knowledge (practical, theoretical)
- Take action based on knowledge (evidence based)

Procedure of sessions

You will each have about 15 minutes to discuss/present your research so far to a small group. This includes time for feedback. It is really up to you how you use that time but here are some guidelines to help you:

<u>What to discuss</u>

- Research topic and main problem(s) you want to address
- Action(s) taken so far
- Summary of key findings so far
- Difficulties you are having
  - Students
  - Actions
  - Method
  - Analysis
  - Other
- One or two key points you would like feedback on
- Action for next two weeks
- Other points

<u>Possible resources</u> to bring to make the discussions more concrete and interesting.

- Handouts (e.g. key points to discuss, key findings, student comments, work etc.)
- PPT
- Audio or video clip excerpts
- Summary of surveys, interviews, observations
- New survey, interview questions you'd like feedback on
- Sample of relevant documents- class activities, students' work, test scores etc.
- Teacher diary/journal you could share excerpts from

Appendix 10: Questionnaire

The purpose of this questionnaire is to gain background information before the first interview and help design an action research workshop that will meet your needs.

Please answer all the questions below in English unless otherwise stated. If there are any questions regarding the questionnaire please don't hesitate to contact me via e-mail.

Section 1: Personal information				
a) Name*				
b) Age (please put one X under appropriate box)	25-29	30-34	35-39	40-44
	45-49	50-54	55-59	60 or over
c) Education and teaching qualifications from university till now (please list)				
d) Number of years teaching (please put one X under appropriate box)	1-4 years	5-9 years	10-14 years	
	15-19 years	20-24 years	25 years or more	

Section 2: Present teaching position	
a) Name and address of present school* (in Korean)	
b) Teaching position(s) (e.g., English subject teacher)	
c) Grades you teach presently	
d) Number of years in present school	
e) Duties other than teaching	

*Your name and name and address of your school are required to link data collected during and action research programme. Pseudonyms will be allocated so that the information will be identifiable only to myself.

Section 3: Continuing Professional Development				
How often have you experienced each of the following professional development activities in the last 12 months? (Please put one X in each row)				
	Frequently/ on-going basis	sometimes	not in the last 12 months	never
Being assigned to mentor or coach someone				
Having a mentor or coach assigned to me				
Collaborative learning with colleagues in my school				
Collaborative learning with external partnership/networks				
Engaging with subjects or specialist associations				
Studying for a postgraduate qualification (e.g., Master's)				
Participating in a domestic external course(s)				
Participating in an international external course(s)				
Undertaking action research (e.g., school or classroom-based project)				
Other (please specify)				

Section 4: Conducting your own research					
To what extent do you agree or disagree with the following statements? This can be research carried out in your own time, as part of your work, or as part of further study. (Please put one X in each row)					
	Strongly agree	Agree	Neither agree nor disagree	Disagree	Don't know
I have experience of undertaking my own research and enquiry to improve my practice					
My school encourages me to undertake my own enquiry					
The Ministry of Education encourages me to undertake my own enquiry					
I feel confident in my research skills to conduct my own enquiry					
There are support (e.g. professional development courses) available if I wish to undertake my own enquiry					
I would like more opportunity to do my own research to improve my teaching					
I would like more opportunities to collaborate with colleagues on a piece of research					

I confirm to the best of my knowledge that the above information is correct, and that the above information can be used as part of the research I have agreed to participation in.	
Name	
Date	

Thank you for completing the questionnaire. Please send to xxxx@xxxx by _____.

Source: adapted from 2010 General Teaching Council for England Survey of Teachers (England, 2012)

Appendix 11: Interview schedule 1

Introduction

Thank you for taking part in this research. If at any point you with to withdraw from the research you are free to do so. The purpose of this interview is to gather information on your thoughts on and experiences of professional development and teacher research. There are no right or wrong answers, I am interested in what you think and feel. I may ask you to expand on the answers that you provided in the questionnaire. The interview will be conducted in English but feel free to answer in Korean if you prefer. The interview will last about an hour and will be audio recorded. Any data used from this interview will be anonymised (your name will not be used) and you can request to see a transcript of this interview. You have a chance to comment or ask any questions at the end of the interview. Are you ready to begin?

Opening
Use answers from the questionnaire regarding present teaching context to ease participants into the interview and ask how the semester is going so far.

Professional development

- What does professional development mean to you?
    - purpose?
    - where do these ideas come from?

- Can you tell me an instance when a professional development was effective?
    - characteristics of effective PD
    - evidence of effectiveness—changes in teacher and student outcomes

- How would you describe professional development in Korea?
    - overall characteristics
    - effectiveness
    - changed over time?

- What type of PD programmes are you interested in? Why?
    - refer to answers from questionnaire
    - changed over time?

- What are the challenges for PD for you?
    - effects of challenges
    - how challenges can be resolved

Action research

To those with experience of classroom action research:

- What does teacher research or action research mean to you?
- Tell me about a previous school/classroom research you engage in
    - purpose
    - process
    - support received
    - results
- What did you gain from the experience?
    - impact on own belief, knowledge, practice
    - impact on students
    - impact on other areas? e.g. school, wider professional community
- What were the challenges?
    - personal
    - school related
    - research itself—methods, data collection analysis
    - foresee similar challenges this time?
- Ask teacher to expand on reasons given in questionnaire for participating in this programme
    - area of interest for research
    - desired outcomes
- Do you think this programme will differ from other professional development you have experienced? In what way?

To those with no experience of classroom action research :

- What does teacher research or action research mean to you?
    - basis of knowledge
- Ask teacher to expand on reasons given in questionnaire for participating in this programme
    - area of interest for research
    - desired outcomes
    - foresee any challenges?
- Do you think this programme will differ from other professional development you have experienced? In what way?

Closing: Thank you, I have no further questions. Is there anything else you would like to add or ask about before we finish the interview?

Appendix 12: Written consent form

Research title: Developing teacher agency through a professional learning approach involving action research

If you are happy to participate, please complete this consent form by putting X in the appropriate box and return to xxxx@xxxx by _____.

	Yes	No
I have read and understood the information sheet about the research		
I agree to be interviewed		
I agree to be observed		
I agree for my interviews and observations to be audio recorded		
I understand that I must inform my school that I am taking part in the study		
I understand that if any of my words are used in reports or presentations they will not be attributed to me (i.e. my name will not be used)		
I understand that I can withdraw from the project at any time, and that if I choose to do this, any data I have contributed will not be used		
I understand that the data will be shared with relevant persons (e.g., PhD supervisors) during the PhD thesis		
I understand that the results will be shared at conferences, as published articles, and as a PhD thesis.		
I understand that the data will be kept and archived after the PhD thesis has been completed for future analysis and publication.		

Name of participant _____

Signed_____ Date _____

Researcher's name: Soh Young Lee

Signed_____ Date _____

Appendix 13: Example themes and codes—Interview 1

Example analysis of first Interviews which were conducted before the EBL programme.

Theme	Codes	Examples	Level of teacher agency
Government-provided PLD General	little reflection on individual or context Transmissive learning Absolutist reflection on individual and context evaluatist	I want to overcome that whatever the environment whatever the variation I think there might be a general rule… a big over riding rule may be out there so what would it be? (Alice1:28) Teachers could get ideas from theory or philosophy, and we can manipulate it for the teachers and for the students. I think it's a good resource… I mean I think theory is theory, it's ideal but real life is not that ideal. We have to change for the real life (Dani1:28-32)	Low moderate
Government-provided PLD Mandatory 60 hrs	Low SRL Extrinsic goal	each person's interest may be music, science, so on, but that is not counted in the 60 hours. I'm busy trying to fill it … if this story club counted, I'm probably doing two hundred to three hundred hours a year, but it doesn't count at all; so, teachers fill 60 hours with useless training so there won't be negative effects on the school (Erin1:64-66)	low
In-school learning environment Open classes	focus on performance non-reflective action negative student consequences	maybe I try to showing something if it's open class it doesn't matter if the students are learning or not I just try to give good impression which is not good for my students' learning (Ilene1:124)	low
Effective government-provided PLD BC programme	sch open class—low reflection effective PLD—critical feedback, increase reflection	Teachers pointed out what I was lacking, and I never thought about that before because nobody pointed it out… the biggest thing is it helped me get over the illusion that the way I'm teaching is the best way' (Fay1:32,88)	Moderate-high

Appendix 14: Example themes and codes—Interview 2

Analysis of second Interviews which were conducted shortly after the EBL programme.

Theme	Codes	Example	Level of teacher agency
Self-regulated learning (SRL)	fixed-prove theory/ absolutist flexible-own goal/ evaluatist classroom action	Master's degree, I should have a plan from the beginning till the end but action research shows me … I don't need to have a fixed idea from beginning till the end. I can modify during the research. That is the crucial part. So, I can just try it and then if it is not good, I can fix it later (Beth2:53)	moderate
Reflection Teacher-student relationship	Classroom action Critical reflection	solving my problem makes me react more positively to my students and gives me satisfaction about my career. They have a better teacher. Because students spend almost all day in school, if they are not happy in the classroom their whole life is not happy (Fay2:137-140)	Moderate-high
Collaboration EBL programme school colleagues	Content reflections past—trust issues, promotion present—content reflection	I couldn't realise that there are so many teachers who are eager to study without any reward. I didn't trust my colleagues… teachers are very passive, I used to think like this. … but I could break this kind of thinking…even in my school there must be the teachers who must be eager to learn something (Beth2:7, 141).	moderate teacher agency

N.B This process was adopted for subsequent interview 3.