An investigation into
the implementation and impact of literacy initiatives on
disadvantaged primary schools in urban Ireland

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ABSTRACT

'They are giving me a license to radically change my classroom practices'

(Grace, former DEIS advisor and DEIS classroom teacher)

Background: In 2005, a national initiative was launched in Ireland, supporting designated schools in disadvantaged areas, known as Delivering Equality of Opportunity in Schools (DEIS). DEIS promotes national policy initiatives, with a major focus on increasing literacy levels, and diminishing the academic achievement gap of students in DEIS and non-DEIS schools.

Purpose of Study: The study explored the process of implementation of new literacy[1] initiatives in urban DEIS primary schools in Ireland. The study also examined the affect that literacy initiatives in DEIS schools had on educators through their engagement and professional development.

The DEIS Initiative: The initiative supports DEIS schools to engage in school improvement, receiving additional financial support, extra teacher resources, after-school clubs and strategic planning support. DEIS primary schools implemented a suite of literacy initiatives, based on a phased delivery programme.

Research Design: The research question was answered through a comparative multi-case-study approach. The study stemmed from an interpretative paradigm stance, rooted in the qualitative method, with the dominant instrument being semi-structured interviews. The learning experiences of nineteen educators in four urban DEIS primary schools and four DEIS advisors were collated. Other documentation, where available, supported and refined the triangulation of evidence.

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[1] **Literacy and Numeracy:** the integration of writing, reading, listening and speaking and mathematics from everyday life experiences.

Findings: A theoretical 'Knowledge Productivity in Literacy Framework' emerged, encompassing a suite of three interconnecting components: infrastructure, professional learning and development, and stimulants for engagement. The study found that change needed to be (a) connected to the school's vision and self-authored targets, (b) driven by key leaders in the school (c) amended and reflected upon through an iterative process, and (d) effectively communicated.

Conclusion: This research identified key components that impact school improvement, with an emphasis on knowledge production in literacy and its management. The study investigated practices that supported critical educators, with the potential to make knowledge production dynamic. On a national level, the study's findings can provide discussion opportunities for future literacy development.

AN ANALOGY

The research will explore the image of the principal as a conductor of the orchestra to highlight the complex elements of the research study. The conductor neither writes nor performs the music, merely picking the pieces and directing the musician to perform a harmonious sound. The teachers support the principal and adapt their music, augmenting their teaching to support the educational journey of their students throughout all the years in primary school. They are the leaders of the various sections of the orchestra, having their own style, developing with new knowledge and methods to get the best out of the musicians. The musicians are the teachers who perform a piece of music in harmony. Harmony cannot be achieved when everyone plays the same note. The musicians at the start of a piece will tune their instruments, ensuring precision, however, after or at times during a performance, further fine tuning may be necessary. The sound for the musician is acute and necessary, and at times needs refinement, to give justice to the pieces of music for the musician and the orchestra, as a whole, with hours of practice and a full repertoire of musical pieces that will be celebrated in front of an audience. Without the musicians, there would not be an orchestra; without practice, there would be discord; without the teachers and 'conductor', there would be no harmony. The active audience are the students who react to the music and are guided by the tones and rhythms of the piece. The reaction of the audience inspires additions, amendments, improvements, or omissions. The audience and the musicians respond to the performance, which is based on previous knowledge and current reflections for the performance. An orchestra needs time together, to get to know its culture and beliefs, with change to becoming the regular rhythm of the school. At times, the pace and tempos will meander from rehearsals of regular pieces, with experimentation to crescendo of rehearsals for a performance, with each orchestra having a penchant for particular genres. The rhythm for one piece of music will have variety; however, a 'style' genre and tempo will emerge. The orchestra is bigger than one musician is, however, one musician can cause a music shrill that can be embraced or refuted. Over time, schedules change, pace of life altered, and, in turn, the tailoring of pieces of the orchestra will vary depending on mood, emotion, flair, talent, time, the audience, and demands on performance.

ACKNOWLEDGEMENTS

'It's that old thing, you don't remember what they said. You just remember how you felt'

(Lori, Principal, Willow School)

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GLOSSARY OF TERMS AND ACRONYMS

Band 1 and Band 2 schools: schools designated disadvantaged under the DEIS scheme with Band 1 being the most disadvantaged and Band 2 having high disadvantage.

DEIS Advisor: a teacher on secondment who supports continuous professional development on a sustained basis in policy development, self-evaluation, and implementation of literacy and numeracy initiatives in schools designated disadvantaged.

DEIS: Delivering Equality of Opportunity in Schools is an Action Plan for Educational Inclusion from pre-school through second-level education that commenced in 2005.

Department of Education and Skills (DES): A government body whose mission is to provide quality education and evaluate educational attainment in Irish primary and secondary schools.

Economic and Social Research Institute (ESRI): The ERSI organization produces research through many mediums that develops understandings on an international platform concerning economic and social change in Ireland and internationally, using an empirical research base, in areas of national policy issues.

Education Research Centre (ERC): The ERC is located in St Patrick's College in Drumcondra, Dublin. The ERC's focus is on monitoring outcomes of national educational initiatives in Ireland.

Educational Disadvantage: defined in the Irish Education Act 1998 as "the impediments to education arising from social or economic disadvantage which prevent students from deriving appropriate benefit from education in schools".

Educator: defined as a teacher working in a school, irrespective of current role and responsibility; principal, class teacher, resource teacher, learning support teacher and Home School Community Liaison teacher.

First Steps Tutor: a teacher who is trained in First Steps Listening and Speaking, Reading or Writing and will then train and support teachers in their own school.

First Steps: (Listening and Speaking, Reading and Writing): a literacy resource created and developed in Western Australia since 1992.

Growing Up in Ireland Study: The Growing Up in Ireland Longitudinal study commenced in 2006, facilitated by the ESRI and Trinity College Dublin, Government-funded, following the progress of two cohorts of children, nine month old infants and nine year old children, 10,000 and 8,000 participants respectively.

Home School Community Liaison Teacher (HSCL): A scheme that was established in Ireland in 1990 in selected disadvantaged schools where a teacher is designed to develop links with parents and the school to support meeting the educational needs of students.

Irish National Teachers' Organisation (INTO): is the largest primary schools' trade union in Ireland providing channels for expressions of teachers' collective opinions, safeguarding conditions of employment between members and employees and promoting the interests of educational developments.

Literacy and Numeracy: the integration of writing, reading, listening, and speaking and mathematics from everyday life experiences.

Maths Recovery: A numerical programme developed in Australia focusing on students in first class on an individual, group and/or class basis.

National Assessment in English, Reading and Mathematics (NAERM): The two National Assessments in English, Reading and Mathematics in Ireland discussed in this thesis were hosted in 2009 and 2014 to examine trends in performance. Students in second and sixth classes were assessed in 2009 and this was extended to fifth classes in 2014 to support the development of literacy and numeracy in all subjects, correlating with the targets set out in The National Strategy to Improvement Literacy and Numeracy among Children and Young People 2011-20.

Organisation for Economic Co-operation and Development (OECD): A global organisation, which was established in 1961, with a membership of 34 countries. The OECD supports countries to share their experiences and explore resolutions to common issues with the ultimate aim of improving the economic and social standards of member countries.

Professional Development Service for Teachers (PDST): A cross-curricular support service established in 2010 to provide professional development for teachers.

Programme for International Student Assessment (PISA): A global assessment of fifteen-year-old students in the areas of literacy, numeracy, and science every three years.

Progress in Reading Literacy Study (PIRLS): An international assessment in reading literacy, which is facilitated by the Educational Research Centre of students in fourth class in Ireland.

Reading Recovery: an American literacy intervention programme incorporating reading and writing on an individual basis to the lowest achieving students in Senior Infants and first class.

Ready Set Go Maths (RSGM): A resource developed in Northern Ireland that focuses on the development of number for students at infant level.

School Completion Programme (SCP) was established to support the DEIS programme. Its main focus is to keep young people in school to complete the Senior Cycle, targeting and providing supports to students most at risk at an early age.

School Development Planning Services (SDPS) provided a wide range of supports for schools in the areas of planning, organisational needs, and resources through workshops, seminars, training and on-site visits to schools. In 2010, SDPS was discontinued and its services came under the Professional Development of Services for Teachers (PDST) remit.

School Self Evaluation (SSE) is a staff collaboration, encompassing a comprehensive and a contemplative planned process of in-school review.

School Support Programme (SSP) is an integration of interventions and programmes that were established to support students in disadvantaged areas, such as Early Start, Reading Recovery and the Home/School/Community Liaison initiative.

SMART targets: incorporating five elements into a target- specific, measurable, attainable, realistic, and timed.

The Inspectorate: A sector of the Department of Education that facilitates Whole School Evaluations, policy makers and provide advice on a suite of educational issues.

Trends in International Mathematics and Science Study (TIMSS): An assessment, facilitated by the Education Research Centre for Irish schools, by students in fourth class in primary schools in Ireland in Mathematics and Science that compares Ireland's ranking on an international platform.

Whole School Evaluation (WSE): The inspectorate facilitates WSE in primary and post-primary schools to evaluate the quality of teaching, learning and assessment, management and leadership and self-review. Oral feedback is given to schools, followed by the feedback being published as a report on the Department of Education website.

CHAPTER 1: INTRODUCTION

'We are teachers, we just want kids to do something a little bit better.

We can do things to the best of our ability but you can always see gaps.

You are always reflecting. If you are not reflecting, you are just coasting along…

You want to do the very best that you can for the children'

(Lara, Willow School, Class Teacher)

1.1 Introduction

At the turn of the century, the Primary Curriculum (NCCA, 1999) was implemented in primary schools throughout Ireland whilst a 'Celtic Tiger' economic boom was expanding rapidly. Less than a decade later, the bubble burst, leading to a devastating economic recession. In 2005, during the economic flux, a new national initiative was launched by the Department of Education and Skills (DES) to support students in schools in disadvantaged areas, known as DEIS (Delivering Equality of Opportunity in Schools). DEIS changes arose from national policy initiatives, with a major focus on increasing literacy and numeracy levels in schools that are designated disadvantaged. Whilst the over-riding responsibility of steering national policy is the responsibility of the DES, it is the teachers that are directly involved in the implementation of the DEIS policy, designing and tailoring their local educational context. This study will explore practices in new literacy initiatives and the impact of such in four DEIS schools in Ireland, using the DEIS initiative from the perspective of adult engagement in new literacy programmes as a catalyst for dialogue. The study will investigate the effects of literacy national policy on the DEIS infrastructures and systems that influence educators' learning in the local urban DEIS school context. The study will critically analyse the factors that influenced literacy change in Irish urban DEIS primary schools since the inception of the DEIS programme in 2005. Through semi-structured interviews, the implementation of literacy initiatives will be explored, unveiling what commonalities lie within different DEIS urban primary schools, thus revealing practices in literacy and the factors that affect their implementation. Planning documentation such as DEIS plans, literacy plans, or Whole School Evaluation may be available to support or consolidate the developing portrait of change in DEIS schools through the lens of literacy.

1.2 The Context of the Study

In the thirty years prior to the introduction of the DEIS initiative, standards in literacy in Ireland had stagnated. While many initiatives were introduced by the DES to schools in disadvantaged areas, prior to the DEIS programme, students in these areas were three times more likely to experience serious literacy difficulties (Barnardos, 2009; Kennedy, 2007a; DES, 2005; Eivers et al., 2004). The DEIS programme was established in 2005, funded by the Irish government. The School Support Programme (SSP) under DEIS, focusing specifically on schools, invited the most economically disadvantaged primary and secondary schools to engage in the new initiative. The DEIS scheme classified schools as Band 1 and Band 2, the highest level of disadvantage and second highest level of disadvantage, respectively, referencing their rural and urban location, with remuneration allocated accordingly. This study acknowledges that, in recent times, there have been improvements in literacy in Irish primary schools (Shiel et al., 2014; Weir and Denner, 2013), substantiated by employing a mainly quantitative approach, using student-oriented summative formalised assessments administered by teachers in their classrooms. Whilst Irish primary schools engaged in the DEIS programme have experienced an increase in their literacy levels (the first increases in thirty years), so too have non-DEIS schools nationwide. Thus, the literacy gap between Irish primary DEIS and non-DEIS schools has not diminished (Denny, 2015; Smyth et al., 2015).

1.2.1 The Positionality of the Researcher

It is important at an early stage in the thesis to outline the reflexivity of the researcher in the context of DEIS: her educational background, her experiences, and her professional background. The researcher is a parent and was a former student in a DEIS school herself, who then pursued a career in teaching, teaching solely in urban DEIS primary schools. For nine years, the researcher was engaged in the support services for schools and teachers under the DES in Ireland; initially in School Development Planning Services (SDPS), which was then subsumed into Professional Development Services for Teachers (PDST). In PDST, the researcher was given the opportunity to be trained as a DEIS advisor, providing sustained support to DEIS schools in literacy, numeracy, and planning. The researcher was also a First Steps Reading facilitator on a national basis, facilitating reading workshops and awarding

certification to teachers. For the last five years, the researcher has been a principal in a large independent school in Dublin, in a non-DEIS setting. The researcher is cognisant of her experience in DEIS schools, from being student, teacher, principal, DEIS advisor, and extending this profile to being a researcher and an author (MacBeath, 2011). The researcher's previous roles have 'opened windows' (Tickle, 2002) to schools that she had previously worked with as a DEIS advisor. This has also supported the researcher to gain access to DEIS schools as a researcher, acknowledging the researcher's knowledge base of structures and programmes related to schools with DEIS status, incorporating political, social and education contexts. Currently, the researcher is an 'outsider' (Zeni, 1998) where engagement in DEIS is non-existent for the past five years, however, she was formerly an 'insider' (Zeni, 1998) through multifaceted platforms, as discussed. The DEIS schools participating in the study, originally know the researcher as a DEIS advisor, however her support to the schools was low and for short periods. Further discussion in Chapter 3 will clarify the boundaries of the researcher and also the fundamental negotiations that took place between the researcher, four DEIS advisors in PDST, and the four study schools and its participants.

1.3 The Aim and Research Questions

The researcher wants to build upon the statistics of literacy improvements in Irish DEIS primary urban schools and go beyond what currently has been gleaned from the DEIS programme, the literacy initiatives that have been promoted, and the statistical data acknowledging literacy improvements (Denny, 2015; Smyth et al., 2015; Weir and Denner, 2013; ERC[2], 2011).

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[2] **Education Research Centre (ERC 2007, 2010, 2013)** gathered data on pupils' achievement in reading and mathematics of pupils, with 120 urban schools being assessed, averaging 17,000 pupils, designated DEIS in 2007, 2010, 2013 and 2016. Follow-up testing was administered every three years in 2nd, 3rd, 5th and 6th class (5th class was introduced to the study in 2010) in the same school. The purpose of the assessments is to highlight trends and developing patterns in literacy and numeracy and whether targets in the National Strategy: Literacy and Numeracy for Learning and Life 2011-2020 are being reached.

1.3.1 Aim of Research Study:

The focus of the study is to investigate the process of implementation of DEIS literacy initiatives in disadvantaged primary schools in urban Ireland and its impact on schools' infrastructures, and on DEIS educators.

Objectives:

- To investigate the key components in DEIS schools' infrastructures that impact the implementation of DEIS literacy initiatives.
- To investigate the affect that literacy initiatives have on DEIS educators through their engagement and professional development.

1.3.2 Research Questions:

1. What are the key components in schools' infrastructures that impact literacy development in disadvantaged primary schools in urban Ireland?
2. What professional development do DEIS educators practice in the implementation of DEIS literacy initiatives?
3. What stimulates DEIS educators to engage in literacy development?

1.3.3 Methodology

The research is a comparative multi-case-study, comprising four Irish urban DEIS primary schools, stemming from an interpretative paradigm stance (Lichtman, 2013). It uses a qualitative method of semi-structured interviews, with participants rooted in the DEIS landscape, namely, principals, teachers, senior management, and DEIS advisors[3]. Semi-structured interviews will be the main instrument used to investigate experiences and opportunities embraced by participants in the study in the area of literacy in the DEIS environment. All "legitimate types of data" (Lichtman, 2013, 147), such as the DEIS literacy plans, documentation, observation and 'Whole School Evaluation' reports, support and

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[3] **DEIS Advisor:** a teacher on secondment who supports continuous professional development on a sustained basis in policy development, self-evaluation and implementation of literacy and numeracy initiatives in schools designated disadvantaged.

triangulate the evidence gleaned from the main source of data, namely, the semi-structured interviews, helping to clarify the DEIS schools' endeavours to improve literacy.

1.4 The Purpose of the Study

The proposed research will explore the characteristics that have developed in DEIS schools, through the educators' voice, where their reflective thoughts on effective and efficient practices make an impact on literacy in the Irish urban DEIS primary school. The study will build upon the quantitative research that verifies that significant literacy improvements have occurred (McCoy et al., 2014a; Weir and Denner, 2013; ERC, 2011). Fullan (2008) succinctly stated that change does not automatically bring improvements, but for improvement to happen, change must have occurred. The study focuses on the schools' infrastructures that support the development of knowledge, also known as "knowledge productivity" in literacy (Kessels and Keursten, 2002, 408). This concept encapsulates what urban primary DEIS schools have learned and experienced from the DEIS initiative, revealing the foundational infrastructures that have enabled or prevented deep and enduring change. Knowledge productivity in literacy entails "identifying, gathering and interpreting relevant information, using this information to develop new skills and to apply these skills to improve and radically innovate operating procedures, products and services" (Kessels and Keursten, 2002, 106). The study aims to explore how the production of knowledge in literacy can be aroused or dampened in the context of the DEIS school. The research investigates learning, both formal and informal, from the standpoint of educators and the infrastructures and stimulants that enhance "knowledge productivity" in literacy (Kessels and Keursten, 2002, 408), with the potential to create powerful learning environments.

1.5 The Complexities of Schools' Infrastructures that Support Knowledge Productivity in Literacy

The research study explores infrastructures that have been formed in DEIS schools to scaffold knowledge productivity in literacy. Infrastructures in schools are "the basic systems and services that an organisation uses in order to work effectively" (Cambridge, 2016). Fullan's writings, from 2002 to the present day, will be explored to capture the elements that impact on schools' infrastructures in a complex world, aiming to increase capacity in teaching and

learning, ultimately with the focus on increasing student achievement (Figure 1). In 2003, Fullan's direction on the Canadian national platform was pivotal from the start of an initiative to support and lead school reform in Ontario, focusing on school improvement and its sustainability. The study spanned over 4,000 schools in Ontario, with literacy and numeracy scores increasing and the achievement gap of disadvantaged schools being significantly reduced (Fullan, 2012). The morale and leadership of educators were pivotal factors in the study. Fullan extended the lessons learned from Ontario to the international stage, in California, Queensland, and Victoria in Australia, with a focus on the educational system making a positive impact on the educational lives of students.

Knowledge Productivity in Literacy

Complexities of Schools' Infrastructures

Interconnection

Knowledge Building   **Moral Purpose**   **Change Process**   **Relationship Building**
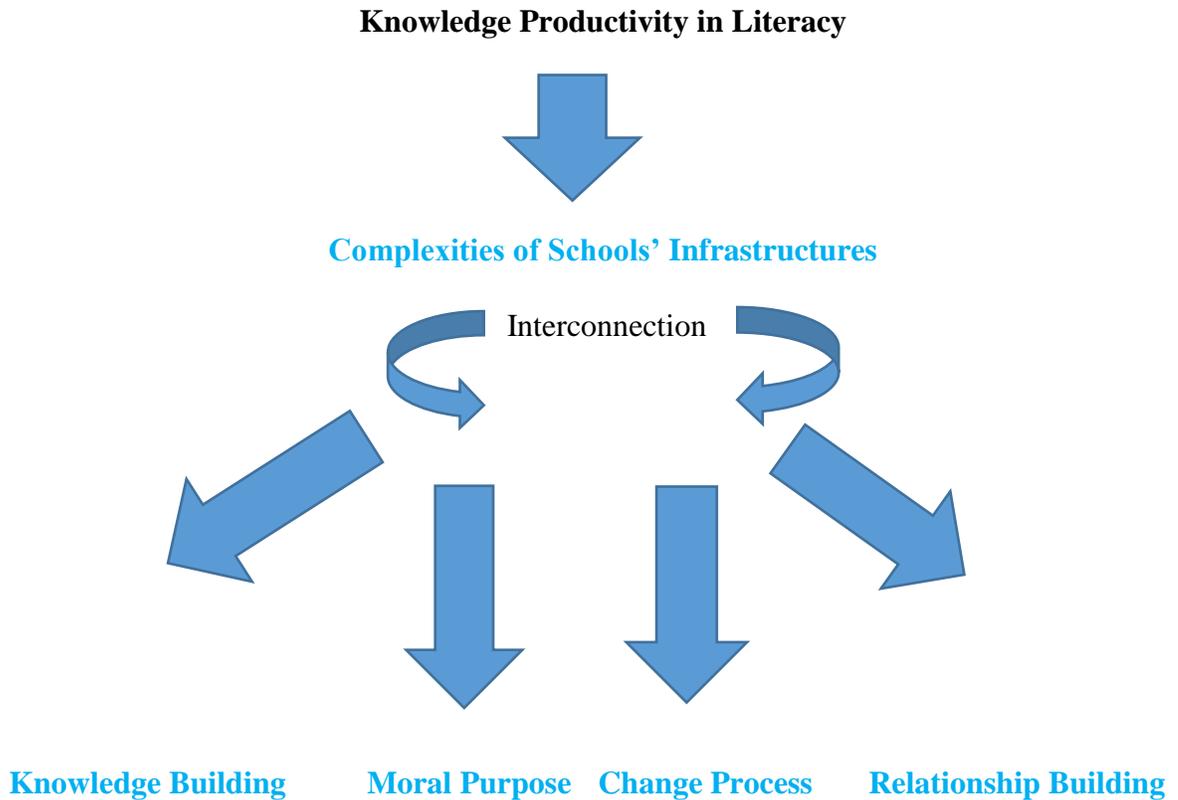
Figure 1. The Infrastructural Complexities that Support Knowledge Productivity in Literacy (Fullan, 2016, 2008, 2007, 2005, 2002)

In a complex school environment, Fullan's aim was to mobilise teachers towards school improvement and its sustainability (Fullan, 2012). Fullan's research focused on augmenting school capacity, immersed in the complexities of a school's infrastructure. Capacity implies the "breath of vision" (Tuohy, 2008, 53). In this study, the researcher merges a framework of

characteristics that outlines the complexities of schools' infrastructures from Fullan's studies and writings (Fullan, 2016, 2008, 2007, 2005, 2002). The four components in the framework are knowledge building, moral purpose, change process, and relationship building. The components of learning are not exclusively immersed in the school environment, with the localised setting, national and global settings also affecting it.

Knowledge building interconnects with teaching and learning to support student learning, which is ultimately driven by the teacher. Knowledge building has the potential to enable teachers, which is at the heart of learning, to respond to challenges, ambiguities, and opportunities, using an "adaptive challenge" approach (Heifetz, 2003, 70). This framework practically applies how the production of knowledge can be supported, blocked, stimulated, and sustained in the school system in a personal, local, national, and global context.

Moral purpose explores the moral compass in the school context, focusing on making a difference to student attainment. This is rooted in one's personal beliefs and assumptions in an individual school, influenced by national and local policy. The moral compass streamlines one's focus and targets improvements. Fullan encourages schools to understand the change process, thus enabling the school to challenge its journey, assumptions, and biases (Fullan, 2005).

The change process explores the school as a living system, enabling learning to transcend from policy to affect learning, ultimately making a positive impact on teaching and learning in the classroom. The change process is a channel to bring learning to life (Fullan, 2005). The study will investigate the cyclic process of change in DEIS schools and the important role of leadership.

Relationship building is important for collaborative cultures (Fullan, 2017) to develop, supporting the professional needs of individuals, the school, and the wider community. Groupings and the quality of professional discourses are important when exploring professional relationships (Kennedy, 2005). Fullan (2016) highlights the importance of building rapport, both internally and externally, in the localised context of the school.

The development of the framework outlining the complexities of schools' infrastructures, encompassing its four elements, has evolved from the writings and studies of Fullan since

2002. This researcher devised the framework, influenced by the works of Fullan, focusing, not only on school improvement, but also on the sustainability of school improvement. It is this framework that will guide the researcher to explore school improvement in four DEIS schools in Ireland since its inception in 2005, using DEIS literacy initiatives as a catalyst for discourse amongst educators.

1.6 The Contexts of Learning

The requirement of knowledge productivity in literacy is synonymous with the prominence of continuing learning. For schools to add value to their literacy attainments in their respective schools, learning is a vital component. The research framework extends its focus to the context of learning (Geijsel et al., 2009; Kennedy, 2005; Senge, 1990), exploring the types of learning that promote teacher "knowledge productivity" (Keursten et al., 2006, 408). It is interesting to investigate the modes of professional development that have made an impact on the individual teacher and in turn the whole school (West-Burnham, 2010; Kennedy, 2005; Joyce and Showers, 2002). The researcher wants to identify, through the voices of teachers and DEIS advisors, the type of learning processes that are effective in supporting Irish urban DEIS primary teachers' "participation in knowledge productivity" (Keursten et al., 2006, 408). Knowledge productivity in literacy occurs when teacher learning is transferred to the classroom, to augment the teaching and learning experiences of the students. Learning "is the work" (Fullan, 2008, 73) that heavily influences the route that change takes and it will be important to reflect on the length of time to embed literacy practices and the scale of resources that were applied, along with the exchanges that happen in the schools participating in the study.

1.7 Stimulants that Support Knowledge Productivity in Literacy and Learning Experiences

The third dimension of the study framework explores the stimulants that drive teachers in DEIS primary schools to engage in the process of knowledge productivity in literacy. There have been a dearth of evaluative studies on the improvement of literacy and numeracy scores

in the Irish educational setting (Shiel et al., 2014; Weir and Denner, 2013; OECD, 2010; OECD, 2009) and the study will investigate whether these evaluative studies support, deter, or neutralise teachers to engage in the change process, using First Steps literacy resources as the stimulus for discussion. In addition, the research will unearth, through the reflective voice of teachers, the rationale of what stimulates teachers to engage in the change process and the correlating motivational factors.

The National Council for Curriculum and Assessment's (NCCA) stance on change is "based in the optimism and belief that schools, notwithstanding the difficulties being faced, will always contribute directly to the potential of the next generation of learners to face and master the challenges of the future" (NCCA, 2009, 7). The learning culture and capacity for learning, "is much more important to organisational success than having the right strategy" (Pfeffer and Sutton, 2006, 145). Through dialogue and observation with teachers, principals, and DEIS advisors, the researcher wants to explore the elements that drive educators to support or oppose the educational lives of students attending DEIS schools. It takes individual and collective investment, by members of the DEIS school community, to achieve meaningful transformation in one's school, re-examining what they believe and what route they are navigating on both an individual and school level.

1.8 Conclusion

The world "has become too complex for any theory to have certainty" (Fullan, 2008, 5), where a "theory is merely a way of organising ideas that seems to make sense of the world" (Wilson, 2007, 16). Substantial change has occurred in DEIS schools through educational reform on a national platform. However, through a qualitative case-study exploration, learning can be gleaned from DEIS schools whose literacy levels have improved under the DEIS programme (Weir and Denner, 2013) in complex conditions. It is appropriate then to explore the voice of educators in DEIS schools to collate their experiences of learning from working together to improve literacy collectively, rather than leaving knowledge productivity in literacy to coincidence. Fullan provides a framework of the components that have the potential to create a fertile landscape (Figure 1) where learning can take place and, in turn, construct knowledge. The elements are merged and interwoven to form the foundational platform for 'Knowledge Productivity in Literacy Framework Overview', to reveal the infrastructures that support or

hinder learning contexts in urban primary DEIS schools. It is opportune then to unearth the infrastructures, the types of learning being implemented, and what stimulates change. Ultimately, the study will investigate whether the experiences of the DEIS initiative by schools have actually reshaped the literacy educational experiences for our educators in the DEIS context (NCCA, 2009).

This thesis will aim to answer the research purpose, as laid out above. This chapter has outlined the main research questions and will seek to clarify the main issues through an extensive literature review. Chapter 2 incorporates a critical exploration of literature, from which the research questions and framework for analysis developed. The methodology utilised throughout this study, investigating the DEIS schools that participated, along with the development of a framework and the data analysis procedures, is outlined in Chapter 3. Chapter 4 conveys the findings of the study, linking them with the research questions while also making reference to the literature reviewed. The findings from Chapter 4 are then combined and synthesised to create the 'Knowledge Productivity in Literacy' framework. Finally, Chapter 5 assimilates all the information gleaned throughout this study and presents new knowledge, understandings, and the developed framework that have evolved from this research study, as well as recommendations for future research.

CHAPTER 2: LITERATURE REVIEW

'We tailor everything to suit the kids that are sitting in front of us…

We don't take everything the way it is.

We change it to suit the kids and adapt it to suit the needs of the kids.

And that we're able to stand by that decision'

(Jackie, Beech School, Class Teacher)

2.1 Introduction

This research study is concerned with how literacy in the DEIS initiative has been implemented and developed in Irish primary urban DEIS schools in the Irish education system. The DEIS changes arose from national policy initiatives, which is only one dimension of the reality for the DEIS school. Local planned and unplanned foci also need to be taken into account when dealing with change. This chapter will examine the inception of the DEIS literacy initiative in Ireland and the research that has taken place to-date on the DEIS initiative. This chapter will investigate what supports and impedes teachers in their own learning and, in turn, the effect on the whole staff in their own context of national and international literature and research. It will also explore what schools and their educators, that is, the principal, class teacher, and learning support teachers do to create opportunities for students to learn through instruction in literacy. These opportunities may enrich or weaken learning experiences, ultimately creating a framework that identifies the elements to support school improvement.

Since 2005, the Irish Department of Education and Skills (DES) subsumed initiatives that supported teachers and schools through a nationwide reform of literacy and numeracy. Their focus lies on student-oriented outcomes - in particular, students in disadvantaged areas - into an initiative known as Delivering Equality of Opportunity in Schools (DEIS). The aim of this programme is to support designated schools in disadvantaged areas, known as DEIS schools, to engage in school improvement in literacy, in order to augment the school's capacity to enhance teaching and learning, ultimately increasing student outcomes. In our knowledge economy, the education sector is promoting DEIS schools to combine and interpret information and knowledge to find solutions to literacy issues that occur to a greater extent in DEIS primary schools than in non-DEIS schools.

The improving DEIS school in literacy (Smyth et al., 2015; Sheil et al. 2014; Weir and Denner, 2013; Weir et al., 2011) highlights the inter-relationship of an efficient and an effective school. With an emphasis on product, as well as process, the 'value-added measures' (Oates, 2008; Gray et al., 2003) of the improving school highlight "how much progress they make from their respective starting points" (Gray, 1999, 11). Firstly, this chapter will identify the context of literacy development in DEIS schools, from its inception to its impact, to date. In addition, the restructuring of teaching and learning in literacy will be explored, such as the role of the First Steps Reading tutors[4]. There will also be an exploration of literacy change from a national and international perspective, detailing the issues that research has discovered. There will be a further investigation of six initiatives in literacy that have been implemented in some Irish schools, along with their impact.

The study will focus on three main elements of the DEIS school initiative. These elements support educators to develop knowledge and skills to improve the teaching and learning experiences for students in the localised classroom in literacy: infrastructure, professional development, and stimulants. Knowledge productivity represents the abilities and competencies to gather information and personalise it to develop, ultimately, innovations that can be potentially achieved in the area of literacy (Kessels and Keursten, 2002). The focus of this study is on knowledge productivity, which has the potential to support literacy instruction and, in turn, student learning.

The first element of the DEIS school initiative in literacy explores the DEIS school's organisational infrastructures, which has the potential to support knowledge productivity in literacy. Knowledge productivity in literacy is defined as a "process entailing identifying, gathering and interpreting relevant information, using this information to develop new skills and to apply these skills to improve and radically innovate operating procedures, products and services" (Kessels and Keursten, 2002, 106). In schools, "knowledge becomes productive when the creation and application of knowledge results in gradual improvements and radical innovations of operating procedures, products and services" (ibid, 106). The researcher will

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[4] **Literacy coordinator and First Steps tutor** are positions in the DEIS Irish primary school. The former position in this research study is part of middle management in the school and receiving additional personal finance. The First Steps tutor, often chosen by the principal has attended a 5 day course in either Reading, Writing or Speaking and Listening. In turn, the teacher returns to support First Steps implementation in the whole DEIS school, however does not receive additional personal finance.

identify literature and research that identifies the key elements in a school's infrastructure that supports the production of knowledge. Fullan (2016) suggests that the characteristics that support a landscape of change and improvement are knowledge building, moral purpose, the change process, and relationship building. As such, a composite, evidence-based, framework of school characteristics that support professional learning and development will be outlined and critiqued. The second element of the DEIS school initiative, to be explored in this chapter, is professional development that, in turn, can support knowledge productivity in literacy (Kessels and Keursten, 2002). It is pertinent to explore the voice of educators in DEIS schools in order to acknowledge their experiences of learning, without leaving knowledge productivity in literacy to coincidence. There will be an investigation of teacher learning and the models of professional development that have been promoted both globally and nationally (West-Burnham, 2010; Kennedy, 2005; Joyce and Showers, 2002).

The third and final element of this chapter explores what stimulates DEIS educators to maintain and engage in literacy development, since the inception of DEIS in 2005. In addition, the stimulants that drive educators to sustain development will be explored in further detail. There is very little evidence, from DEIS schools, to date, of teachers' desire to learn, improve, or how this is cultivated. Thus, the researcher will explore literature in order to view perceptions from educators of what drives schools to commence or sustain changing practices. The view of change is "based in the optimism and belief that schools, notwithstanding the difficulties being faced, will always contribute directly to the potential of the next generation of learners to face and master the challenges of the future" (NCCA, 2009, 7). A framework to support knowledge productivity, encompassing the key characteristics that have evolved throughout this chapter will be presented.

2.2 Definition of Literacy

The definition of literacy that will be adopted for this research study is based on a constructivist stance, incorporating a variety of elements. The Department of Education and Skills in Ireland embraced, in the 'National Strategy to Improve Literacy and Numeracy Among Children and Young People 2011-2020' (DES, 2011a), the following definition for literacy:

> "the capacity to read, understand and critically appreciate various forms of communication including spoken language, printed text, broadcast media, and digital media" (DES, 2011a, 8).

A constructivist approach prevails in this definition of literacy, with the reader being actively engaged with a variety of text forms. It also takes cognisance that literacy includes the elements of reading, writing, and oral language, using both print and digitised materials. Extending this concept of literacy, Aistear (NCCA, 2009, 54), the early childhood curriculum framework in Ireland views the early emergent phase of literacy with students as being active through play and life experiences:

> Developing a growing understanding of print and language as a foundation for reading and writing. Through play and hands-on experiences children see and interact with print as they build an awareness of its functions and conventions (Aistear, 2009, 54).

2.3 Irish Historical Developments to Support Disadvantaged Schools

Levels of literacy in Irish primary schools have remained constant since the 1980s, with one in three students living in disadvantaged areas leaving school with serious literacy difficulties, which is three times the Irish national average (Barnardos, 2009; Kennedy, 2007a; DES, 2005; Eivers *et al.*, 2004). In 2005, the School Support Programme (SSP), financed by the government, welcomed the most economically disadvantaged schools to engage in a new initiative known as 'Delivering Equality of Opportunity in Schools' (DEIS). The DEIS programme brought together previously stand-alone projects and subsumed them into the DEIS programme. There were, in 2015, 657 primary and 193 secondary schools which are supported by the DEIS scheme (Smyth et al., 2015). Table 1 highlights the historical development of provisions for disadvantaged schools. The DEIS programme's foundational concern follows on from the Education Act 1998, which defines educational disadvantage as "the impediments to education arising from social or economic disadvantage which prevent students from deriving appropriate benefit from education in schools" (Education Act 1998, s.32(9)). The inception of the DEIS programme, by the Educational Disadvantage Committee (2003), derives "from a belief that the disadvantage associated with poverty is aggravated

when large proportions of pupils in a school are from poor backgrounds (the "social context" effect)" (Educational Disadvantage Committee, 2003, 3)

The key characteristics have been identified from the historical developments (Table 1) supporting disadvantaged primary schools in Ireland: class size, early interventions, creating development plans over a period, and the allocation of extra funding. The table is derived from reports that have been produced by the Economic Social Research Institute and The Department of Education and Skills (Smyth et al., 2015; DES, 2005)

Table 1 Irish Historical Developments to Support Disadvantaged Schools

Scheme	Function
1984 The Disadvantaged Scheme (DAS)	Programme based on socio-economic and educational indicators where 33 most disadvantaged schools were provided with additional teachers and grants (DES, 2005)
1990 DAS schools included in the Home School Liaison (HSCL) Scheme	Increase links between home, school, and the wider community. This scheme had a greater impact on attitudes than behaviours, less influence on students (Ryan, 1999)
1994 Early Start Programme	Initially established in 40 primary schools with the focus to stimulate language and cognitive development (Kelly and Kellaghan, 1999)
1996 Breaking the Cycle	New approaches to identifying disadvantaged schools where reduction in class size and grants for materials were made initiated. There was no evidence of improvement in literacy or numeracy (Smyth and McCoy, 2009; Weir and Ryan, 2000)
2001 Giving Children an Even Break	The ERC allocated disadvantaged schools extra funding on a sliding scale. A special per capita grant was granted in relation to students identified disadvantaged
Establishment of Education Disadvantaged Committee	Offer counsel on policies and strategies
Establishment of an Educational Disadvantage Forum	Offer advice to the minister relating to educational disadvantaged
2002 The School Completion Programme (SCP)	Invited to enter the programme for students at-risk with its aim to keep young students in formal education until the leaving certificate
2005 Office of the Comptroller and Auditor General	Undertook a Value for Money analysis where the need for increased coordination and cohesive approaches for disadvantaged programmes to make the allocation of funds more effective and

Scheme	Function
	also to track its performance (Comptroller and Auditor General, 2006)
The publication of DEIS-Delivering Equality of Opportunity in Schools: an action plan for educational inclusion (DES, 2005)	The commencement of DEIS in 2006/2007 where existing schemes were subsumed with new elements into the DEIS School Support Programme (SSP)

The DES have maintained the lower student/teacher ratios in DEIS schools, in comparison to non-DEIS schools. The DES staffing allocation in DEIS Band 1 schools is 20:1 student/teacher ratio in Junior schools, 20:1 student/teacher ratio in vertical schools, maintaining the student/teacher ratio of 24:1 in Senior schools (DES, 2017; DES, 2014; DES, 2005). Thus, it is difficult to link smaller class size to increases in literacy and numeracy, in isolation (Weir and Denner, 2013). Reduced class sizes have been a feature in interventions prior to DEIS; for example, Breaking the Cycle or Early Start programme, both commencing in 1996.

The DES targeted a one year 'Early Start' programme' intervention scheme, mainly based in a DEIS primary school, to support students at risk in their educational, language, social and emotional development before commencing formal school. Kelly and Kellaghan (1999) compared the achievement of students who participated in the Early Start programme and found no evidence of student difference from those that attended and did not attend Early Start. Over a decade later, Lewis et al. (2011) found that students who attended Early Start received higher ratings from teachers, in relation to language and cognitive skills than students who did not attend the programme. There has been a student decline in the Early Start programme since the Irish government's introduction of the Early Childhood Care and Education scheme (ECCE) in 2010. The ECCE centres have a longer day than the Early Start. In 2016, all parents in Ireland are entitled to receive two years free early childcare in both community and private childcare establishments (Túsla, 2016; DES, 2014) under the ECCE scheme before the commencement of formal education. This may be another reason for student decline.

Another major influencer of the DEIS initiative was the office of the Comptroller and Auditor General, following a 'Value for Money' review in 2005 (Comptroller and Auditor General,

2006) of all disadvantage initiatives. The report highlighted the need for target setting by schools and the low levels of literacy and numeracy in disadvantaged schools who partook in schemes for disadvantaged schools. The study further recommended the development of a comprehensive database, highlighting the allocation of funding, resources, and student-oriented outcomes (Comptroller and Auditor General, 2006). The elements recommended by the comptroller and Auditor General (2006) were incorporated into the DEIS programme.

2.4 The DEIS Programme

The DEIS programme commenced in 2006, amalgamating stand-alone projects (Table 1) that have specific foci. The rationale for merging the schemes with the disadvantaged focus, pertains to "the multiplier effect" (Smyth et al., 2015, vi), where there is a concentration of students from disadvantaged backgrounds, whose academic achievements are significantly lower than students not from disadvantaged backgrounds, with social backgrounds taken into account (Smyth et al., 2015; DES, 2005). Schools in the School Support Programme (SSP) under DEIS have received additional financial support, extra teacher resources, after-school clubs, strategic planning support, and have been exposed to numerous literacy and numeracy initiatives, with a focus ultimately on student-oriented outcomes at all educational levels: "The DEIS Action Plan (2005-2010) is based on the phased delivery of training, support, evaluation and funding to schools that have been designated as disadvantaged" (NESF, 2009, 33)

Literacy and numeracy initiatives, extra teachers, and reduced class size (Band1 only) were solely made available to DEIS schools by the DES, through the DEIS initiative (DES, 2005). DEIS schools invested time, money, and resources in an effort to raise national standards, supported by the PDST, a sub-section of the DES. The National Action Plan for Social Inclusion 2007-2016 target was to reduce the proportion of students with serious literacy difficulties in disadvantaged primary schools, from 30% to 15%, by 2016 (Dáil Eireann, 2007; DES, 2005). This was revised in the National Strategy to improve Literacy and Numeracy among Children and Young People 2011-2020. In 2014, the National Assessment of English, Reading and Mathematics found that all of the targets of the National Strategy to improve literacy and numeracy had been achieved ahead of the scheduled targeted date (DES, 2016; Shiel et al., 2014).

2.4.1 Applying for DEIS

Schools were encouraged in 2005 to apply for DEIS status with the Educational Research Centre (ERC), on behalf of the DES, irrespective of their disadvantaged status at that time. The process of permitting schools, both primary and post-primary level, into the DEIS scheme was coordinated by the ERC, on behalf of the DES and commenced in the academic year 2006/2007. The ERC used socio-economic variables collectively to predict educational achievement (Dáil Eireann, 2007) to identify the most disadvantaged schools who applied. Accepted schools in the scheme were classified as Band 1 (highest disadvantage) and Band 2 (high disadvantage), along with whether the school is urban or rural, with remuneration allocated accordingly. In 2015, there were 657 primary and 193 post-primary schools that were supported by the DEIS scheme (Smyth et al., 2015).

2.4.2 The Components of the DEIS Initiative

DEIS primary schools have implemented, on a gradual basis, a suite of literacy and numeracy initiatives to improve standards (Smyth et al., 2015; Weir and Denner, 2013). PDST provided workshops and facilitated DEIS advisors to visit schools to help support DEIS schools in creating strategic DEIS plans (DES, 2016; Smyth et al, 2015; DES, 2005). The following section will discuss each of these areas in further detail.

Specific literacy and numeracy initiatives were introduced on a gradual basis by PDST, under the direction of the DES (DES, 2011b). First Steps (2004), originating in New South Wales Australia, was introduced in three phases: firstly First Steps Writing (First Steps, 2004), then First Steps Reading (First Steps, 2004), and finally Speaking and Listening (First Steps, 2004). One teacher from each DEIS school was invited to send a teacher for three days training to become a First Steps tutor, increasing to five formal training days (Smyth et al., 2015; DES, 2011b). The tutor would then be obliged to support the whole school in the implementation of First Steps Writing, from resource dissemination, to providing sessions with staff members on the First Steps pedagogy. There is no formal report from the DES or the ERC to evaluate the success of the First Step tutor leading literacy in one's own school; rather, success was based on student summative assessments (Weir and Denner, 2014). Reading Recovery (Clay, 1991; 2005) was another literacy initiative that was offered to DEIS schools, running concurrently with all other literacy training in schools. The Reading Recovery teacher takes students

individually for an instructional period, lasting between twelve to twenty weeks, gaining on average twenty-one months in the student's literacy level in Ireland (Reading Recovery Europe, 2013). Whilst teacher time in Reading Recovery is intensive for each individual student, the Reading Recovery Europe Report (2013) states that nineteen out of twenty students that attend Reading Recovery attained the equivalent reading standard of students in the respective class. A factor that is not discussed in the Report (2013) is the benefit of intensive individual time of 30 minutes each day per student over the instructional period; instead, the focus is on the Reading Recovery methodology. It is also not stated in the report if the gains that a student achieved during the Reading Recovery intervention are retained over long periods.

Maths Recovery was developed by R.J. Wright in New South Wales (Wright et al., 1994; Wright, 1991), solely focusing on the number aspect of mathematics. The Maths Recovery team in Ireland was smaller than Reading Recovery, with only one full-time leader initially, Dr O'Loughlin, based in Mary Immaculate University, Limerick. A report on the Maths Recovery programme explored the links between the school system and the programme in Northern Ireland (Munn and Ellis, 2005). Unlike Reading Recovery, instruction could be either on an individual or group based. Another numeracy project, 'Ready Set Go Maths' (Pitt, 2001) was devised following a two-year action research project, conducted by Eunice Pitt, a former inspector of education, in Northern Ireland. The project investigated mathematical language used by students and focused activities to support number development in infant classes. This programme focused solely on number facts and concepts that could replace or supplement the current number programme in infant classes in DEIS schools. The literacy and numeracy programmes outlined were implemented concurrently, initially for DEIS 1 schools and then for DEIS 2 schools thereafter.

DEIS schools were required to document a school's individual DEIS three year development plan, including a review process, devising specific targets, implementing actions, all the while monitoring and evaluating baseline data in five areas: literacy, numeracy, attendance, parental involvement, and community links (DES, 2011b). The DEIS strategic plan has the potential to be evolutionary (Louis and Miles, 1992), which emphasises an approach that is flexible and individual to the school. The Professional Development Service for Teachers (PDST) had DEIS advisors who advised and supported schools in the implementation of strategic plans,

key literacy, and numeracy programmes, which are influenced by baseline school data. The DES report on the planning process found that targets were not specific and not necessarily linked to the actions in the plan (DES, 2011b). It is unclear from the report whether the targets directed or influenced the actions outlined in schools' DEIS plans. The DEIS strategic plan is for a three year period and is replenished tri-annually. Recently, the DEIS plan has been replaced by the 'School Self-Evaluation' process, which applies to all schools in Ireland (DES, 2015). Practically, the only change for DEIS schools is in name, with the process remaining the same. DEIS schools are working in response to "national purposes, local contexts, skills and attributes of individuals, and the demands and expectations of school communities" (Riley and MacBeath, 2003, 174).

The area of parental and community involvement in the planning process is a major focus for DEIS schools. DEIS schools have Home School Community Liaison teachers support the links between school and home, from parent-focused workshops to home visits (Weir et al., 2011). Some DEIS schools have community centres or health centres based locally that support programmes and initiatives as a joint venture with DEIS schools, such as sports programmes, and before and after school clubs. Some literacy initiatives have merged parental involvement with literacy interventions (Table 2, section 2.6.2.2). The multi-faceted disposition of the DEIS programme means that it is not feasible to disentangle the effects of various elements of the initiative on student outcomes (Smyth et al., 2015). Teachers have the power to alter the systemic structures at school and classroom level, transferring the development plan to the school environment and extending it to the home environment.

Students from DEIS schools tend to come from low-income households or economically inactive households, where the mother does not have a degree qualification (McCoy et al., 2014b). The School Completion Programme focused on activities before and after school formal instruction, where healthy meals were provided and an emphasis was placed on social skills through play and activities, supporting students to remain in the school system (Smyth et al, 2015). McCoy et al. (2014a) uncovered that not all students from disadvantaged areas go to DEIS schools. This implies that DEIS funding does not reach students from disadvantaged areas who do not attend DEIS schools.

The DEIS Dormant Accounts Educational Disadvantage Programme provided extra funding to DEIS schemes. This scheme was devised following the Fitzgerald Report (2007), which recommended that local schools should identify how they needed support, from developing facilities, to a range of activities both before and after school. DEIS schools could apply for grants up to €77,000 to cover capital expenditure for after-school programmes and activities for students and parents over a period of two years. Under the fourth round of the Dormant Accounts grant aid in March 2008, €1.694 million was granted to Limerick DEIS schools, with the focus being on maximising community use of premises, facilities, and operating costs of before and after-school programmes from 2010-2012 (Oscailt, 2013).

A support organisation known as School Development Planning for Schools (SDPS) was established by the DES, for both primary and secondary school levels in 1999, to support all types of schools to engage in strategic planning and, in turn, develop the skills to self-evaluate progress in schools by themselves. In 2010, SDPS was subsumed into PDST (Weir et al., 2014). DEIS advisors were created, who combined the skills of planning and the DEIS programmes to offer a suite of combined supports to DEIS schools. Currently, in the Irish educational context, planning in all schools, DEIS and non-DEIS, under the School Self Evaluation (SSE) process is obligatory, with its foundations built upon the School Development Planning Service (SDPS) philosophy. On a micro level, deficiencies in planning were found in the area of assessment, both formative and summative, in collecting data and in its application (DES, 2011b). Several years later, the greatest challenge that DEIS schools found in planning was using data to set targets (DES, 2015). Weir and Denner (2013) have highlighted significant improvements in student-oriented outcomes in literacy, however, further investigation is needed in the Irish educational system to analyse whether improvements in literacy in DEIS schools have links with targets outlined in individual schools' DEIS plans.

2.5 Restructuring Teaching and Learning

"Restructuring" of teaching and teacher professional learning is a common theme in the developing world (Coolahan, 2007, 24). Ireland is no exception to restructuring, which requires "new identities, new forms of interaction and new values" (Ball, 2006, 145), when or

if embedded in DEIS schools. The proposed research will investigate, with members of the DEIS primary school community, what restructuring has been implemented. "Principals are the prime movers of change" (Sugrue, 2003, 24) in schools, balancing their focus between routinely administrative daily duties and leading learning. Sugrue reported, following his research at the Irish Primary Principals' Network Conference 2002, that there was a growing recognition that schools are involved in shared leadership, with educators participating and contributing in meaningful ways (IPPN Conference, 2002). The extent of these practices in Ireland remains unclear. With middle management structures, with its focus on sharing duties and responsibilities with the principal, it also created "new demands on principals" (Sugrue, 2003, 18). As such, getting decisions made through shared leadership can extend time frames, while ensuring all relevant educators are available for discussions can be cumbersome, all of which may take time away from teaching time and student time.

With a "rising tide of accountability, compliance with regulations and adherence to professional norms" (Conway and Murphy, 2013, 12) in Ireland, power of implementation is vested solely with the DES. Educators in DEIS schools in Ireland have been implementing literacy in their classrooms, with experiences gained from, their initial training, from fellow teachers, and from practices that had evolved in the school over time. Since the turn of the century, results of standardised literacy assessments are centralised by the DES, international assessments such as PISA are published and reported by the media. There is more emphasis on comparing Ireland's educational attainment of students amongst international standards (Sahlberg, 2015; Merrill Lynch Bank of America, 2014; Alexander, 2012). It will be interesting to explore the standpoint of DEIS educators on whether published reports on Ireland's literacy attainment has "disturbed national monologues" (Hulme et al., 2016, 229).

Education of teachers and their changing practice is not straightforward and is "hugely contested and subject to considerable influence" (Kennedy, 2015, 1), internationally, nationally, and at local level, blanketed by "a climate of global competiveness" (Riley and MacBeath 2003, 174). Levin (1998) discusses the epidemic of educational policies that have been transported across borders. These include, policy borrowing of programmes from Australia, such as First Steps literacy resources for implementation in DEIS schools. Importing a solution or borrowing a problem from abroad to a unique local context (Kennedy, 2015) can be problematic. Sahlberg (2015, 173) states that "it is easier to walk the paths that

others have travelled than to be in the lead"; however, the teacher has overall power on how policy is translated in the classroom and what students receive. Thus, a policy without discourse with educators would seem to ignore the importance of the cultural setting (National School Climate Council, 2007) in the Irish context and could negate the levers from policy to classroom setting. The DEIS teacher is the conduit of the 'unfolding of authority' (Dean, 1996) and how DEIS literacy initiatives are translated, either positively or negatively in the classroom setting. Sahlberg (2015) identifies initiatives that are promoted on an international platform as the Global Educational Reform Movement (GERM). The elements of GERM that resonate closely with educational reform in the DEIS programme include, competition between schools, standardised learning test-based accountability, and a narrow focus on literacy and numeracy. Finland is one of the top performing countries in the OECD's Programme for International Student Assessment (PISA) and does not partake in GERM practices (Robertson, 2015). Alexander argues that school improvement is "as much about educational vision as student achievement" (Alexander, 2012, 3), that success should not be solely focused on student summative testing. The evaluation tool used in GERM is predominately test-based, as opposed to the Finnish system that leans towards trust-based responsibility (Sahlberg, 2011, 130-131). GERM highlights the tendency to prioritise national economic performances over local contexts and creativity. Studies in America and England conclude that high stake testing and marketization of schooling (Ravitch, 2010; Nichols and Berliner, 2007), also referred to as the "corporate world" (Gavrielatos, 2015, 1), is closely aligned to economic performance (Robertson, 2015). This may produce significant collateral damage and may not attain standards in literacy and numeracy (Alexander, 2010). Merrill Lynch Bank of America estimated the value of education globally at $4.3 trillion (Merrill Lynch Bank of America, 2014). The Cambridge Review's evidence for the period 1998 to 2010, with the implementation of the GERM approach by the British government, compromised a student's right to a broad curriculum (Alexander, 2010, 497). In the United States, Nichols and Berliner found that GERM high-stakes testing is counter-productive also (2007). In Finland, Sahlberg argues that the professionalism of teachers is more important than accountability (2015, 2011). Finnish schools do not engage in standardised testing until the students' final year in school. One of the main elements in the Finnish educational system is the promotion of equity and teaching quality (Alexander, 2012, 12); therefore, with

collegiality and systemic thinking, the composite stance is far more powerful than fragmented initiatives.

The research aims to investigate the "value-added" measures (Gray *et al.,* 2003, 391) of the DEIS improving school accentuates "how much progress they make from their respective starting points" (Gray, 1999, 11). The "value-added" measures (Gray *et al.,* 2003, 391) are not solely based on assessments and student achievement, the culture of a school, and how teachers apply their new knowledge from DEIS initiative resources to support new learning in the classroom, known as the "invisible side of implementation" (NESF, 2009, 79) or the soft factors (Downes, 2007) can also enhance school improvement. In the next section, global and national studies will be investigated and the key characteristics of school change and reform that have been identified will be outlined.

2.6 Infrastructures in Disadvantaged Schools: Global to National Contexts

In this section, there will be an exploration of global initiatives in America, the United Kingdom, Australia, and Canada that focused on literacy change, along with a discussion of its key characteristics. Thereafter, a suite of literacy initiatives in Ireland will be investigated, from a national or local perspective. The researcher will then compare and contrast the initiatives under the following headings: targeted audience, literacy aspects, participants, assessment criteria and professional learning and development.

2.6.1 Policies to Battle Educational Disadvantage: from a Global Perspective

There will be an exploration of initiatives and studies that have taken place on a global platform, commencing with the United States. In recent times, the influence of globalisation, social change, and political change have put education to the forefront. There is not a simple map to success in school improvement, with some countries finding educational success through a multi-dimensional approach that was experienced in the United States (Slavin, 2008). Heckman's study (2011) showed strong effects on intensive early intervention with the United States taking on a "War on Poverty" (Heckman, 2011, 4), with intensive education in small groups and, concurrently, fostering parental involvement (Levin, 2009). With this layered approach, there were positive long-term effects, with the positive effects increasing

with the length of time in the initiative (Barnett, 1995). Ultimately, research found that the 'War on Poverty' at an early intervention stage is the most cost-effective means of decreasing educational inequality (Levin, 2009; Heckman, 2006). A similar project in the United States, 'Project STAR', in Tennessee, focused on students in the early years, where smaller class sizes lead to higher student achievements (Komstantopoulos, 2008) and how they became more effective when students spent more than one year in them (Finn et al., 2001). It is vital to note that these successful interventions for the early year students were not replicated in other studies, and it must be deduced that there are more factors that are fundamental to support positive outcomes (Milesi and Gamoran, 2006). Lamb and Rice (2008) used a mixed methods approach in 25 secondary schools in Victoria, Australia that investigated strategies used in schools with high retention rates. Lamb and Rice (2008) found a link with successful programmes that had a strong supportive culture in the school: shared vision, high expectations, flexibility and a drive for continuous improvement. There are limitations to the measured outcomes, such as the time period for projects displaying their effects may be considerable (Te Riele, 2012; Black et al., 2010). There a multiple elements that impact the outcome of programmes, such as finance and context, thus it is difficult to identify with accuracy the reasons for programme success or failure. In Lamb and Rice's study (2008), the findings evolved from interviews with 25 secondary schools in Victoria, which could be developed as a guide to support other schools in implementing appropriate strategies (Te Riele, 2012).

In the United Kingdom, programmes to support schools, with a focus on literacy and numeracy, were implemented. In 1995, the pass rate for students sitting the 11+ English SATs (National Curriculum Tests), taken at the end of Key Stage 2, was 48%; it was 65% in 1998 and 75% in 2000 (Burkard, 2004). However, the Office for National Statistics found serious inadequacies in the 'anchoring' process, which should have ensured consistency of scoring from year to year (Tymms, 2004). The 'Literacy Hour' in the United Kingdom was launched nationally in 1998 to 400 English primary schools, which was first introduced in 1996 in the context of the National Literacy Project. The main emphasis of this initiative was to raise standards in literacy through a focus on the quality of teaching through literacy instruction and effective classroom management, alleviating low levels of reading (West and Pennell, 2003).

The experiences of the 'Success for all' in the United States had influenced the development of the National Literacy Strategy in England (Machin and McNally, 2004; Slavin and Madden, 2003), with a framework outlining the teaching objectives, the structure of a lesson, and duration. The emphasis is not merely on increasing the amount of time on literacy. Instead, the Literacy Hour represents a change in how literacy is taught. The 'Literacy Hour' in the United Kingdom outlined a framework for teaching for students from five to eleven years old, a whole school approach, incorporating practical structures of time and class management directed towards a specific lesson objective. With such a focus on literacy, time spent on other subject areas could be affected; however, it is argued that reading affects every subject and other cognitive processes are linked to reading (Stanovich, 1986). Four years after the introduction of the National Literacy Strategy, OFSTED (2002) intimated that it has raised the quality of teaching in the other curriculum areas.

The 'Pupil Premium' scheme commenced in 2011 in England, supporting disadvantaged schools with funding for additional resources, linked to the number of disadvantaged students in attendance (Foster and Long, 2018; Ofsted, 2013). The main focus is to raise attainment of eligible students and, in turn, narrow the attainment gap between the students in the scheme and those not in the scheme (Foster and Long, 2018). There is an obligation for schools receiving funding to author a 'Pupil Premium Strategy', outlining objectives, actions, modes of monitoring and evaluation and making it available on their website. Carpenter et al. (2013) explored how the premium was used, using case studies. It was found that over 90 per cent of schools surveyed decided how the premium would be used by the schools' own experiences of what works for them (Carpenter et al., 2013). Carpenter et al. (2013) also found that the majority of schools in the study found their interventions to be effective, with 75 per cent recruiting additional staff to support children in disadvantaged schools in England. Having a strategy in place does not necessarily mean that schools are implementing it or using it as an informative tool base, however. Ofsted (2013) evaluated a cohort of schools participating in the scheme and found that 'inadequate schools' had insufficient analysis of students' needs, monitoring, and evaluation. This initiative allocates resources on the number of disadvantaged students in a school, which is in contrast to resources supplied to Irish DEIS schools, with a sharp withdrawal at a specified cut-off, rather than the tapering of funds. Therefore, students from disadvantaged areas in Ireland enrolled in non-DEIS schools do not receive additional resources.

In Chicago, Burch and Spillane (2003) investigated leadership strategies and subject matter for reforming literacy and mathematics instruction. The focus on this study is based on instruction rather than on student achievement, investigating opportunities for student learning through instruction. They explored leaders' agendas for improving literacy teaching, which focused on input and skill development in a variety of academic subjects, illuminating the mutual relation between leadership practices and maintaining quality instructional practice (Spillane, 2015). Burch and Spillane (2003) found that leaders, who interacted on a regular basis with teachers and their teaching, stressed the importance of both internal and external expertise. Spillane's (2015) main argument is that school administrative practice and instructional practice need to connect. Spillane (2015) argues the importance of policymakers engaging directly with educators and their practices in context, exploring the links between policy and practice (Spillane, 2015, 290). With research design, Spillane suggests that it is vital to investigate the best methods and process used to study "the effects of school administration on classroom instruction and by extension student learning" (Spillane, 2015, 290).

Focusing on numbers alone, traditional definitions of scale may neglect fundamental characteristics to demonstrate teachers' capacity engaging in reform and can fundamentally make a difference to teaching and learning (Coburn, 2003). Coburn defines reform in four interrelated dimensions: spread, depth, sustainability, and shift in reform ownership (2003). In 2008, Coburn and Russell carried out a comparative case study of two schools engaged in 'Professional Learning Communities', commissioned by the Learning Policy Centre, Pittsburgh, investigating how schools engage in professional conversations. In brief, Coburn and Russell (2008) suggested that simply getting teachers to collaborate or hire a curriculum expert does not in itself "establish the reoccurring patterns of communication necessary for teacher learning and positive instructional change" (Coburn and Russell, 2008, 1). Their research found low to high depth interactions across two districts engaged in Professional Learning Communities, where the efficacy of the coaches co-ordinating the sessions depended on selection criteria, the coaches training experience, and defining the role. In their study, they observed two initiatives being introduced concurrently, both literacy and numeracy, cautiously outlining that time was limited for interaction and structured learning, therefore, hard to sustain multiple priorities.

In Ontario, a school improvement programme commenced in 2003, led by Fullan (Fullan, 2015) where a team worked with schools, and other educational bodies linking with schools. There was an investment into capacity building leadership and resources, with the student voice being heard and in turn providing direction. Schools in Ontario were judged by high standards, which were transparent, and relentless (Linsky and Lawrence, 2011). Although the "emphasis of results and outcomes stifles imaginative teaching" (Little, 2001, 17), this project looked at standards, student interests, and student assessments. Rather than standardised assessments alone, Fullan (2016) advocates sharing our understandings collaboratively on a global scale. However, we also need "to explain it, account for it and also to legitimate it" (Mulford, 2003, 4) to others outside our school community. The research studies of Fullan will be discussed further later in this chapter.

In Ireland, the DEIS programme focused attention towards literacy and numeracy, which mirrors the focus of international studies, Programme for International Student Assessment (PISA), Progress in International Reading Literacy Study (PIRLS)[5], and Trends in International Mathematics and Science Study (TIMSS)[6]. In 2011, 151 randomly selected schools in Ireland participated in PIRLS and TIMSS at fourth class level, with Ireland ranking 10th out of 45 participating countries. Ireland's educational mind-set is a "culture of compliance" (Menter, 2016, 19), with professional standards, standardised testing at primary level, and intense inspections. National standardised assessments in Ireland have placed a strong focus on standards, where knowledge that is measurable and relevant is prioritised (Hulme et al., 2016). Post, the global and national Irish recession, from 2007, there was an increased focus on the profession of teaching and its quality and Irish performance in PIRLS and TIMSS was consistent with the performance in three consecutive PISA assessments. In 2009, a further emphasis on literacy student-oriented outcomes was highlighted due to Ireland's placing in the PISA study (OECD, 2010). This study of global literacy standards for fifteen-year-old students echoed Ireland's decline, where ratings slumped from 5th place to 17th place. This decline in PISA rankings received significant media attention, with a particular focus on DEIS schools being "very influenced" by this (Breakspear, 2012, 14). However, it

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[5] **Progress in Reading Literacy Study (PIRLS):** An international assessment in reading literacy which is facilitated by the Educational Research Centre of students in fourth class (9-10 year olds) in Ireland.

[6] **Trends in International Mathematics and Science Study (TIMSS):** An assessment, facilitated by the Education Research Centre for Irish school, by students in fourth class (9-10 year olds) in primary schools in Ireland in Mathematics and Science which compares Irelands ranking on an international platform.

was questioned amongst educationalists if the decline in OECD rankings for Ireland in the PISA 2009 (OECD, 2010) results was a true reflection of literacy standards in Ireland or the increased placing in PISA 2012 (Smyth et al., 2015).

> The publication of the OECD/PISA study was a most significant educational event of the year 2010. Reading levels in Ireland have slipped from fifth place in 2000 to 17th place – the sharpest decline among 39 countries surveyed. Almost one-quarter of Irish 15-year-olds are below the level of literacy needed to participate effectively in society (The Irish Times, 14th December 2010)

2.6.2 Literacy Initiatives in DEIS Schools in Ireland

In this section, the First Steps Reading (First Steps, 2004) initiative that was introduced in DEIS schools will be explored in detail. Next, a suite of literacy initiatives will be discussed, those introduced in DEIS schools in Ireland during the same period as First Steps, either on a national or a local platform.

2.6.2.1 The First Steps Reading Resource

Through the DEIS initiative, the Department of Education and Skills in Ireland identified key literacy and numeracy programmes, such as First Steps (2004), Reading Recovery and Ready Set Go Maths (Pitt, 2001) to support the aim of closing the literacy and numeracy attainment gaps in DEIS and non-DEIS schools. PDST supported DEIS schools to implement the initiatives since 2005, over a phased period. Developed in Western Australia, First Steps is a literacy resource that is a progressive developmental resource in reading, writing, and listening and speaking. First Steps Reading, First Steps Writing, and First Steps Speaking and Listening are divided into three resource elements. Whilst they all work in unison, they were introduced over a phased timeframe in Ireland. Teachers, selected by the principal, attended training that certified teachers to be First Steps tutors. As a tutor, the teacher was expected to lead the implementation of the First Steps Reading programme in one's school. The literacy process is complex and multi-dimensional. As the layout and components in each of the First Steps literacy resources are similar, the research will focus on the First Steps Reading resource to outline the components mirrored in each resource. First Steps Reading programme was not authored to be prescriptively followed from start to finish; rather, it is a resource to be used to

support teaching. As such, the teacher, ultimately, is the intervening agent between the school's target for literacy, the actions, and what students receive.

First Steps Reading can be used in parallel to current established reading programmes in schools in Ireland. First Steps supports an inquiry-based learning model that can be used to teach literacy across all curriculum areas. There are six phases of reading development, known as the Map of Development (First Steps, 2004) with key indicators of attainment skills, with each phase increasing in standards: role play, experimental, early, transitional, proficient, and accomplished. The phases do not pertain to primary school level only; they extend to all levels of skill, considering "the life span developmental perspective" (Alexander, 1997, 413). The 'Map of Development' enables the educator and student to track progress in four areas of literacy acquisition: use of texts (variety of literacy forms), contextual understanding (critical thinking), conventions (vocabulary development, phonics, phonemic awareness, word recognition), and processes and strategies (comprehension). Once the teacher has placed his/her students at a phase, the teacher is striving to support the student to acquire more advanced skills to reach the next phase of development. The targets at each phase are known as 'major teaching emphases' similar to key indicators, with an extended focus on the school environment and attitudes towards reading. First Steps Reading can be used in conjunction with any reading programme currently in Irish primary schools or real-life reading resources, such as newspapers, digital media texts, poetry, literature, or the student's own work. There is a strong emphasis on formative and summative assessment, with a plethora of approaches at each phased level for teachers, students, and parents, both in the book or on a CD. In each phased chapter, approaches and activities are outlined to support skill development. Skills can be viewed as being constrained and unconstrained (Paris, 2005). Constrained skills included the mechanical aspects of literacy such as phonics, punctuation, grammar. Once the student has mastered the constrained skills, the impact is minimal to literacy development. Alternatively, unconstrained skills such as comprehension critical thinking and vocabulary continue to develop and enhance the student's literacy development. First Steps support, at each phased level of literacy development, the importance of constrained and unconstrained skills that need consideration. As such, First Steps (2004) focuses on content of literacy and the methods of teaching.

Little research is accessible regarding the First Steps programme, which has its foundations in research (Joyce and Showers, 2002; Vygotsky, 1978). Instead, studies explored the implementation of First Steps (DES, 2011b; Deschamps, 1995). Deschamps (1995) carried out a survey on 150 schools regarding the implementation of the First Steps project in Western Australia. The main findings of the survey informed the revised editions of First Steps thereafter. Deschamps (1995) surveyed parents, teachers, principals, and students, where the implementation of First Steps was established or at an advanced stage, which had led to a moderate amount of change to literacy teaching methods and language programmes, with no reference to evaluative data or external assessments on the impact of First Steps on students' literacy achievement for First Steps (Meiers et al., 2013). Deschamp's study (1995) found that there was no need for class modifications or special equipment when implementing First Steps. Whilst Deschamps found that whole school programmes of teacher professional development were the most effective means of changing teacher methodology, the quantity and mode of professional development are not specified in Deschamp's study (1995). It is unclear in Deschamp's study (1995) the time allocated to training and implementation, with Conca et al. (2004) emphasising the importance of linking professional learning with interventions. Deschamps (1995) found that principals were uncertain whether change in student literacy attainment was due to First Steps in isolation, or other factors. In Ireland, although there has been an increase in literacy levels (DES, 2016; Shiel et al., 2014; Weir ad Denner, 2013), there is no evidence that the increases in literacy levels are directly linked with the First Steps resources in literacy.

2.6.2.2 A Suite of Literacy Initiatives Implemented in DEIS Schools

There are many initiatives and interventions in schools in Ireland striving to raise standards in literacy. The researcher will outline six programmes that have been implemented in selected DEIS schools throughout Ireland which ran either concurrently or post First Steps: Write to Read (Kennedy, 2010), Reading Recovery (Clay, 1991), individual early years' literacy initiative (Clarke, 2011), Doodle Den (Reid and Kelly, 2013), Building Bridges (Gleeson et al, 2010), and Peer Tutoring (King, 2012). A summary of each literacy initiative is outlined in Appendix A and an overview can be found in Table 2. Each of the initiatives shows that "every child has the fullest opportunity to become an accomplished reader" (Mehigan, 2013, 99). In general, the key reading skills and strategies are; phonics, phonological/phonemic awareness,

word identification, reading fluency, vocabulary, and comprehension (DES, 2011b) with some of the initiatives incorporating all the skills and others focusing on the depth of learning of a chosen few. A brief description of the key characteristics of each initiative is outlined in Table 2.

Researcher/ Initiative	Targeted audience	Literacy aspects	Participants	Assessment	Professional learning and development	Effectiveness/Outcomes
First Steps (First Steps, 2004) literacy resources: Reading Writing Speaking and Listening	All students from birth to beyond third level education	Students placed on one of six phases that are progressive and continuous Key indicators: • Use of texts • Contextual understanding • Conventions • Processes and strategies Activities and resources to support each specific target	First Steps tutor to lead implementation of First Steps All teachers can use the whole literacy resources or select component to support school targets	Map of Development- formative and summative assessment Arrange of formative assessment tools for teachers, students and parents	PDST facilitated a specific course to certify First Steps tutors PDST facilitator supporting schools on-site and tailored Local schools creating professional learning communities	Expansive implementation programme to DEIS schools of literacy programmes (PDST DEIS Annual Report, 2011) Continuous of PD for First Steps by PDST

Researcher/ Initiative	Targeted audience	Literacy aspects	Participants	Assessment	Professional learning and development	Effectiveness/Outcomes
Reading Recovery Programme based on the works of Marie Clay (2005)	Students in Senior Infants with the lowest literacy achievement with specially trained Reading Recovery teacher On average, four students receive this intervention annually Mainly in DEIS schools or schools identified with a need	Components of Lesson: • Re-reading of familiar texts • Running record of new book • Letter identification • Sentence writing • Orientation to new text	Teachers trained especially for Reading Recovery for a year DES funded	Observations at each thirty minute lesson Running Records Literacy testing specific to Reading Recovery Results of student assessment are collated on a global scale	Eighteen initial professional development sessions Four assessment training sessions Professional Learning Community: Observation teaching with team feedback	May et al., (2016) Strong short-term impact on students in 1st grade Analysis of retention of long term impact of RR was not significant Strong fidelity to First Steps programme delivery and design
Eithne Kennedy Write to Read (2010)	1 Urban Band I school as part of a dissertation in 2010 Expanded to 8 DEIS schools to focus on raising literacy standards	• Phonics • Vocabulary • Reading fluency • Writing • Comprehension	1st class students class teacher SEN teacher parents	Formative assessment tools: • Conferences • Checklists • Running records • Work samples	On-site and tailored following an investigative stance	Kennedy (2010) Collaboration amongst teachers Structured approach to literacy Significant increases in literacy attainment

Researcher/ Initiative	Targeted audience	Literacy aspects	Participants	Assessment	Professional learning and development	Effectiveness/Outcomes
Clarke (2011)	DEIS Band I School in North Dublin Linking student attainment and home environment	Four-part programme: • Facilitating parental skills • Skills to support the student's • Parents co-teaching in classroom • Educational trips	Link of class teacher and parent Junior Infant level (4/5 year old students)		In-school workshops on a fortnightly basis focusing on: phonics, comprehension paired reading	Increased engagement of parents attending literacy workshops Literacy initiative with parents and students continued after the initial study
Reid and Kelly (2013) Doodle Den: After-School Programme	After-school literacy programme Based in West Tallaght	Using story as a context to support phonics, writing, comprehension and oral language Parent education programmes Educational trips	Senior Infants (5/6 year old students) Parents of students attending the programme	Assessment: • Observation • Focus groups • Attendance • Evaluation by Queen's University, Belfast	Students continuing attendance Assessing innovative methods and delivering	Reading attainment increased Increased attendance at school Story at home was established with parents and students

Researcher/ Initiative	Targeted audience	Literacy aspects	Participants	Assessment	Professional learning and development	Effectiveness/Outcomes
Building Bridges Glesson worked with a team of practicing teachers in the mid-west region (2010)	Qualitative study with 10 teachers in a variety of schools in the mid-west region	Gradual release of responsibility (Duke and Pearson, 2002) 8 key comprehension strategies Comprehension in English and across all curricular areas		• Student work samples • Teacher observation • Book reading • Student self-assessment indicators	Monthly seminars Visits on-site Debriefing sessions with students	Structured programme to teacher comprehension strategies Whole school approach at all class levels Identified literature that marries with the programme
King (2012)	5 urban schools designated disadvantaged	Peer Tutoring in third class over a ten week period Exploring the impact of professional development and sustainability	Third class (9/10 year old students) with class teacher and SEN teacher	Qualitative interviews Assessments on reading attainment pre and post initiative of students in 3rd class.	One day professional development Two school visits during 10 week period Support via e-mail and phone	Sustained practice in most schools of Peer Tutoring, 5 years after initial implementation Collaborative practices in majority of study schools

Table 2. Overview of Literacy Initiatives in DEIS Primary Schools in Ireland

The interventions in Table 2 highlight approaches to literacy instruction, exploring flexible methodologies, development of classroom environments, and using assessment data effectively. Urban Band 1 schools received all the DEIS programmes first, with professional development being facilitated by PDST. Like First Steps, Reading Recovery is nationwide and Doodle Den, as of 2013 expanded its centres to other counties in Ireland All other initiatives were created in Ireland. Clarke's initiative (2011) is the only intervention out of the seven to be independent of direct funding from an organisation. Clarke's study (2011) school was also her place of employment. DEIS schools get funding as part of the Home School Liaison Scheme, however, it is unclear if any of these funds were used to support Clarke's literacy intervention. First Steps, Reading Recovery and Doodle Den receive national funding. Gleeson (2010) and Kennedy (2010) have links with third level universities: University of Limerick and Dublin City University (formerly St Patrick's College), respectively. King received financial support from the Irish National Teacher's Union. The majority of the highlighted initiatives received customised professional development, the majority of which was on-site, except for Reading Recovery (Clay, 2005). Reading Recovery (Clay, 2005) has on-site training, with the majority being off-site, generally being hosted in the local Education Centre.

All the literacy interventions were introduced initially in schools in disadvantaged areas, except for Building Bridges, which encompassed DEIS and non-DEIS schools. Whilst the focus of the seven initiatives supports literacy intervention in Irish primary schools, Clarke (2011) and Reid and Kelly (2013) have an increased focus on parental participation in literacy and support during their initiative. The majority of interventions focused on early years interventions, whilst King solely explored 'Peer Tutoring' with third class. However, although Gleeson and First Steps programmes embrace the early years, their interventions extended to students in the classroom setting at all levels of reading attainment.

In general, the key reading skills and strategies are phonics, phonological/phonemic awareness, word identification, reading fluency, vocabulary, and comprehension (DES, 2011b), with all initiatives incorporating all the skills to varying degrees of depth, except Building Bridges (Glesson et al., 2010), solely focusing on comprehension strategies. Peer Tutoring (King, 2012), Building Bridges (Glesson et al., 2010), and Reading Recovery (Clay, 2005) have a clear and specific layout for a literacy session. Write to Read (Kennedy, 2010)

and First Steps Writing and Reading (First Steps, 2004) both worked with the educators to tailor the resource to the localised school context, supported by Kennedy (Kennedy, 2010) and PDST respectively. Interestingly, both initiatives emphasised the importance of writing and how this had a strong foundation and link with reading, with both merging and complementing each other as a literacy focus. The approach advocated in the majority of the initiatives for professional development for teachers is modelling and the scaffolding of reading strategies, that is, the gradual release of responsibility, with the levels of support for the reader reducing throughout the process (Duke and Pearson, 2002; Joyce and Showers, 2002; Pearson and Gallagher, 1983). All initiatives had assessment tools, both formative and summative, guided by a range of assessment procedures. With all initiatives, apart from Reading Recovery (Clay, 2005), there is a greater emphasis on soft targets (Gaffney, 2009) rather than statistics (Downes, 2007) alone. These assessment procedures supported the initiative to meet the needs of the students and create appropriate learning opportunities for students to extend the student's literacy levels, consolidating Vygotsky's theory of the 'Zone of proximal development' (Vygotsky, 1978). With the initiatives, there was a focus on capturing assessment in an authentic context, such as reading a book or student work samples. Whilst parental information and involvement was a feature of all interventions, Clarke's literacy intervention (2011) and 'Doodle Den' (Reid and Kelly, 2013) emphasise the involvement of parents in acquiring assessment information on the students.

In this section, there was an exploration of the key characteristics of the First Steps initiative (First Steps, 2004). This was followed by a critique of a suite of literacy initiatives, on a national and local platform in Ireland. The next section will discuss the impact of the DEIS literacy initiatives, to date.

2.7 Impact of the DEIS Initiative To-Date

The DEIS programme has been evaluated mainly from a summative perspective with an evaluative focus, steered by The Department of Education and carried out by the Education Research Centre (ERC) from its inception to current trends. The DEIS programme for urban DEIS schools offers financial assistance and a multitude of supports to DEIS schools. The evaluations of DEIS have mainly focused on student achievement by ERC and its self-authored assessments, at three-year intervals, starting in 2007 at four grade levels (second,

third, fifth and sixth), with achievement being defined in terms of literacy and numeracy testing. In recent years, there has been improvements in literacy and numeracy attainment in Ireland, which contrasts with findings and evaluations of schemes in disadvantaged schools, preceding DEIS (Barnardos, 2009; Kennedy, 2007; DES, 2005). The ERC 2007 and 2013 assessments (Smyth et al., 2015; Weir and Denner, 2013) on students highlights that attendance rates have improved in Urban Band 1 DEIS schools, however, there is a high concentration of students attaining low test scores in literacy in DEIS Band 1 schools than in DEIS Band 2 or DEIS Rural primary schools.

Programmes prior to DEIS show little evidence that they made a positive impact on achievement (Weir et al., 2011). The Economic and Social Research Institute (ESRI)[7] were commissioned by DES to carry out a report to examine the influence of DEIS supports for disadvantaged schools, using current research on DEIS schools, to date, by Shiel et al. (2014), Weir and Denner (2013), national and international best practice. The ERSI report was issued in April 2015, entitled 'Learning from the Evaluation of DEIS' (Smyth et al., 2015). Smyth et al. (2015) observed that there has been changes in the student profile in DEIS school; "some cross-sectional trends appear to be driven by changes in the profile of students rather than improvement in the scores of individual students" (Smyth et al., 2015, 27). Students, whose first language was not English or Irish, outperformed native English speaking students at all three grade levels (ERC, 2011). This is a new pattern that has emerged in recent times, where students attending DEIS schools, where English is not their first language, have increased the assessment results for DEIS schools. Smyth et al.'s report (2015) gained information, and data reports, mainly from the ERC 2013, 2010 and 2007 (Weir and Denner, 2013) outlining summative assessment scores of students attending DEIS schools, Growing Up in Ireland Report (McCoy et al., 2014b), and the National Assessment of English, Reading and Mathematics 2014 (Shiel et al., 2014b)[8], which highlight changes in school organisation, processes, and student outcomes (Smyth et al., 2015, vii). The ERC carried out standardised

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[7] **Economic and Social Research Institute (ESRI):** The ERSI organization produces research through many mediums that develops understandings on an international platform concerning economic and social change in Ireland and internationally, using an empirical research base, in areas of national policy issues.

[8] **The National Assessment in English, Reading and Mathematics (NAERM 2009 and 2014)** was administered to primary students in second and 6th class to a representative sample of more than 8,000 students. The NAERM 2014 study comprised of 150 schools nationally, with 30 schools on average being DEIS designed. Questionnaires were completed by class teachers, principals and parents. These assessments allow for comparison of results in 2009 and 2014 in all school types and trends to be explored.

testing in literacy and numeracy in 120 urban DEIS schools in May 2007 in 2nd, 3rd, 4th and 6th class. In May 2013 and 2010, the same urban DEIS Band 1 schools were tested, with the addition of 5th class (Table 3). The ERC evaluations do not allow for comparison with non-DEIS primary schools. Weir et al. (2011) found that there was a small difference in results, which was statistically significant. Evaluations highlight variation amongst DEIS schools in student outcomes. Improvements in test scores were greater, at lower class levels, with the greatest gains in 2nd class, with students with age ranges from seven to eight years. The largest increase was in 2nd class where students achieved on average of 22.8 out of 40 reading items correct in 2007; this climbed to 24.3 items in 2010. However, the national average in second class for non-DEIS schools is 29 approved items (Weir et al., 2011). Table 3 illustrates further improvements in scores from 2010 to 2013 (Weir and Denner, 2013), showing the average reading achievement increased across all the grade levels from 2007 to 2013; however, the raw scores in DEIS Band 1 were lower than students in DEIS Band 2.

Table 3. Average Reading Raw Score of Students in Urban Band 1 and 2 Schools at or Below the 10th Percentile

	2007		2010		2013	
Class	**DEIS Band 1**	**DEIS Band 2**	**DEIS Band 1**	**DEIS Band 2**	**DEIS Band 1**	**DEIS Band 2**
2nd Class	21.6 (26%)	24.3 (17%)	23.3 (18.6%)	25.5 (12.9%)	25.3 (13.2%)	26.9 (8.5%)
3rd Class	20.5 (31.6%)	23.9 (20.6%)	21.6 (26.6%)	24 (18.9%)	23.6 (19.5%)	26.2 (13.6%)
5th Class	NOT TESTED	NOT TESTED	18.1 (25.5%)	21 (14.5%)	19.6 (17.1%)	22.4 (9.4%)
6th Class	16.2 (36%)	19.9 (19.1%)	16.9 (31.1%)	20.1 (19.4%)	18.4 (25.3%)	24 (10%)

(The number of items correct out of a total of 40 items, with the percentages, at 2nd, 3rd, 5th and 6th Classes in 2007, 2010 and 2013) (Weir and Denner, 2013; Smyth et al., 2015)

The format of the results in the evaluation report of assessment carried out in 2016 from the ERC (Kavanagh et al., 2017) is not in the same format as previous years (Table 3). Table 4 extends the literacy result of evaluations from 2007 to 2016. Changes in 2016 in literacy are smaller in magnitude than the corresponding reductions in students' performing at or below the 10th percentile. Modest increases were observed from 2013 to 2016 in literacy; the composite gains observed were smaller than in previous assessments. Interestingly, greater gains have been found in mathematics than in literacy from 2007 to 2016 at all grade levels. The majority of schools have patterns of mixed changes during this period (Kavanagh et al., 2017).

Table 4. Percentages of Students Scoring at or Below the 10th Percentile in Reading

Class	2007	2010	2013	2016	Norm Group Average
2nd Class	22	15.9	11.0	11.9	10
3rd Class	26.4	22	16.8	14.4	10
5th Class	NOT TESTED	20.6	13.6	12.3	10
6th Class	28	25.6	20.2	17.6	10

(Kavanagh et al., 2017)

In 2013, the same students in 5th class improved on their 2nd class 2007 results in numeracy and literacy (Weir and Denner, 2013). With the triennial testing of the same DEIS schools, longitudinal results are emerging in reading that support the unloading of the effects of the programme, with reading scores increasing in both groups (Weir and Denner, 2013). With no control groups, it is difficult to ascertain whether improvements are attributed to the DEIS programme or simply following national trends of improvements in literacy among all schools

(Shiel et al., 2014). The NAERM 2014 can provide trends in non-DEIS schools. Smyth (2015) used this assessment in place of a control group for DEIS comparisons and offers a platform to identify patterns and trends. It is uncertain whether the increases can be solely attributed to the DEIS scheme, as the NAERM 2014 (Shiel et al., 2014) shows that, nationally, there has been an increase in literacy results in DEIS schools (Smyth et al., 2015). Urban DEIS Band 1 students in the NAERM 2014 have scored significantly lower on English reading assessment (urban school mean score 232) than all other school types (non-urban mean score 268), with a 36 point difference. Contrasting the achievement gap between DEIS and non-DEIS schools in literacy and numeracy, using ERC results and NAERM 2014 results, highlights that the gap has not diminished. Therefore, the gap of attainment levels between DEIS and non-DEIS schools has remained and not narrowed. In summation, there has been an increase in literacy in all types of primary schools nationwide, thus exploration is needed as to what the factors are that spurred such a rise in literacy results.

The Growing Up in Ireland study is a longitudinal study of students, led by Trinity College and ESRI that involves students at the age of nine and thirteen being surveyed, with information collected from parents, principals, teachers, and students. This study "confirms that DEIS schools differ markedly from non-DEIS schools in terms of the social class background, parental education, household income and family structures of their students" (Smyth, 2015, vii). The proposed research feeds into the recommendations of Smyth et al. (2015), where "existing evaluations point to variation among DEIS schools in student outcomes, and case-study research could provide insights into which school and teacher factors influence such variation" (Smyth et al., 2015, ix) to capture the effects of the concentration of disadvantage, also known as the multiplier effect. Creemers (1994) extends this claim and places the focus on the classroom, which has a greater influence on students than the school. The following section explores the key elements that support a school to improve and increase its knowledge production, influenced by Fullan's research studies and writings.

2.8 Knowledge Productivity: The DEIS Schools' Infrastructural Components and its Complexities

2.8.1 Introduction

"Knowledge becomes productive when the creation and application of knowledge results in gradual improvements and radical innovations of operating procedures, products and services" (Kessels and Keursten, 2002, 106). Ultimately, the knowledge building will interconnect with teaching and learning to support student achievement, driven by the teacher. Fullan's research (2016, 2008, 2007, 2005, 2002) has focused on school reform, where knowledge building and its sustainability are vital in supporting school improvement. Knowledge productivity represents the competencies to gather information, personalise it, and support improvement in the area of literacy (Fullan, 2005; Kessels and Keursten, 2002). The focus of Fullan's research and writings in this study is to investigate knowledge building (Fullan, 2005) and its sustainability immersed in the complexities of a school's infrastructure: knowledge building, moral purpose, change process and relationships, ultimately to support student learning and, in turn, student achievement. The DEIS school's infrastructural set-up is unique to each school. Infrastructures in schools are "the basic systems and services that an organisation uses in order to work effectively" (Cambridge, 2016). When a school is engaged in literacy development as a living system, then the 'process dynamics' (Keursten et al., 2006) alter; that is, the manner in which change is put into practice. Improvement depends on the capacity of the school and their application to change. Capacity refers to the "breath of the vision" (Tuohy, 2008, 53) and accepts the past, lives in the present, and organises students and the school to thrive in the future (Tuohy, 2008). Schools develop on an individual and collective basis, enriching the "wisdom of a crowd" (Fullan, 2008, 47); however, the converse may also be valid. The study will explore the writings of Fullan over the past decade of investigation into school reform: building knowledge and its sustainability, whilst acknowledging its complexities. The following section will investigate the framework that has evolved from the writings and studies of Fullan.

2.8.2. Research and Works of Fullan: Supporting School Improvement

Fullan is professor emeritus and former Dean of the Ontario Institute for Studies in Education at the University of Ontario. He has received numerous awards for his work on change in system reform in education, receiving the Order of Canada in December 2012. He also holds honorary doctorates from several universities, both in North America and abroad. Fullan's book 'Leading in a Culture of Change' was awarded the 2002 Book of the Year award and 'Change Wars', co-authored with Hargreaves won the American Association of Colleges for Teacher Education award. In Ireland in 2006, Fullan hosted a series of workshops in Ireland for school leaders and wrote a paper 'Quality Leadership, Quality Learning' (Fullan, 2006). Fullan was a special advisor to the Premier and the Minister of Education in Ontario from the commencement of education reform in Ontario since 2003, with a focus on improving school capacity, focusing on sustaining improvements and student achievement in Ontario. In Ontario (Fullan, 2012), reading, writing and mathematics results increased by 15 percentage points across 4,000 elementary schools in Ontario since 2003, with achievement gaps being substantially reduced for those in disadvantaged areas (Fullan, 2012). Morale of teachers and its leaders had increased, with a decrease in the attrition of teachers (Fullan, 2012), enhancing school conditions for sustainability. Fullan advises policy makers and local leaders globally, extending the principles of the Ontario project into other environments, such as California, Queensland, and Victoria in Australia, with a focus on the education system making a positive difference in students' lives. Drawing on a vast array of research, Fullan focused mainly on the dynamics of school life and challenges of school systems to support and develop learning, ultimately ensuring the sustainability of the education system.

The McKinsey Group (Barber, et al., 2010) and the Organization for Economic Co-operation and Development in Paris (OECD, 2010) have all carried out case studies in recent years incorporating Ontario's education reform movement, which has ranked highly on the global platform. The Ontario Initiative in education focuses on relationships and increasing student achievement. In Ontario, there is a focus on communication with schools, their community, and the district, fostering communication, sharing practices, and developing a culture of teamwork. The main outcome of this strategy is to develop leaders and ensure its sustainability. Fullan, using his wide range of research studies, supports a framework of components, identified as 'right drivers' (Fullan and Rincon-Gallardo, 2017) that give schools

an opportunity to investigate their own school system more deeply (see Table 5), with the overarching focus being to maintain sustainability of learning achievements. Fullan is currently the Global Leadership Director of New Pedagogies for Deep Learning (NPDL), a worldwide group on educational reform, partnering over 1,000 schools in ten countries. The ultimate focus of NPDL is for schools to network and promote learning communities, known as a "collaborative culture" (Fullan, 2017, 2), to build knowledge that can develop deep learning in a school system: the school, the community, and policy, with their over-arching focus on supporting sustainability in whole school systems in order to transform learning.

In an ever-changing complex environment, Fullan's focus is to mobilise teachers towards school improvement and sustainability (Fullan, 2012). Working conditions needed to improve, where Fullan documented the essential components in a knowledge society:

1. knowledge building (merging the components knowledge creation and sharing),
2. moral purpose,
3. the change process, and
4. building relationships.

In 2005, Fullan also used these essential components as characteristics of a successful leader in a tri-level reform modelled: in schools, school districts and on a national basis. Whilst Ireland does not have formalised school districts, there is an informal clustering of education centres in each county. "Knowledge becomes productive when the creation and application of knowledge" supports gradual improvements in the school system (Kessels and Keursten, 2002, 106). Fullan gives a framework that practically applies how the production of knowledge can be stimulated, supported, and hindered in workplace systems. Fullan's four components will be discussed in further detail below (Fullan, 2007, 2005, 2002), outlining the school infrastructure and its complexities towards school improvement. Fullan (2016, 2008, 2002) emphasises the importance of providing better environments for educators to develop in their own context, which in turn provides them with the capacity to sustain student achievements.

Sustainability is not "how to keep going in a linear fashion. It is not how to keep up relentless energy" (Fullan, 2005, ix) to build upon knowledge, ultimately striving to increase student achievement. Thus, the focus is not solely on outcomes and statistics. For sustainability to last,

key characteristics of the school system need to be identified that support dynamic sustainability. Claxton (2010) identifies components of learning powers, similar to Hargreaves's "thinking" skills (Hargreaves, 2013, 30) inforce and extend the concept of sustainability in educational environments, such as resilience, resourcefulness, and reciprocal learning. He considers resilience important to focus on the learning, avoiding distractions, reflecting on actions both individually and collectively. Hargreaves's concept of "thinking" skills (Hargreaves, 2013, 30) also gives power to learning. In the next section, there will be an exploration of Fullan's four sustainability characteristics that have the potential to support a school system to be both 'process smart', where exchanging of ideas and plans have a channel, and also 'people smart', where interactions have the capacity to energise people (Perkins, 2003). Table 5 gives an overview of the complexities of school change and its sustainability in Fullan's studies and their development over a decade.

2.8.3 School Sustainability and its Complexities

Table 5. Complexities of Schools' Infrastructures

Adapted from Fullan (2016, 2008, 2007, 2005, 2002)

Components in a knowledge society 2002	System leaders committed to sustainability 2005	Insights into Educational Change 2007	The Six Secrets to Change 2008	Professional capital: Professional learning and development (Fullan and Hargreaves, 2016)
Knowledge Building Knowledge Creation and Cultivating leaders are at many levels (Capacity)	Collaboration and capacity building The long lever of leadership: sustainability	Continuous focus on capacity building 'Sustainable leadership spreads' (Hargreaves and Fink, 2006: 95)	Sustaining learning needs to have many leaders with humility and faith System's learning	Sustainable leadership

Components in a knowledge society 2002	System leaders committed to sustainability 2005	Insights into Educational Change 2007	The Six Secrets to Change 2008	Professional capital: Professional learning and development (Fullan and Hargreaves, 2016)
Moral Purpose Moral purpose	Moral purpose: Reality test of current position and raising attainment Beliefs	The overarching goal is to close the gap and ultimately raise educational attainment	Love your employees: investing in people, support their learning (Human and social)	Moral purpose: unique shaping of collaborative professionalism • Human capital • Social capital • Professional capital
Change Process Understanding the change process and developing a social environment	Getting the basics right 'Intelligent accountability' (Milliband, 2004) and deep learning	Attending initially to the three basics: literacy, numeracy and well-being Internal accountability which is linked with external accountability	Transparency of data: assessment that guides behaviour towards best practices Learning is the work	Purposeful collaboration: growth of the person and action Regular quality feedback related to improvement: from own school and others
Relationship Building Ability to improve relationships Enhancing the teaching professional: Sharing and Coherence Making	Opportunities for people to interact with the big picture: relationships Communication the big picture: long and short term plans	Driven by tapping into people's dignity and respect Quality of the people working on change Socially based and action orientated	Connect peers with purpose: Capacity building	Growth of person and actions Learning and development; deep learning with self, colleagues, students and parents

2.8.3.1 Knowledge Building in School and its Sustainability

Fullan's writings, with a strong evidence-base, move us into the future and explore factors that support improvement to endure over time. Sustainability is "the capacity of a system to

engage in the complexities of continuous improvement consistent with deep values of human purpose" (Fullan, 2005, ix). This definition of sustainability is not focused solely on outcomes and the key characteristics of the school system need to be acknowledged and understood in its unique context. Not only is sustainability an internal concept, but the schools is also encapsulated in 'tri-level reform': the school, its district, and national level (Fullan, 2005). Sustainability is not about an initiative or lasting development, it is a matter of keeping the persistent focus and energy to the fore of developments surging forward, without compromising established developments. As such, sustainability needs support from individual leadership and also system transformation, two entities intertwined. Hargreaves and Fink extend Fullan's concept of sustainability, which does "not simply mean whether something will last. It addresses how particular initiatives can be developed without compromising the development of others in the surrounding environment now and in the future" (Hargreaves and Fink, 2000, 30).

Senge (1990) believes all schools should be viewed as living systems and school improvement should not be defined as 'you don't have to be ill to get better' (Hopkins et al., 1994). At the core of school improvement, is teaching and learning, where the school's capacity will determine how knowledge will be used. Fullan (2005) explored the collective abilities that can act together to bring about positive change, such as knowledge competencies, motivations, and beliefs. Ouchi (2003) investigated projects in Ontario, Seattle, Houston, New York, Los Angeles, and Chicago, highlighting the seven keys to success from his findings. Ouchi (2003) found that the principal was viewed as an entrepreneur, with the school being accountable for student performance, and student achievement, corroborating the beliefs of Fullan.

If schools are striving to improve, it is important that educators have the skills and competencies to adapt to challenges, known as "adaptive challenge" (Heifetz, 2003, 70). When a problem needs to be addressed, with the resolution beyond the school's current operation, then skills and competencies should support flexibility. Ideally the teacher is not working on their own, optimally would be working with each other in an interdependent and interrelated relationship. Fullan's elements of sustainability (Fullan, 2005) have the potential to build a fertile landscape.

2.8.3.2 Moral Purpose

Beliefs support schools to create a picture that incorporates the past, the present, and moves into the future (Tuohy, 2008). Beliefs (Fullan, 2002) encompass the vision that is personalised for each individual school and how to attain it. It is a process, "a sense of adventure" (Tuohy, 2008, 38), where external forces impact on the journey. A school is challenged to explore its moral compass and has an autonomy to contemplate and re-direct to enrich it. "Learning is not doing; it is reflecting on doing" (Mintzberg, 2004, 228), challenging one's moral purpose. Reflection in action embeds learning in practice and "develops deep and lasting change" (Fullan, 2008, viii), which consolidates Fullan's concept of a reality test (Fullan, 2005). The DEIS school needs the vision and skills necessary to ensure innovation and improvement are reached. As such, one needs to learn from the past, reflect on the curriculum, procedures and resources whilst forgiving mistakes, but also remember the lessons learned (Fullan, 2008).

Schools do not own their visions, they "rent them from other people" (Sahlberg, 2015, xvi). As such, the skills of generating creative turmoil and creative stability (Keursten et al., 2006) are pertinent to developing and applying knowledge to one's DEIS context. The DEIS community will need to commit themselves to become "what we would naturally become, which is human communities, not machines" (Senge, 2000, 58). The DEIS school's vision is more than just standardised testing, with the main moral purpose for DEIS schools being to support their students to raise the educational bar and also narrow the gap of students in DEIS and non-DEIS Irish primary schools (Fullan 2016, 2007, 2005, 2002).

Fullan (2016, 2008) discussed two main approaches to investment in education in the United States, that of business capital and professional capital, with decisional capital developing later. Business capital is a short term focus, with instant returns, with a simple view of teaching, which can be driven by data. It would be important to reflect on whether the focus on development is a quick result that may or may not be sustained. Alternatively, professional capital in organisations focuses on three elements: individual, collaborative practices, and critical thinking. The OECD (2013) found that all high-performing schools invested in all three aspects of professional capital, enabling further growth, with educators having a focus and moral compass committed to making a positive difference in the lives of students (OECD, 2013). The quality of return for the investment in literacy improvement is to develop over

time, last and progress, therefore the focus should be on professional capital (Fullan and Hargreaves, 2016). Professional capital encapsulates human, social and decisional capital (Hargreaves and Fullan, 2012), with the focus on knowledge, relationship development and solution seeking. Sahlberg emphasises the active nature of social capital in the Finnish educational system where schools individually and in the wider community create the curriculum together, with educators learning together in the group, with no one method, being the ultimate method. For example, in Alberta, Canada, one aspect of social capital emanates through a 50% investment in professional development resources. However, this is consolidated human capital, attracting the best people (Sahlberg, 2015; Hargreaves and Fullan, 2012). Fullan has extended the concept of human capital to developing humanity, embraced in 2012 and refined in 2016, with schools becoming immersed in real-life issues both on a local and global platform.

Findings from evidence-based research of Ericsson and Pool (2016) emphasise that expertise is gained from experience, and repetition of practices that are extended, consolidated, or curtailed over time. Ericsson and Pool (2016) view professional capital that grows through measured practices, in an environment of trust, reflection, and transparency. The concept of humanity is vital, in that some educators do not improve their practice, therefore, interaction and practice in new concepts are important to help those learning at varying paces, abilities and standards (Kaufman and Epstein, 2016). Sustainable leadership and integrating networks both internal and external to the school can support coherence, that is, "the shared sense of understanding about the nature of the work" (Fullan and Quinn, 2016, 10). The investment is, not only monetary, but also an investment in time to plan, discuss, and evaluate practices, such as those practiced in the Finnish educational system (Campbell et al., 2016; Sahlberg, 2015). With the development of collaborative practices, a higher platform would include an approach which is both critical and appreciative (Campbell et al., 2016).

The DES in Ireland did not intend vision to be focused on "volume obsession" (Sheth, 2007, 3). Its intention is to streamline and target improvements that are deemed important to each DEIS school (DES, 2011b). There is an emphasis on quality of actions, rather than too many changes. If DEIS schools are engaged in the mapping of assumptions and beliefs that people have, they have the ability to support the school's transformational potential; "the discipline of managing mental models: surfacing, testing and improving our internal pictures of how the

world works, promises to be a major breakthrough for building learning organisations" (Senge, 1993, 174). Fullan promotes the school to understand its process, direction, and in turn, challenge its assumptions and biases, taking the tri-form model (Fullan, 2005) from national policy and localise it, using practices that achieve the best model for their students. The next section explores the change process and the school planning process that enables actions to be implemented using a cyclic process (Fullan, 2016, 2008, 2007, 2005, 2002).

2.8.3.3 The Change Process

There are many layers to leading and managing learning, from a systemic and procedural level to facilitate learning, to supporting staff to change their perceptions on student learning and, ultimately, at classroom level, a change in practice (O'Sullivan, 2011). This change process will be analysed under two concepts: leadership and the school development planning process. A school needs to be able to use knowledge that marries with one's vision towards attaining targeted outcomes for improved student performance. Knowledge can be understood "as the potential for action that doesn't only depend upon the stored information but also on the person interacting with it" (Malhotra, 2000, 249). The change process is a channel to bring learning to life and a forum to enable transformation (Fullan, 2005).

The change process necessitates expansion towards delving into leadership issues (Fullan, 2007). The leader, be it the principal, literacy coordinator, or the First Steps Reading tutor, helps teachers as individual learners and as members of the school learning community to grow "through a more organic form of management" (Geijsel et al., 2009, 410). The living system facilitates bringing learning to life. An imperative for effective change is leadership that postulates vision, focus, and support (Hord and Huling-Austin, 1986). Leadership needs to combine the vision with action, cultivating a context where change is respected (Fullan, 1991) whilst ensuring the environment is conducive to change (Boyd, 1992). Management promotes order and consistency, whilst leadership's main focus is on coping with change (Crawford, 2003), with both dimensions being vital to an improving DEIS school. Management and leadership have "high levels of personal artistry" (Bolman and Deal, 1997), which is at the heart of creativity. Leadership is one such process that has the potential to support the translation of intentions into reality (Block, 1987, 98).

Research is necessary to explore who takes on the role of leader in an Irish DEIS school, on an individual or team basis: the principal, middle management, the First Steps tutor[9] or a combination of people. Delegation becomes a tool of staff development when people are given roles, freedom to enact those roles, supported with a belief in their abilities and given responsibility (Tuohy, 2008). There is very little known about team dynamics in the Irish context during literacy development and it would be timely to observe 'trends' (Oates, 2008) in the Irish urban DEIS schools' context. The First Steps tutor is expected by the DES to cascade First Steps Reading knowledge to all staff members as part of one's 'adaptive leadership' role and how this manifests itself (Linsky and Lawrence, 2011).

The DES (2015) reviewed a sample of DEIS primary schools where planning was found to have a positive effect. On a micro level, deficiencies in planning were found in the area of assessment, both formative and summative, in collecting data and in its application (DES, 2011b). Several years later, the greatest challenge that DEIS schools found in planning was using data to set targets (DES, 2015). Unlike Fullan's collaborative culture (Fullan, 2017, 2007, 1999), there is little evidence, to date, in Ireland of schools planning with target setting or sharing these practices with other schools, on an external basis. It is important for all staff members to be aware of "the different levels of participation: individual, face-to-face team, inter-departmental groups and the organization" (Tuohy, 2008, 61) and choose the most applicable to suit their purpose. Reactions to change may be juxta-positioning between reactions to change of anxiety, loss, and panic; however, it may also be risk-taking, exhilaration, and excitement (Fullan, 2002).

Whilst DEIS schools author three year cyclic development plans, the focus is on achievement of the short-term goals however in tandem the school has another goal, enhancing the conditions for sustainability which are longer-term investments. With the cyclic process of planning, action, monitoring, and review, it is a reflective process to generate better practices, increase shared commitment and implement 'intelligent accountability' (Milliband, 2004). Whilst there is accountability for DEIS schools to submit their standardised literacy and numeracy to the DES, Fullan highlights the importance of self-evaluation as a more effective accountability medium. Munby and Fullan (2016) discussed the Education Development

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[9] **First Steps Tutor**: a teacher from a school designed DEIS, who is trained in First Steps Listening and Speaking, Reading or Writing on a 5 day course and will then train and support teachers in their own school, with no remuneration.

Trust's Schools Partnership Programme with more than 400 schools where collaboration has moved to co-responsibility and forward to "a position of shared professional accountability" (Munby and Fullan, 2016, 8). To reach professional accountability, it is recommended to have a small number of shared goals, backed by good data, where strategies have a process where educators are learning from each other and themselves and, in turn, where reflection on progress is seen, in order to attain greater performance from both the students and educators. It is timely to explore the reality of DEIS schools and their position towards professional accountability.

The fundamental nature of reality and school plans "is relationships not things…they are neither predictable nor controllable like machines, though they have patterns of behaviour that tend to recur and their future development can be influenced" (Senge, 2000, 52). Systems are entwined and it is necessary to explore how all the interconnecting parts work. The performance of the system is not secluded from the plans, environment, and space; it is unique to each school context. If taken apart, the system will not function to the same degree, as the functioning of the school depends on its totality (Tuohy, 2008; Senge, 2000). The system is "something that maintains its existence and functions as a whole through the interaction of its parts" (O'Connor and McDermott, 1997, xiii). The school and all its subsystems depend on how its members connect and this will be explored further in this research study.

2.8.3.4 Relationship Building

For professional development to be genuine and ultimately enrich student learning, the school needs to have systems and procedures "to facilitate embedding learning in practice, at whole staff level to change perceptions and at organisational level to change structures" (O'Sullivan, 2011, 111). Campbell et al. (2016) outline the elements of relationship building that are important for collaboration to be effective, such as well-led, well-supported with high quality. She emphasises that an investment in collaborative practice is sensible if the quality is good, mirroring Fullan and Munby's findings (2016). Croft studied collaboration in the United Kingdom and found only some collaborative practices to be effective (Croft, 2016). Kennedy outlines that group dynamics and quality of professional discourse (Kennedy, 2005) are important in the advancement of new knowledge (Boreham, 2000). The ultimate aim would be to have all key players working together to run the school as efficiently as possible.

Bell and Bolham (2010) consolidate Fullan's view of professional communities, found that the needs of professionalism between the teachers' own professional needs, the school's needs, and the needs of the State need to be balanced (Bell and Bolam, 2010). Whilst Bell and Bolham (2010) investigate the needs of the State, Fullan and Munby explore professional needs globally. There is a need for learning communities (O'Sullivan, 2011; Fullan, 2007; Kennedy, 2005; Hargreaves, 1994), a forum where resources and practices are shared and professional relationships developed. Fullan and Hargreaves (2016) have evidence-based research on the workings of professional learning and development having mutual interactions and commonality. Professional learning without professional development focuses on learning that would not transcend into the classroom. According to Fullan and Hargreaves (2016), "in the end, there should be no development without learning, and learning can and often should entail development" (2016, 4). Ideally, a professional learning and development community (Fullan and Hargreaves, 2016) would ultimately have the educator learning both individually and collectively, both in and out of the school context, interacting with the wider school community, and globally. There is an emphasis in recent times on global competition (Riley and MacBeath, 2003). Leadership is heavily influenced by social and political factors. It returned us persistently to the point where "cultural history meets contemporary politics, and where globalization confronts national identity" (Mintzberg, 1997, 174). Successful school leaders "are willing to change in response to new sets of circumstances and to the differing needs of students, young people and teachers and they are often rule breakers" (Riley and MacBeath, 2003, 174).

A natural response for teachers to change, is resistance, tension, and conflict, thus a principal's leadership is vital (Fullan, 2002). Conflict can dichotomise into being destructive or constructive. It is interesting that Owens views the DES perspective on schools reaching national goals as "organizational ideals normatively emphasize cooperation, harmony and collaboration" (Owen, 1998, 230). Conflict should, not be viewed as a negative response to change, but as an everyday reality where conflict is creative. The more constructive conflict strategy is problem solving, and its aim is "to integrate interests of disputants to achieve mutually satisfying outcomes" (DiPaola, 2003, 147); if dealt with in a problem-solving context, it usually has positive outcomes (Nicotera, 1995). It is important here to emphasise

the systemic nature (Senge, 1990) of a school and how changes to one area could permeate throughout the system and cause negative attitudes towards change.

Change does not automatically mean improvement has occurred, however, for a school to improve, change must have occurred (Fullan, 2008). For improvement and change, there needs to be systemic change and innovative change. The components that were discussed to support the school infrastructure are knowledge building, moral purpose, change process and building relationships. If the infrastructure is established and the elements are strong, it can provide an effective platform for teacher profession learning and development. It is important that principals have the capability and competence to challenge teachers and form resolutions that require teachers to learn new ways (Heifetz, 1994). Learning is dynamic through the promotion of constructive relationships, with an emphasis on the parts of a system merging, with the need for competencies coming to the fore (Fullan, 2016; Keursten et al., 2006). Following the discourse on the DEIS school infrastructure, influenced by Fullan (Fullan, 2016, 2008, 2007, 2005, 2002), the following section will further explore the concept of the learning process as professional learning and development, outlining realistic perspectives of time and opportunities, created in the DEIS school context to support or hinder literacy development (Riley and MacBeath, 2003).

2.9 Elements of Professional Development

'Professional Development' has no single clear definition. The concept is "broad, vague and debated, having multiple dimensions, meanings and purpose" (Crawford, 2009, 12; Friedman et al., 2008). There are three contexts that professional development needs to balance between: the individual, the environment, such as a school, and policy makers. The term 'continuing professional development' describes learning activities that are undertaken throughout working life and are intended to "enhance individual and organisational performance in professional and managerial spheres" (Woodward, 1996, 1). It is unclear whether the intention of enhancing the experiences for students in the classroom following professional development is an automatic assumption but not necessarily a reality. The focus of this study is to explore "the participation of teachers in a variety of learning activities within the school context" (Geijsel et al., 2009, 417) from the voices of teachers, in order to explore the impact

of professional development on the educator and on the school. King highlights the link as the need to build capacity with support in order to increase student achievement (2011). This would imply that the teacher has an individual power, where a need for an "emotional attachment to and engagement in their work" is necessary also (Day and Sachs, 2004, 34).

King provides a definition for professional development, where "professionals are people who have specialist knowledge and have the capacity and trustworthiness to use it to provide a continually improving service for society" (King, 2011, 150). Neil and Morgan extend this notion of professional development as conforming to new departmental or governmental regulations (Neil and Morgan, 2003). Contesting this representation of professional development is Kennedy (2007), who identifies two types of professionalism: democratic and managerial. The characteristics of democratic professionalism encompass equality, social justice, and which values fairness. Managerial professionalism perspective becomes more evident in reality, which values efficiency and effectiveness, with compliance to policy. The study will be cognisant of the styles of professionalism and its development through listening to the voices of professionals in the DEIS environment, to unearth the reality of styles, seeing whether one is more dominant or if a blend is nearer to the reality.

There is a plethora of government driven policies and initiatives that, debatably, impose pragmatic solutions, with goals devised "by political fashion or public purse strings" (Graham, 2008, 4-5), which can result in "self-regulatory behaviours and regimes" (Land, 2004, 8). The DEIS initiative has identified characteristics of skills and standards for Irish DEIS primary schools, through First Steps literacy and national literacy targets. It is unclear, however, whether regard for moral facets and creativity have been acknowledged and recognised in doing so. Lifelong learning policies have an inconsistency between "policy rhetoric and policy achievement" or "conception and delivery" (Field, 2002, 201). Jones (2011) explored the development of learning as having undertones of coercion into roles and responsibilities through more influential positions. A proposal of change in terminology, could be 'critical' professional development (Jones, 2011), which implies that teachers in their quest for lifelong learning contemplate, question, and deliberate new concepts and developments rather than just adopt a passive acceptance. The impact of professional development results in improved student outcomes (Earley and Porritt, 2010) and school improvement (King, 2011; Syed, 2008). The DES commonly refers to professional development as 'continuing' professional

development. This would imply that professional development is a continual process, where "the development of expertise and skills at behavioural, attitudinal and intellectual levels is a common and unending practice" (Evans, 2010, 16). The impact of professional development on student outcome and improvement is not an automatic link (Cumming, 2002). Jones (2011) discussed the term 'critical' professional development, which implies a more active engagement and increased professional dialogue for both the participants and the facilitator, with passive attendance being negated. It is an opportune time to explore the reality of professional development in the DEIS school and whether continuing professional development is continual in nature or whether 'bursts' (Gray et al., 2003), also referred to as "temporal discontinuity" (Oates, 2008, 105) of professional development, is a better descriptor.

With developments in the education system, aspirations, which are stated as targeted goals, remain issues of control and power, possibly leading to contrived collegiality (Hargreaves, 1994). Once schools were eligible and agreed to enter the DEIS programme, it was compulsory to engage in the literacy and numeracy programmes, for example, First Steps Reading (First Steps, 2004). With the DES evaluating the DEIS programme through visitations at fixed periods (DES, 2011b), the evaluation was based on implementation-oriented First Steps programmes, rather than development-oriented educational goals. The First Steps Reading (First Steps, 2004) could then be described as a "top-down controlled process rather than a real collegiality which is spontaneous, flexible, and above all, teacher driven" (Kennedy, 2007, 64). Individuals take control of their own learning and development, "by engaging in an on-going process of reflection and action" (Megginson and Whitaker, 2007, 3). Thus, it is opportune to obtain teachers and principals' reactions to the professional development that was organised from the inception of literacy programmes for DEIS schools in Ireland, and how this has developed over time in the four urban DEIS primary schools participating in the study.

In February 2011, the DES' new compulsory practices of professional development became operative, where teachers must complete an additional thirty-six hours annually in all primary schools; the majority of time is staff based (DES, 2011b). This compulsory action for all teachers supports professional learning in education, with "the participation of teachers in a variety of learning activities within the school context" (Geijsel *et al.,* 2009, 417). Whilst

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appearing positive, it must be noted that it is not automatic that all teacher learning promotes professional development and, in turn, that school development can be further challenged (Cumming, 2002). As such, knowledge processes of engagement of teams or teachers alone will not ensure school improvement, with the results depending on how the knowledge gained is used. This research study will investigate if new practices in First Steps Reading are being sustained and will delve into the approaches and styles in literacy that lead and manage professional development. Learning needs to extend, from mere information gathering, to learning in action. Teacher learning is a "constructive and socially and culturally situated process" (Geijsel *et al.,* 2009, 408). The context and exercise of that knowledge supports further consideration of that knowledge. The academic context, institutional discussion of policy and practice itself are pivotal towards professional development (Eraut, 1994, 20). Thus, it is important to further explore the uses that teachers make of knowledge through the learning processes and in the future, what type of teacher learning needs will be recommended, whilst stimulating the development in the school, "with the ultimate aim of accomplishing educational goals more effectively" (Van Velzen, 1985, 34). Effective teacher learning should ultimately complement the teaching and learning experiences for both teachers and students in the classroom, which supports and enhances the concept of an improving school, which will be explored in the following section.

2.9.1 Teacher Learning

It is important to note that teacher learning is more complex than simply the transfer of information. It can be thought of as knowledge that is embodying personal, social, and professional 'domains', which are interconnected (Bell and Gilbert, 1996), where a mix of all three can result in significant professional learning. Kennedy (2007) highlights that the range of actions needed to be spread over a variety of contexts: formal, informal, planning, and incidental; therefore, they are a part of ordinary life in the school. There has been extensive literature on teacher learning and a strong argument that experimental learning needs to be linked with research (MacBeath, 2011). Eraut (2014) would extend this view that learning from one context is rather limiting and that one needs to understand approaches and resolutions from a variety of contexts.

Shulman classifies the link between knowledge and its practice in the classroom as "pedagogical content knowledge" (Shulman, 1986, 9). Sugrue investigated the modes of practices that were used in schools to transfer knowledge into the school and the classrooms. The three main modes were knowledge for practice, knowledge in practice and knowledge of practice (Sugrue, 2003, 20). Knowledge for practice can appeal to policy makers, as it is "driven by prescription" (Sugrue, 2003, 21), where knowledge that has already been produced by experts, ready for use by teachers. The Curriculum in Ireland (NCCA, 1999) is an example of a prescriptive programme devised by the NCCA. In DEIS schools, the First Steps tutors attend a five day course and bring back knowledge to colleagues, a practice promoted by DES and PDST in Ireland. Knowledge transfer is dependent on the First Steps tutor and the school. Sugrue would argue that sustained and on-going support in isolated 'ready-made' workshops are increasingly redundant (Sugrue et al., 2001); however, localised Education Centre workshops in Ireland are reverting back to set workshops. The second mode is "knowledge in practice" (Sugrue, 2003, 20), which leans more on the 'craft' (Eraut, 1994) of constructing, inventing knowledge. Much knowledge is developed through reflective practices where the teachers are the dominant agent of change. "Knowledge in practice" (Sugrue, 2003, 20) explores the school as a learning community, where processes and practices are formed and reformed. Support of the school community is vital in this process. Theoretically, then, the WSE and DEIS self-evaluative planning would be anchored in "knowledge of practice" (Sugrue, 2003, 20).

Sahlberg (2015) argues that teachers in the Finnish educational system have attained a qualification in education to Master's level, which would therefore imply teachers having the experience of research-based exploration. He outlines that the Finnish education system is focused on a blend of learning through research methods and analysis, which Sahlberg would argue is in contrast to the focus of the United States and European countries, "where competition, test-based accountability, standardisation, and privatization seem to dominate" (Sahlberg, 2015, 14). This study will explore the use of evidence-based research to inform changes in literacy practice in DEIS schools.

2.9.2 Models of Professional Development

Continuum models of professional development have been developed (West-Burnham, 2010; Kennedy, 2005; Joyce and Showers, 2002) and classified according to their capacity for supporting professional autonomy and transformative practices. DEIS advisors followed the model of Joyce and Showers (2002) as a model of professional development. Kennedy's nine key models move through the stages of the gradual release of responsibility, imparting information at group level to increase the degree of capacity for individual professional autonomy. As such, the continuum models move from transmission level to a higher level of transitional development (Table 6). The training model is an opportunity for teachers to up-date their skills, which is usually delivered to a teacher by an expert who is off-site and of a generic nature. The DEIS Advisor delivering the workshops has not used the First Steps resource in the classroom nor had first-hand experience of the resource in a classroom; thus, the 'expert' must follow a script and an agenda for the workshop. It also does not take into account the skills or schema of the teachers present; it is simply an imparting of knowledge, with a limited agenda. From the perspective of the DES and demonstrating the new First Steps Reading resource (First Steps, 2004), it is an effective medium for introducing new learning (Hoban, 2002). The First Steps tutors, teachers from DEIS schools that attend a five day course over a certain period, receive a certificate of completion. The intention thereafter was that the First Steps tutors, with support from the DEIS advisor, would cascade the knowledge to colleagues in their DEIS school. The knowledge that the First Steps tutor gained is knowledge without a contextual focus on the values and needs of the individual DEIS school. It will be interesting to explore, in the DEIS context, how teachers perceived the introduction of the First Steps Reading resource, where "skills are given priority over attitudes and values" (Kennedy, 2005, 240). There is a connection between teacher effectiveness and student learning, with standards giving a validation (Beyer, 2002, 243). Kirk et al. (2003) would argue that there is very little difference between competencies and standards, other than semantics.

Table 6. Models of Learning, adapted from West-Burnham (2010), Kennedy (2005), Joyce and Showers (2002)

Models	Descriptor	Purpose of Model
The Training model	• Opportunity to up-date skills • Usually presented to the teacher by an expert	Transmission
The award-bearing models	• Validated by universities • Perceived to be academic rather than practical	
The deficit model	• Using CPD as a cure/solution the weakness/problem	
The cascade model	• Teachers attending training events and then cascading/disseminating the knowledge to colleagues	
The Standards-based Model	• Standards versus competencies • The real issue is the implementation of the standards in the school	Transitional
The coaching/mentoring model	• One-to-one relationship • Mentoring akin to apprenticeship/hierarchical	
The Community of Practice	• More than 2 people • Allowing the members for that community to exert control/power over the agenda	
The Action Research Model	• Participants are the researchers	Transformative
The transformative models	• Using a range of the models, with a sense of power and tensions	

It will be interesting to explore the modes of learning that have been used by the First Steps tutors and literacy post-holders to promote shared dialogue in literacy development and the purpose of the models used.

2.9.3 Reflection on Professional Development Practices

The proposed research is an exploration of teacher professional identities, investigating if teacher actions in the DEIS setting are marrying with teacher beliefs. Through the teachers, principals and DEIS advisors' voices, the research will consider how teachers learn and develop their knowledge base. The school and its environment have frameworks that need to be scrutinised to examine how it supports the emotionally charged experiences that teachers regularly confront (Hobson and Malderez, 2005). PDST facilitates professional development literacy for the DEIS initiative based on the framework of Joyce and Showers (2002) (Table 4) and the concept of the learning continuum. DEIS schools could also request, from PDST, workshops that could be tailored to their own needs in their own environment. With the First Steps literacy programmes, one teacher was selected from each DEIS school to become the First Steps Reading tutor and thereafter, lead its implementation in one's school; making teachers the 'central actors' (Hagger and McIntyre, 2000) in their own development. It is vital to investigate the professional learning in the DEIS teachers' own communities and develop an understanding of the reality of professional development in literacy in DEIS schools.

It is well-timed to explore the reality of professional development for educators in DEIS schools since the roll-out of First Steps Reading. First Steps Reading was the second of three First Steps literacy resources to be implemented in DEIS schools, alongside numeracy programmes. Kennedy questions if learning activities, which "enabled change and led to transformative practices was more prioritised over learning which simply involved knowledge transfer for teachers" (Kennedy, 2005, 67). In the study, rather than asking teachers which learning experiences they recalled, the researcher wanted teachers to reflect on which learning experiences were most successful and which had the most impact in supporting learning in the classroom and amongst their contemporaries, with First Steps literacy resources (First Steps, 2004) as the focal point of discussion. Geijsel et al. (2009) created a framework to explore four learning activities carried out by teachers: keeping up-to-date, changing practices, experimentation, and reflective practices. Geijsel's four learning activities have their foundations based on the findings of Smylie (1995) and Keursten et al. (2006). This focus allows the researcher to enable DEIS personnel to impart a more reflective response, acknowledging how learning has occurred, using First Steps Reading as the catalyst for investigation.

2.10 Stimulants

The final section of the 'Knowledge Productivity in Literacy Framework' will investigate practices that have the potential to stimulate or de-stimulate educators to continue developing their practices in literacy in urban DEIS schools in Ireland, using two main dimensions: evaluation and motivation. Evaluation explores the perspective of assessment of learning progression on an international, national, and local basis by educators in the urban DEIS environment. Thereafter, there will be an exploration of the voices of educators to unveil their driving forces that stimulate both themselves and others in order to improve the literacy outcomes of students in their respective DEIS schools.

2.10.1 Evaluation

Evaluation in this study is defined as educational assessment that "provides information about progress in learning" (NCCA, 2009) and visa versa. All schools in Ireland have been exposed to a suite of assessments that can be administered to students on an individual and/or class basis, where the purpose may be formative or summative (NCCA, 2009). Formative assessment, also known as assessment for learning, which includes diagnostic testing, encompasses both formal and informal assessment procedures to support modification of teaching and learning activities to, ultimately, improve student attainment. Summative assessment, also known as assessment of learning, evaluates learning often at the end of instruction, against a set of standards or target.

First Steps Reading (First Steps, 2004) uses a formative assessment format, known as a development map, to highlight targets that students have to reach in four contexts of reading: use of texts, conventions, contextual understanding, and comprehension. The attainment of targets is assessed through teacher observation, student tasks, and student conferencing. Each context has a range of progression targets that need to be met on a developmental level, rather than on an age-basis. This formative approach to assessment can direct future learning. Through this study, participants may reveal whether the First Steps assessment tool is used. All schools in Ireland must administer standardised assessments in literacy and numeracy annually by teachers and the results are submitted to the DES; teachers also administer their

own designed tests. Assessment is, not only indicated through administration of tests, but also can encompass observation checklists and teacher focus group sessions. Thus, it will be interesting to discover if schools in Ireland are more concerned with patterns and results that emerged at a localised level from standardised testing than those at a national or international level, echoing Morgan et al.'s findings (2009). Although the national standardised tests are based on "a range of semantic possibilities" (Stanley and Stronach, 2013, 293), the study will explore whether a wide variety of assessments are administered in DEIS schools to represent a portrait of a student, mirroring more closely educational beliefs (Korthagen, 2004). Whilst summative assessments are used by the DES (DES, 2016) and the ERC (2014 and 2009) (Shiel et al., 2014), in the form of statistics to investigate literacy levels, it is unclear if 'soft targets' (Gaffney, 2009) are used for target setting in Irish DEIS schools and as a monitoring tool, such as teacher observation, comments from students, copy work, and feedback from parents in DEIS schools, which appeared to be valuable indicators to teachers (Downes, 2007).

If learning does not continue in a clear predictable fashion (Kennedy, 2016), then expecting year-on-year improvement is questionable (Fullan, 2008; Oates, 2008; Gray, 1999). Educators in the study were monitoring achievements from where they started at, the commencement of the DEIS initiative, rather than at national average benchmarks, such as standardised tests scores used to set targets. The standardised reading tests are based on "semantic possibilities" (Stanley and Stronach, 2013, 293), which highlight quality assurances and quality improvements (Sachs, 2003). If standardised tests are administered each year on students attending Irish primary schools from seven years to twelve years, then there seems to be an assumption that learning continues in a clear predictable fashion, which Kennedy (2016) refutes. Standardised testing cannot analyse how much DEIS school policy has been endorsed. Thus, it is important to establish with DEIS teachers the frequency of use of both formative and summative assessment, along with which assessment format mirrors more closely the educational beliefs (Korthagen, 2004) of the DEIS educationalist.

In this research, the qualitative semi-structured approach explores ideas and conversations with educators in the DEIS setting to investigate if there are a range of measurements to track student attainment or whether DEIS schools have a tendency to rely solely on attainment in standardised testing, both on a national and international platform. With the latest OECD results (OECD, 2012), it would appear that Ireland's decreased ranking in PISA 2009 was an

indication of an emerging issue, rather than a crisis; "the challenges have never been greater, the opportunities never more recent, and the need for success never more critical. All the familiar norms at play" (Linsky and Lawrence, 2011, 3). There are substantive global policy challenges in teacher education. Taking a global problem of decreased standards in literacy needs to be investigated and resolutions sought which can then be re-framed at local policy level (DES, 2016). Policy makers are attracted to "high performing education systems" (World Bank, 2013), where high performing systems are named and ranked on a global level, with entrepreneurs of convergence (Mourshed et al., 2011) influencing international and national policy. Education is a source of economic growth, where educators are supporting or crumbling the economy, "heroes or villains" (Robertson, 2013, 78). Ireland is being bench-marked on an international basis, self-chosen, which supports a test-based accountability system (Sahlberg et al., 2012; Hulme, 2016). Thus, it would appear that policy makers are attracted to numbers and seem to be governed by them (Ozga et al., 2011), where numbers can scandalise in order to "trigger action" (Ochs, 2006, 602), which is a mirror of how the Irish government reacted to the OCED 2009 (OECD, 2010) results and its reduced ranking on a global platform. The study will explore how the international rankings, and the Irish government's response, has affected educators in their DEIS schools.

Ireland is currently engaged in both internal Whole School Evaluations by the DES, which are published on the DES website and external evaluation processes (Smyth et al., 2015), which are both being "scrutinized and judged by an autonomous and systemically powerful external body" (McNamara et al., 2011, 79). Whilst the evaluations provide evidence of strengths and challenges for the Irish education system, at both primary and secondary level, there is no clear evidence as to the support strategies that made a difference in real school improvement. The school's stance ideally should be moving towards adult learning, which focuses on professional responsibility (Sugrue, 2011), celebrating achievements and refocusing their practices, rather than viewing the Whole School Evaluation, where the inspectorate evaluates a schools under specific criteria as being accountable to a higher organisation (Sahlberg, 2015). The DEIS teacher has many continuous demands on one's time to explore the priority of literacy development and the suite of evaluation tools employed with DEIS educators and what motivates and de-motivates them to engage.

2.10.2 Motivation

Morgan et al. (2009) found that "routinely encountered affective episodes" (Morgan et al., 2009, 1) are prime motivators in the lives of teachers, and in turn explain how certain behaviours stop or are being sustained (Geijsel et al., 2009; Morgan et al., 2009; Addison and Brundrett, 2008; Senge, 1990). The main areas for discussion that affect motivation are culture, leadership, and intrinsic motivation.

In the education system in Ireland, Smyth et al. (2015) affirmed that interventions based on a whole school basis are more effective than stand-alone initiatives, with a strong supportive culture being key for successful interventions (Lamb and Rice, 2008). The study will explore whether the literacy initiatives in DEIS schools were adopted on a whole school basis and if these factors energised educators to improve their teaching of literacy in the DEIS classroom. It will explore the culture and whether a collaborative cohesion has developed in tandem with the literacy initiatives, where new ideas and tailoring is married with a genuinely participative culture (Riley and MacBeath, 2003). Interviewing educators with a variety of roles in four DEIS schools will reveal their discussions and debates, and the optimal forum. The study will encourage educators to reflect on how much progress their school, and they themselves, have made from their respective starting points (Gray, 1999, 11). The voices of the DEIS educators will illuminate the role of leadership and the power battles (Senge, 1990) in the DEIS schools and who is influencing educators in the area of literacy, from the Inspectorate, local community, and teacher perspective.

The First Steps Reading tutors have been given the responsibility of distributing their learned knowledge of the First Steps Reading programme (First Steps, 2004) throughout the school, which brings risks, including limitations of the level of control individuals have in exercising their responsibility. Thus, it is opportune to explore the reality of this "devolution of authority" (Brennan, 2011, 1). Whether it is a motivating factor, it is unclear who has control, be it the government, Minister for Education, DES, Board of Management, principal, the First Steps tutor, PDST, DES, or the individual class teacher. It is also unclear how control is distributed. Leadership is not solely "the exclusive prerogative of people in positions of authority" (Linsky and Lawrence, 2011, 6). It resonates with the class teachers leading their classrooms to direct the educational course of the learning environment. The real question is whether teachers in the DEIS schools have the intention and skills to introduce the DEIS literacy resources in their

classrooms and, if this occurred, what stimulates and deters them to change their teaching and learning practices.

For teachers to nurture their intrinsic motivation and to maximise their potential, Hargreaves and Fullan (2012) believe that teachers need to be respected and viewed as "skilled professional capital" (Fullan, 2012, 3). Professional capital (Hargreaves and Fullan, 2012) has the potential to be a strong motivator and it supports self-efficacy. International policy is re-contextualised at local levels of influence (Ozga and Jones, 2006) and it is the educator who is the conduit of evolving authority (Dean, 1996). In an urban Irish DEIS context, the proposed research will explore how DEIS teachers, principals, and DEIS advisors view and enact their professional status, both internally and externally, to the DEIS school context. There are countries who have curricular programmes that are evaluated on their outcomes in an era of increased managerialism and answerability, where standards take precedence over knowledge that is quantifiable and significant (Hulme, 2016). Hulme (2016) claims that Ireland has drawn critical attention to itself where "teacher quality is coupled with national economic competitiveness… it is clear that teacher education faces challenging times as national administration recalibrate provision in a climate of austerity" (Hulme, 2016, 225). Ireland is moving to a culture strong on compliance, increasing its attention to international league tables. Hargreaves questions then whether teachers are viewed as professional capital, business capital or a blend of both (Hargreaves, 2013) and if it affects how teachers react.

The former Irish Minister of Education and Skills, Ruairi Quinn, (Quinn, 2012) said that the Irish community are looking at the Irish education system, with a focus on giving schools the competitive advantage, especially in high-tech and other growth areas. This view would suggest that outcome is vital, irrespective of how it is attained and leaning towards a business capital viewpoint (Hulme et al., 2016). Alongside the decentralisation of the educational system, there has been increased control of the DES through accountability (Mulford, 2003). On the other hand, the former British Prime Minister, David Cameron, focused on the power of education, not only to give people tools and skills, but also because "it gives them the character to live a good life, to be good citizens" (Cameron, 2011). Cameron's focus would correlate with the concept of "professional capital" (Fullan, 2012, 3), where enhancing and tolerating professional autonomy is central and, in turn, leads to a cultivation of trust imperative. From this research study with DEIS educators in Ireland, the participants'

perception of professional status, and their insights may affirm or contradict the views of both Ministers. It is an important factor as it has the potential to be a strong motivator for educators (Morgan and Kitching, 2007).

Motivation stems from the frequency of positive affective episodes, mirroring the findings of Morgan et al. (2009). Morgan and Kitching (2007) researched motivating factors of teachers with five years or less experience. It was found that teachers with high self-efficacy have a desire to explore better practices. From Morgan et al.'s research (2009) teachers are getting a sense of achievement from daily tasks of the literacy project, such as students increasing reading standards or students completing a task. It is claimed that positive episodes consolidate the teachers' sense of accomplishment and, in turn, promotes self-satisfaction. The study acknowledges the findings of Morgan and Kitching (2007), on whether teachers with high self-efficacy are motivated to explore better and effective approaches to teaching.

The proposed research will explore the DEIS primary school from the perspective of teachers and principals through dialogue, and perceived levels of being valued and respected; "Fairness, honesty and social justice are deeply rooted in the Finnish way of life" (Sahlberg, 2015, 12), where "professional capital" (Fullan, 2012, 3) is personified. It will be noteworthy to investigate whether Ireland can make a similar claim through the proposed DEIS research and if it has an impact on educators' motivation to engage in school improvement. It will be investigated whether teachers with high self-efficacy, irrespective of the length of teaching experience, are finding that achievement in the classroom is an important factor and a strong connector both as a member of the DEIS team and also for the individual's sense of achievement (Evans and Bertani Tress, 2009).

Many studies identify intrinsic motivation as being the primary motivator to strive towards improvement, where positive responses from the school community, supportive colleagues, and the sense of achievement at completed tasks frequently uncovered (Addison and Brundrett, 2008; Morgan and Kitching, 2007). Sergiovanni stated that an effective community is "a community of heart and mind" (2003, 15); however, it is unclear where both elements are attributed to one's own emotions and thoughts, or whether it is a combination of the whole staff's composite attributes, illuminated through ethos and values. The research study will reveal from the context of DEIS schools, if patterns of stimulants have evolved from literacy

development in their own respective schools or if, alternatively, new stimulators are revealed. This research study will explore the effects of evaluation on educators in the DEIS context, be it positive, negative, or indifferent. It is opportune to identify through the voices of educators, the key factors that support and hinder school improvement.

2.11 Conclusion and the Development of the Knowledge Productivity in Literacy Framework

This research study aims to build upon current research (DES, 2016; Shiel et al., 2014; Weir and Denner, 2013) and the gap in research identified by Smyth et al. (2015), to identify the journey of change and the dynamics that support and hinder it in four urban DEIS primary schools.

> Detailed case-studies of school with different levels of achievement should help to explain the differential patterns found for reading and mathematics achievement and provide useful insights into the factors which influence between-school variation in outcomes. In particular, there is a lack of systemic information currently on the kinds of teaching and learning practices used in DEIS and non-DEIS classrooms across different class and year groups. Research to date has focused largely on performance in reading and mathematics (Smyth et al., 2015, 77)

The responsibility of a researcher "is to enhance the quality of the intellectual journey" (Kushner, 2000, 208, 209). By dialogue through qualitative semi-structured interviews, there is a focus on encapsulating what the DEIS schools have learnt and experience from the DEIS initiative and, in turn, the skills and capacities and models of learning that have been used since the establishment of the DEIS initiative. Elements, which may come to the fore through conversations with staff members in the Irish DEIS context, include the length of time to embed a practice and the scale of resources that were applied. It is important to explore the effects of national policy and systemic dimensions of change in the localised DEIS school context.

Research Aim:

The focus of the study is to investigate the process of implemntation of DEIS literacy initiatives in disadvantaged primary schools in urban Ireland and its impact on schools' infrastructures and DEIS educators.

What are the key components in schools' infastructures that impact literacy development in disadvantaged primary schools in urban Ireland?

What professional development do DEIS educators practice in the implementation of DEIS litercy initiatives?

What stimulates DEIS educators to engage in literacy development?

Complexities of Schools' Infastructures

Knowledge Building
Moral Purpose
Change Process
Relationship Building

Fullan (2016; 2008; 2007; 2005; 2002)

Learning Intentions

Keeping up-to-date

Changing practices

Experimentation

Reflective practice

Geijsel et al. (2009)

Learning Process

Gradual Release Model

Hierarchy

Kennedy (2005)

Stimulants

Morgan and Kitching (2007)

Evaluation

Weir and Denner (2013)

Figure 2. Knowledge Productivity in Literacy Framework

The elements of the school infrastructure and its sustainability, acknowledging its complexities, are needed for successful change, which have been outlined in the 'Knowledge Productivity Framework', based on the writings of Fullan (2016, 2008, 2007, 2005, 2002), Geijsel et al. (2009), Kennedy (2005), and Morgan and Kitching (2007) over the past decade (Figure 2). It is thus prudent to explore the professional learning and development that has taken place in DEIS schools, from the voices of educators in four DEIS schools and four DEIS advisors. It is also opportune to explore whether DEIS schools have subsumed national targets into school targets and, in turn, into personal goals for teachers, where motivation and

commitment are needed, to move beyond a climate of control towards a "culture of professional responsibility" (Sugrue, 2011, 59) and what stimulates schools communities to engage in change.

The proposed research will ask direct questions to DEIS school educators regarding their perceptions as to what made a real difference in supporting literacy improvement in their classrooms and their students. The research does not want to rely on results of testing alone (DES, 2016; OECD, 2012; ERC, 2011; OECD, 2010). Instead, it wants to build upon its findings. The proposed research will reveal stimulants in the context of philosophies, opinions, convictions, values and beliefs from DEIS educators about teaching and learning. It would be important to recognise that school culture and values play an important role (Cochran-Smith, 2002).

In order to investigate the concepts and themes evolving from this literature review, the researcher will explore the most applicable methodologies that will benefit the research process in the next chapter.

CHAPTER 3: METHODOLOGY

3.1 Introduction

This chapter will explore the philosophical perspectives and the research paradigms that influence research design and the questions that need to be contemplated and assimilated throughout the philosophical investigation: what is being researched, along with how and why it is being explored. The researcher has decided to research initially for reasons of self-interest that are pertinent to the researcher and other educationalists' professional careers (Freimuth, 2009). It causes the researcher to analyse her philosophical assumptions regarding ontology and epistemology, which in turn will heavily influence the chosen research questions that penetrate the research process (Freimuth, 2009). This chapter considers the paradigm, method, and approach, which are most suitable to address the research questions. The researcher will outline the analysis process of the collected data, along with her positionality and ethical stance.

3.2 Restructuring DEIS Primary Schools in Ireland

Many countries around the world have been engaged in teacher restructuring (Little, 2015; Benn, 2011; Ball, 2006). Professional development is central. The cause and effects of change are hard to isolate because schools are a part of a system (Senge, 1990), where change penetrates through the layers of structures in the hope of improved learning experiences for the student. The DES orchestrated a nationwide reform of literacy and numeracy, with a focus on student-oriented outcomes. Currently, trends are evolving (Oates, 2008) and it is timely to explore whether schools are embracing DEIS reforms in planning and curricular areas or whether classroom practices are frozen in time. Tension could be a feature between the old and new forms of restructuring "co-existing features of both modernity and post-modernity where the desire to change, to look forward, to step into the unknown can be at odds, with the monolithic culture of the school" (Kennedy et al., 2007, 60). It is important to explore the battles (Benn, 2011; Kennedy et al., 2007) of DEIS reform at a localised level, where the catalyst for reform is rooted in "externally-imposed change" (Kennedy et al., 2007, 60), which

is heavily evidence-based by the Irish Department of Education. The research study builds upon the summative testing (DES, 2016) to unlock the snapshots that capture the internal workings of the DEIS initiative.

3.2.1 Philosophical Underpinnings

The author will explore philosophical underpinnings and how they influence the researcher in composing the research aim:

> The focus of the study is to investigate the process of implementation of DEIS literacy initiatives in disadvantaged primary schools in urban Ireland and its impact on schools' infrastructures and DEIS educators.

The paradigm used will support the investigation of the aim of the research, which will be aligned with the best approach, and method, to provide answers to the over-arching research aim, as illustrated in Table 7.

Table 7**. Overview of Methodology Trail**

Paradigm	Interpretative - Comprehending meaning from events - Co-constituted - Fusion of intention and motivating factors - Why certain ideas, feeling and intentions evolve
Research Approach and Design	A comparative multi-case-study approach - Professional reflection - From macro-political decision making to the portrait at local level - Think large but start small
Method	Qualitative - Study is small scale yet has depth and richness - Discovery rather than proof - Comprehending realities and beliefs in the moment - Participants realities are tentative and fluid
Instrument	Semi-structured interviews Exploration of insights and not just trends

	• Path of discovery

It is essential to capture the stimulants in a DEIS school that drive, implement, and reinforce the change process, which in time becomes tradition. The proposed research acknowledges that there have been improvements in reading in Irish schools (Shiel et al., 2014; Weir and Denner, 2013). However, the research is moving from the stance of "political arithmetic" (Pring, 2004, 97), where return on investments for the government is on increased student performance in literacy and numeracy, to active research, where cause-and-effect are being discovered (Cohen et al., 2011) in real-life contexts where ambiguity will need to be embrace. The research study allows inner experiences to be measurable, organic rather than steadfast (Cohen et al., 2011). Comparative multi-case studies will be the method applied, which are "eclectic" (Cohen et al., 2011, 299), with many different sources of data supporting emerging patterns of reality.

3.2.2 Current Trends in the DEIS Context

Using a positivist scientific quantitative approach, with a view that reality can be measured (Creswell, 1994), confirms the causal relationship between DEIS intervention programmes and an increase in reading levels. It is unclear whether the improvements in reading and mathematics are due to the School Support Programme (SSP) or simply as a result of following a national trend of literacy and numeracy improvement. The research study is interested in going beyond the statistical data and exploring the changes have occurred or not, using a qualitative approach (Cohen et al., 2011). Interviews, documentation, and DEIS strategic plans are "all legitimate types of data" (Lichtman, 2013, p 147) that may support further clarification to the actions and events that support and hinder the improving school (Cohen et al., 2011).

The research study is an exploration of what stimulates and hinders DEIS schools and its educators to drive their own learning in tandem with infrastructural supports. Schools focusing on improvement need "systematic, sustained effort" (Van Velzen, 1985, 34) and the proposed research wants to explore what the key factors are, such as relationships, interdependencies, and experiences, that support an improving school (Sayer, 1992), using DEIS literacy resources, such as First Steps Reading (2004) as the stimulus for discussion.

3.3 Philosophical Underpinnings: Epistemology and Ontology

At the commencement of any research, it is important to outline the researcher's philosophical position and explore which research standpoints support the researcher's assumptions or philosophical underpinnings. The two philosophical underpinnings are epistemology and ontology, denoting knowledge and social reality, respectively, combined with values. Epistemology is concerned with knowledge, linking to its origins and how knowledge is acquired (Hofer, 2001), which is at the core of the research study of DEIS schools. The ontological realities evolve with "endless formation, reformation, construction and reconstruction" (Grbich, 2004, 26). With the change in students and sometimes educators in DEIS schools over a period of time, reality evolves and is not steadfast.

The interpretivist paradigm accepts a subjective reality.

> There are a multi-faceted set of beliefs that describes the epistemological milieu that guides the individual's thought and professional choices…We believe that different individuals hold different epistemological beliefs, both in terms of the content of their knowledge, as well as the relative sophistication of beliefs (Schraw and Olafson, 2008, 30-31).

The ontological view of reality increases in complexity (Grbich, 2004) in the postmodern than the modern world. The post-modern world recognises pluralism (Pring, 2000) of cultures, values and perspectives, however, quantitative assessments in literacy, to date, have not taken these factors into account, except for the current research study, where words, rather than numbers, are coming to the fore. Truth is multifaceted, with multiple realities needing frequent realigning through the subjective lens of society. The interviewees' epistemological and ontological beliefs may not be at the same point on the continuum, therefore, educators, based in the same or different school contexts, can have different worldviews regarding the curriculum and pedagogy.

3.4 Paradigm: Interpretivist

A paradigm is a way of understanding the world. Whilst exploring paradigms and their related perspectives, one is surprised with many philosophies that connect, compare, and contradict one another and shape the manner the world is seen together.

Positivism is based on empirical research, where deductive reasoning can generate a hypothesis, which in turn can be tested (Morrison, 2007). The hypothesis or 'educated guess' is formed and acts as a stimulus to advance to active research, particularly where cause-and-effect are being investigated (Cohen et al., 2011). Theories and knowledge need to be reduced into simple accounts from the experiences of the study participants (Pring, 2004). Theory gathers together information to create a rational argument to explain human behaviour (Cohen et al., 2011). The theory, post-testing, is generalizable and can be replicated. It can be argued that a positivist approach has "a tendency to minimise the complexity of social interactions and fails to capture the lived socio-cultural nature of humanity" (Bracken, 2006, 4), where reality can be interpreted rather than just an observation exercise (Corbetta, 2003).

In order to be enabled to understand the culture of the Irish urban DEIS primary school, one must try to comprehend the interpretations that people give to their identity in the school and to the school itself. It is more extensive than observation alone. There is a difference between the physical aspect of a school and the people that "attach meaning" to it (Pring, 2000, 98), thus to glean a portrait of the DEIS school and its involvement in literacy, particularly reading, there needs to be a fusion between the intention and the motivating factors and influences of the situation (Pring, 2000). The recounting of an experience is ameliorated by taking into account the senses and gestures of the person recounting life experiences (Pring, 2000) which in turn has the potential to enrich the portrait of the DEIS school. By applying an interpretivist approach to the research of literacy in Irish urban primary DEIS schools, many interpretations of literacy in the DEIS context are revealed through "subjective meanings" (Pring, 2004, 98); interpretations "illuminate" what is happening in localised contexts (Pring, 2004, 98), as each person "brings to those negotiations their own unique experiences and thus interpretations" (Pring, 2000, 100). This brings a great responsibility onto the researcher to collect, interpret, and elucidate the literacy events in a DEIS primary school in Ireland. The inductive and emergent nature of an interpretative study makes it extremely difficult for the research to "predict where the study will take them" (Malone, 2003, 800). The researcher needs to be flexible to discover answers and emergent themes that had not been predicted.

The Educational Research Centre (ERC, 2011) and The Department of Education and Skills (DES, 2011b) used "political arithmetic" (Pring, 2004, 97), a positivist approach, to decide which schools, on application, would be accepted into the DEIS programme by using hard

contextual data in the areas of employment, social housing, ethnicity, and social class, which correlates with data of students' academic performance (Pring, 2004). Positivism produces a reality that can be detected through the senses, irrespective of people (Coleman and Briggs, 2002), generalizable, and replicable.

The research study will build on the ERC and DES reports, using a subjective approach, alongside a personal contribution of the researcher in creating new understandings in similar contexts. Whilst there is a national DEIS context of initiatives and programmes, at a local context, DEIS schools have a flexibility to navigate and negotiate their unique adventure and in turn influence the teaching and learning that the student receives in the classroom setting (Tuohy, 2008). "We know that one size does not fit all" (Malone, 2003, 812), therefore it is vital to listen to the participants and those around them whilst observing the environment (Malone, 2003). There are three levels to observe - the researched, the researcher, and the ethical guidelines of the University of Lincoln are adhered to. The journey rather than the destination is of interest to the research study, therefore an interpretivist paradigm provides the platform to manage the research (Maykut and Morehouse, 1994).

The focus in the DEIS study concerns human behaviour and its intention, both individually and collectively, in each DEIS school. The DEIS research study will be rooted in the interpretivist tradition, where debates about values, moral judgements, opinions, and attitudes will take centre stage (Horkheimer, 1972). The interpretivist stance will influence, mould, and align with the styles and designs of educational research.

Positivism claims objectivity, whilst interpretivism brings "subjective meaning" (Pring, 2004, 98) to the narrative through dialogue of actions, motives and intentions. It explores what the participant is thinking, whilst acknowledging their life history. Positivism does not take into account the participants' unique ability to interpret their own experiences, construct theories of our own world, and act on these localised theories (Cohen et al., 2011). One of the main challenges in this study with the interpretivist approach, is that reality has many perspectives (Morrison, 2007) and the outcome is uncertain. The meaning of words is explored at a deeper level, where feelings and use of language also play a part. The researcher and not the participant will interpret the participants' actions, feelings, tones, language, and gestures. The portrait of literacy in the DEIS schools is continually evolving throughout the process, with

the role of the researcher being central to the continual process of "constructing meaning to experiences in order to comprehend them" (Morrison, 2007, 23), in light of the Irish urban DEIS context. The researcher is part of the process, where meaning evolves from interactions where the researcher is pivotal to elicit from each participant their own life histories and beliefs to bare on the narrative. The researcher is viewing the participants and exploring meanings attributed to events from the participants viewpoints (Morrison, 2007). Also, their role in the DEIS context, such as that of principal, class teacher or First Steps Reading tutor, will influence their actual experience, role, and responsibilities when recounting their narrative. From the interpretative paradigm, the researcher is facilitating the participant to recount moments (Morrison, 2007). The researcher tries to understand why certain ideas, feelings and intentions, in a certain context, evolve from, not only the participant's point of view, but also from the point of view of the researcher and the reader (Pring, 2004, 104).

Epistemology and ontology are revealed to be paradigms that inform research through providing frameworks of concepts and viewpoints upon which methodology is grounded (Gray, 2004). A teacher's beliefs occur on a continuum and can change and evolve over time for many reasons such as education, dialogue, and critical reasoning skills (Shadish et al., 2002; Kuhn, 1999). Prudent researchers will attempt to "understand and make explicit, their personal values while at the same time, seek to understand the values held by people, organisations or cultures being researched or supporting the research" (Anderson, 1998, 330).

3.5 Research Approach and Design: Comparative Case-Study

The research approach to the study, informed by the interpretivist paradigm, is informed, using a comparative case-study approach. This approach is optimal to answer the research questions that were posed and to connect with the philosophical underpinnings, the topic, and the participants included in this research study (Lichtman, 2013).

DEIS schools were defined in the context of social and economic variables by the Education Research Centre (DES, 2005). It is timely to be making explicit the impact of the Irish government's decision to initiate the DEIS programme in schools, designated disadvantaged, in urban areas. The reality of gaining answers to the research questions would imply a need to

search and discover, at a local level, the "portrait" of a DEIS school, whether it changes or remains the same (Grbich, 2004, 81). It is important to acknowledge that both the researcher and the research area evolve over time, and therefore, the researcher should not assume that all those researched remain static with the same viewpoints and perspectives. A comparative case-study approach provides information on the effects of "macro-political decision-making, fusing theory and practice" (Cohen et al., 2011).

The research will use a comparative case-study basis, which enables an investigation into DEIS schools, specifically literacy impact and the individual DEIS schools' particular interpretations of the system (Stake, 1995). This approach will describe the DEIS initiative, where the borders between the initiative and its context are blurred with real people in real contexts, where many variables are operating, simultaneously (Cohen et al., 2011; Yin, 2009). It is argued that this approach is richer and more robust (Jensen and Rodgers, 2001), with four single-case studies being used for comparative purposes.

The DEIS school is involved in a change process, where "fluctuations" (Grbich, 2004, 27) can be positive or volatile. The DEIS initiative research lends itself to the exploratory (Yin, 1984) and interpretive (Merriam, 1998) type of case studies, which are collective studies (Stake, 1995) that illuminate typical patterns and trends (Lichtman, 2013). The comparative case-study approach does not promote generalisability from a positivist perspective. It is more attentive to the wealth of information that is uncovered (Lichtman, 2013; Patton, 2002). Robson (2002) states that case studies can provide a "test bed" (2002, 182) to gain as full a picture as possible to the variables that affect an initiative before it is expanded to the wider school community.

3.6 Role of the Researcher

Epistemology is a challenged theory that is exposed to objectivity or subjectivity. In quantitative studies, the researcher can stay objective and outside the research system, and in turn biases can stay external to the research system; however, in qualitative research, the researcher acts as a filter "through which data are collected, organised, and interpreted" (Lichtman, 2013, 159). The interpretive paradigm accepts a subjective reality that allows the

researcher flexibility to engage at a local level in DEIS schools and negotiate the adventure (Tuohy, 2008). It is dynamic. The view of the DEIS school's reality augments its complexity (Grbich, 2004) in the postmodern than the modern world, where cause-and-effect of systemic changes are being explored (Cohen et al., 2011). The post-positivist stance wants to understand the phenomena of actions and activities that are occurring in DEIS schools. The researcher wants to create a medium that will support the participants to define the characteristics of the change process and in turn outline how the actions are influencing educational outcomes of the student, from the perspective of the stakeholders in the school community. Using a comparative case-study approach, there is an investigation into real-life contexts, where reactions to events and relationships are unveiled (Cohen et al., 2011). The relationship and dependability between epistemology, ontology, and methodology are critical (Scott, 2000). Applying a qualitative research methodology, navigated by an interpretive structure, the researcher can link the values of critical realism, whilst consolidating one's belief towards interpretive investigation (Crawford, 2009).

The researcher wants to investigate actions that have evolved in real contexts and recognises that the case-study approach acknowledges pluralism (Pring, 2000) in the context of DEIS schools' complexity and "embeddedness" of "social truths" (Cohen et al., 2011, 292), revealing unique features that otherwise would lay buried (Nisbet and Watt, 1984), by peeling away the layers of complex meanings to describe events whilst in turn analysing them. The four DEIS schools in the case-study can acknowledge actions that work or fail in their own school environment; background factors influence the outcomes of the DEIS initiative (Dorman, 2009; Miles and Huberman, 1994).

The researcher wants to look behind the national assessment results in Irish schools and attempt to understand the subjective world in DEIS schools and extract human experiences (Cohen et al., 2011). Using a comparative case-study approach builds upon the information already sought both by national and international studies in Ireland (Shiel et al., 2014; Weir and Denner, 2013; OECD, 2010; Eivers et al., 2004). The researcher is trying to understand literacy events, with a focus on educators' perspectives, including DEIS advisors, in the Irish urban primary DEIS school. The case-study approach, through an interpretative paradigm has

a focus on the individual (Cohen et al., 2011) and will support the exploration of influencing factors that are "not easily defined or easily separated from other influencing factors" (Dorman, 2009, 13). Reality is complex (Cohen et al., 2011). Patterns will emerge from inquiry "grounded" (Cohen et al., 2000, 23) on data generated from the participants in the urban Irish DEIS schools. The researcher is the conduit "through which information is gathered and filtered" (Lichtman, 2013, 25). Using a qualitative method, the researcher must be comfortable with ambiguity, as the line of development is difficult to plan with any certainty. Whilst it is clear that DEIS and non-DEIS schools have increased their standards in literacy (Smyth et al., 2015; Weir and Denner, 2013), it is important to reveal "the black box" (Black and William, 2001, 1), namely, understanding the participants in their unique DEIS context and what the DEIS schools have contributed to the world of education (Cohen et al., 2011; Hitchcock and Hughes, 1989), which is small scale yet with depth and richness (Pring, 2001; Wellington, 2000). The researcher is enabled to think large and start small, with flexibility to grow and develop patterns as they are exposed. Unlike quantitative results, case studies lack generalizability, yet they have the potential to provide transferable learning (Cohen et al., 2011).

3.7 Qualitative Method

The rationale of why a qualitative stance has been pursued with the DEIS study (Schraw and Olafson, 2008) will be discussed further. Through the case-study approach, the researcher is constructing knowledge, which is influenced by contextual factors (Lichtman, 2013; Maykut and Morehouse, 1994). The researcher is following a qualitative worldview and traditions that generally see the researcher creating subjective realities that can be multiple in nature at that moment in time. The social world should be discovered in its natural form (Cohen et al., 2000), where situations are changing rather than steadfast (Cohen et al., 2000).

This research study aims to explore the change process in literacy in DEIS schools, which needs to be dynamic, fluid, and ever changing depending on the experiences and events that are exposed through qualitative approaches. The qualitative approach supports the method of discovery rather than proof. The research needs to have a competent interviewer to discover,

investigate and disentangle complex experiences (Rubin and Rubin, 2005). The inductive approach explores statements, data, and experiences of the participant in the case-study to unearth themes and ideas, which in turn support the researcher to make general statements. (Lichtman, 2013); the emphasis is on a small sample and the depth of information gathered.

The qualitative response by the participant is influenced by global economics, national and local politics, culture and social structures in the DEIS school community of each of the four urban DEIS primary schools (Maykut and Morehouse, 1994). The researcher is cognisant that reality is multi-faceted. Life is not steadfast, and the participants are providing snapshots of life in the DEIS school, with flexibility for the participant to disclose their reality of literacy in their DEIS context, which does not automatically transcend to each individual DEIS school.

3.7.1 Conceptual Framework

The framework provides direction and guides the researcher's investigation and helps direct the research. A framework is simply a "current version of the researcher's map of the territory being investigated" (Miles and Huberman, 1994, 20). As the researcher's understanding improves, the map changes accordingly (Miles and Huberman, 1994). The researcher has adapted the framework following an intensive literature review, guiding the research study questions. This process informs and focuses the questions for the interview process (Yin, 2009).

3.8 Data Collection Strategies (Interviews)

3.8.1 Sampling

This section will examine the suitability of the sampling strategy, discussing size, professional role, and access to the sample. Practically, the researcher is guided by the research questions and decides on a sample of DEIS schools. There is a wide variety of sampling strategies from intensity sampling, maximum variation sampling, to typical case sampling (Patton, 1990). For the DEIS change process study, there are two levels of sampling that will apply; the educators at a school and individual level in four DEIS schools, supporting the exploration of the change process in literacy in similar schools.

3.8.1.1. Rationale

Within the context of the study, the researcher decided to focus on urban DEIS 1 schools only and excluded rural DEIS schools from the study. There are three main reasons for this decision. Firstly, urban DEIS schools had the highest and most concentrated levels of disadvantage (DES, 2005), with lower levels of literacy than rural DEIS schools (Shiel et al., 2014; Weir and Denner, 2013). Urban DEIS 1 schools received all the literacy interventions and support from DEIS advisors, unlike rural DEIS schools (Weir and Denner, 2013; DES, 2005). Thirdly, the researcher worked in urban DEIS 1 schools, and it would allow for easier access to these schools for research purposes.

The research sample consisted of four urban DEIS schools. The researcher engaged in lengthy discussions over a period of time with professional friends that were employed in a variety of contexts in education in Ireland: third level, the inspectorate, primary teachers, second level teachers, and former DEIS advisors, all of whom discussed the sample for the research study and the optimal sample for answering the research questions. The researcher found that meetings with more than two professional friends were interesting, as there was debate, dialogue between the two friends, and often, the researcher had time to listen and hear the arguments and rationales. The researcher, with advice from professional colleagues, felt that facilitating the interviews in the interviewees' DEIS context would support familiarity, increase comfort levels, and support the researcher to meet all staff, gain access to the staffroom, and experience the climate in the school. The researcher chose to focus her sample in Dublin in Band 1 schools, due to the categorisation policy of the ERC with Band 1 schools, gaining entry into the schools, and also the study was investigating how far the individual schools had changed their literacy practices from their respective starting points. The researcher had been a DEIS advisor in the Dublin area for five years, visiting hundreds of schools and also a First Steps Reading facilitator throughout the country, facilitating literacy courses and certifying First Steps tutors. Due to issues regarding access to DEIS schools and the increased time factor of interviewing, the researcher decided to invite schools that she had worked in as "they were convenient, willing, and, most of all, particularly appropriate for answering my questions" (Malone, 2003, 801). It is important to note that the researcher has been in the role of principal for the past six years and has not had formal contact with DEIS

schools. As a principal, the researcher was aware of the pressures to complete assessments and official forms and the pace of life in the Irish primary school. Malone states that the most challenging environment for qualitative research is in a familiar environment to the researcher (Malone, 2003). Whilst Malone was working in her research study environment and had the difficulty of being a colleague and researcher, the researcher was cognisant that the power issue in her study was not similar. The researcher was in a position of mentoring whilst also being a PDST DEIS advisor, visiting each school on her database on average three times a year. The schools that participated in the study know the researcher, her professionalism and, to a certain extent, her as a person. In the initial meeting, the researcher made it clear that she was working independently of PDST and working in an independent school in Dublin as a principal. The researcher deduced that access to DEIS schools was the most important factor, as without access, there would be no study.

3.8.1.2. Accessing the Sample

From the researcher's knowledge of accessing Irish schools in her previous role in PDST, in supporting literacy and numeracy development, the principal is "the gatekeeper" (Malone, 2003, 801) to access a school and its educators. Initial contact was made to the principal through the school secretary by phone and followed by a meeting to outline the research study, access, venue and regarding how communication would be made with fellow colleagues. It was vital that the researcher was transparent, with regard to one's intentions, where a stance of trust is established and suspicion is minimalized. The researcher needed to initially seek permission from the principal to conduct her study. In a conversation with the principal by phone, the researcher explained the research study that she was engaged in and if the principal's school would be interested in discussing participation in the study. The researcher offered to e-mail all principals an information letter, a brochure of the study (Appendix D), and a consent form, before the initial meetings to explain the study further. Four schools agreed to meet with the researcher and another school said that if needed, they would engage in the study but had a DES evaluation pending and were also engaged in a pilot project. Borg and Gall (1979) outlined that comparative and experimental studies require a minimum sample size of fifteen cases. To give insight into the DEIS school system, the comparative case study encompasses four Irish urban DEIS primary schools. The researcher contacted the fifth school

near the end of the interviewing process and informed them that no further engagement was necessary, as "saturation" (Wellington, 2000, 138; Maykut and Morehouse, 1994, 63) had been reached. The researcher also had a letter and brochure for the Board of Management of each school, which was channelled through the principal; it is unknown to the researcher if, or when, the Board of Managements were aware of the study.

3.8.1.3. Overview of the Four Case Study Urban DEIS Primary Schools and its Participants

The following section gives an overview of the four urban DEIS primary schools in Ireland that participated in the study: Willow School, Oak School, Beech School, and Pine School. The descriptions of each school give an insight into the backgrounds of the educators that participated in the study from each school, followed by a composite overview of the participants.

Willow School

Willow School is a Catholic vertical DEIS Band 1 primary school, with 20 teachers and over 250 students, located in the busy suburbs of Dublin. It is based on a shared campus with two other primary girls' schools with infant boys. A community resource centre and primary boy's school is located adjacent. All the schools in the area are designated DEIS 1, with four similar schools located less than a mile away. Willow School has a pre-school affiliated to the school, which is under the direction of Túsla Early Years, the national regulation body in Ireland. In general, there are two classes at each level, which depend on student enrolment on an annual basis and a team of five support teachers. Reading Recovery and Maths Recovery are firmly established in the school. The principal has vast literacy experience, both in Ireland and abroad. The support teachers move position every few years, which ensures a sharing of practical experience. Under the School Completion Programme, a homework club and a variety of after-school programmes are available for students attending Willow School. There is a very active Home School Community Liaison teacher who organises a wide variety of activities, from art and craft, to literacy workshops that focus on adults supporting students with reading in the classroom, known as 'Literacy for Fun'.

Oak School

Oak School is a 22 teacher and over 230 students Catholic, co-educational vertical school located in South Dublin with DEIS Band 1 status. The school has a breakfast club and many extra-curricular activities, which are mainly facilitated by staff members. Oak School has an up-to-date website, highlighting current events and academic achievements, accompanied by a suite of photographs. Oak School actively engages in many national initiatives such as 'Active Flag' and 'Green Flag'. The school has a student council and displays the council's activities on the school website. Oak School has a steadfast resource team, which is composed of the most experienced staff members. It is apparent from the school website and the school environment that parents are active members of the school community, involved in reading initiatives, a variety of workshops, and excursions.

Beech School

Beech School is a 26 teacher, Catholic, co-educational vertical school located in South Dublin, in a single story building on a large campus with over 300 students. There are two classes at each academic level, and on occasion mixed classes, five support teachers, and a HSCL teacher. The school has interesting, informative, and creative noticeboards both on the corridors and in the classrooms. The school's website is extremely informative, with current photos and accounts of activities undertaken in the current school year. The support teachers' focus is, in general, on numeracy or literacy, with Reading Recovery and Maths Recovery firmly established in Beech School. The Home School Community Liaison teacher provides a wide programme for parents and grandparents, from gardening courses, parenting certified programmes, and fitness sessions. A student council has been established in Beech School. The Parents Association fundraise for school equipment and are also involved in the shared reading programme with students. Throughout the School Completion Programme, several sports, both during and after school, are made available: majorettes, cycling, tag rugby, soccer, Gaelic football, and swimming. Beech School have a vast library located in adjoining rooms, with a wide range of texts and standards.

Pine School

Established in 1982, Pine School is a mixed Junior school, with over 230 students and classes from Junior Infants to Second Class. The Senior school is based on the same campus. There are three/ four classes at each level, depending on student enrolments. There is an Early Start

programme in the school, with a focus on social skills and language development. Pine School have an active parent community, from adult training courses to supporting students in literacy programmes in the classrooms. Over one third of the teachers are in support roles in literacy and numeracy. There is a strong focus on supporting students where English is not their first language and who have immigrated to Ireland. The school is bright and has been recently renovated, extending classrooms in the Infant corridor. The 'Care Team' to support students' well-being is well established, with strong links with the local health centre. The School Completion Programme facilitates a breakfast club and a wide variety of after-school activities. A system of collaborative planning has been established at each class level, with targets and evaluative practices being part of the reflective process.

3.8.1.4 Overview of Participants

The researcher needed permission to conduct her study in the four DEIS schools and was cognisant that the principal was acting "as both gatekeeper and subject" (Malone, 2003, 803). During the initially meeting with the principal, the researcher emphasised that she would prefer the teachers to volunteer for the study. Through discussion with the first principal in Willow School, it was clear that there needed to be a balance between volunteering and also the role that the teachers engaged in. The principal was enthusiastic about the study however, she decided that the literacy co-ordinator, who was also the deputy principal in the school should engage with the staff the following week, at their staff meeting to seek volunteers for the study, with an emphasis on ensuring that the teachers had engaged in a variety of literacy roles over the DEIS period. The researcher and deputy principal exchanged mobile phone numbers and e-mail addresses, which made communication easy throughout the study. In Oak School, following my initial meeting with the principal and e-mail exchange, the principal asked for volunteers and gave the staff my contact details. Following contact from three members of Oak School, I contacted the principal to arrange a time and venue to meet; I also thanked him for an adequate number of volunteers. It is questionable that, if the researcher had not made contact with the principal so soon, whether further volunteers would have come forward. In Beech School and Pine School, the principal was the link person for the researcher.

Whilst all principals seemed content to engage in the study, there is always the question whether the participants were "coerced" (Malone, 2003, 803) by the commitment of the

principal. This may be the case in Beech School and Pine School and to a more limited sense in Willow School and Oak School. It could also be argued that the participants partook in the study because they trust the opinion of the principal, a safety blanket for participation. As the study was conducted through the medium of semi-structured interviews, it gave flexibility for the participants on whether to voice their opinion or not. Whilst the transcripts of the interviews were read and analysed by the researcher and the participant if requested, no other member of the staff would see its contents; however, the researcher was cognisant that the final study would be open to the public. The researcher saw the relationship amongst the participants that were involved in the study as positive in each school. Whilst anonymity was guaranteed, the volume of participants would also make it more difficult for participants to be identified. Table 8 gives an overview of the participants that were interviewed.

Table 8. Overview of Participants in the Research Study

Name	DEIS Status	Pseudo Name	Gender	Current Role	Years in Professional Education	Further Roles and Responsibilities'
Willow School	Urban DEIS 1	Lara	Female	Class Teacher	20 Years	Assistant Principal Literacy Coordinator Learning Support
		Lori	Female	Principal	30 years	Class teacher Professional Development Advisor
		Ailish	Female	Learning Support	10 years	Maths Recovery 5 years as class teacher

Name	DEIS Status	Pseudo Name	Gender	Current Role	Years in Professional Education	Further Roles and Responsibilities'
		Susie	Female	Learning Support	10 years	Reading Recovery 5 years class teacher
Oak School	Urban DEIS 1	Oscar	Male	Principal	30 years	Principal
		Saoirse	Female	Learning Support	30 years	Reading Recovery teacher Post-holder
		Kate	Female	Class teacher	11 years	3rd class teacher
Beech School	Urban DEIS 2	Jackie	Female	Class teacher	15 years	First Steps Writing Tutor
		Gayle	Female	Learning Support	35 years	Reading Recovery Assistant Principal
		Carol	Female	Class teacher	10 years	
		Kayla	Female	Class teacher	19 years	First Steps Reading Tutor
		Patrice	Female	Principal	30 years	
Pine School	Urban DEIS 1	Maria	Female	Principal	30 years	Over 10 years as principal
		Ann	Female	Class Teacher	10 years	Infant teacher
		Molly	Female	Learning Support	20 years	Assistant Principal

Name	DEIS Status	Pseudo Name	Gender	Current Role	Years in Professional Education	Further Roles and Responsibilities'
						Literacy coordinator Reading Recovery
Professional Development Facilitators		Cathy	Female		20 years	Class teacher
		Conor	Male		15 years	Class teacher
		Grace	Female		10 years	DEIS class teacher
		Anya	Female		35 years	Principal

The researcher interviewed four interviewees in Willow School, where the three teachers had dual experience of teaching a class and learning support. From the commencement of the interview process, data collection was cumulative and evolving (Strauss and Corbin, 1998). The researcher's focus of the interviewees in Willow School evolved into a dual role of class and specialist learning support teacher for students, rather than, initially, the focus being on each interviewee having one experience, that of a class teacher, principal, and First Steps tutor. The researcher's focus, supported by the principal, regarding participant selection, was to ensure that, "all the social situations that are relevant to the research, rather than attempting to reproduce the characteristics of the population in full" (Corbetta, 2003, 268). As the researcher arranged the timetable and venues for hosting the interviews, it became apparent that the First Steps tutor also had multiple roles; therefore, the tutor was also interviewed as a class teacher or a learning support teacher. During the interview process, it became apparent that governance is shared among many stakeholders, the complexity of the "power source" (Grbich, 2004, 19), with the majority of participants being part of middle management. It was interesting to observe whether attitudes, beliefs, and motives differ across "power sources", both between schools and internally (Grbich, 2004, 19). There were four variables that were considered significant and ascertained from the participants.

- Gender

- Current role

- Length of teaching experience

- Positions accrued to-date.

Interestingly, two out of nineteen participants are male, representative of the male/female ratios currently in education in Ireland. The teachers were invited to participate in the study, with detailed accounts, rather than giving short answers or responding to general statements (Reissman, 2008). For the first few years of the DEIS initiative, each DEIS school had a DEIS advisor allocated to the school to provide continuous and sustained support, however, this stance by PDST and DES has changed. The researcher had an opportunity to interview four DEIS advisors who were allocated to individual DEIS schools to add, amend or widen the pool of data by the DES subsidiary Professional Development Service for Teachers (PDST). The researcher purposely had 'a combination of elements from a variety of sources' (Grbich, 2004, 61), with many lenses being used to look at the DEIS school from "multiple perspectives in an attempt to unravel complexity" (Grbich, 2004, 82). This sample does not intend to claim generalisations of the wider Irish population in an Irish urban schools, rather, it reveals 'how' and 'why' patterns have emerged (Yin, 2009).

3.8.2 Instrument: Semi-Structured Interviews

Interviewing is "a form of interaction jointly constructed by the interviewer and the person being interviewed" (Lichtman, 2013, p 189). Human discussion and decision-making are complex, where structures, like interviewing can facilitate, but not control (Sayer, 1992). Interviewing merely offers a path of discovery and greater understanding (Mears, 2012). The focus of the interview method explores the complexity of meaning, rather than the breath of the study. Lichtman (2013) identifies three main types of interviews: the structured, unstructured, and semi-structured. The researcher identified the semi-structured format of interviewing as being optimal for this research project, with set topics and guided question areas. Semi-structured interviews are constructed by the participant and the researcher, by constructing the dynamics in the urban DEIS context, outlining their social situation from their standpoint. The interviewer is a constructionist, building and investigating meaning to reveal and illuminate the realistic circumstances of many participants (King and Horrocks, 2010). The structured interview would not enable probing or meandering of ideas, whilst the

unstructured interview is similar to a conversation, with the main four aspects of the research study being unexplored: school climate, systemic factors, types of learning, and stimulants to action (Seidman, 2006; Kvale, 1996).

> The issue here is 'fitness for purpose'; the more one wishes to gain comparable data-across people, across sites-the more standardised and quantitative one's interview tends to become…to acquire unique, non-standardised, personalised information about how individuals view the world, the more one veers towards, qualitative, open-ended, unstructured interviewing (Cohen et al., 2011, 412)

The lens of the class teacher, principal, First Steps tutor, and DEIS advisor give a variety of perspectives to look at the case studies and "unravel complexity" (Grbich, 2004, 82). Each interviewee's voice needs to be navigated and made meaningful, where the complexity of the "power source" (Grbich, 2004, 19) is extenuated when shared among many of the stakeholders. The voice of the participants will also highlight the interplay between effects of the social system and the power of the individual action, where potentialities "may or may not be exercised" (Hartwig, 2007, 57), which is a major influence in the project.

This research study wanted to build upon the fact that literacy has improved in Irish primary schools and capture real and unique life-experiences in DEIS schools "in order to understand, inform and improve practice" (Mears, 2012, 170). Research is concerned with processes that are operational in the DEIS school and the participants' perspectives of the new initiative (Allison and Pomeroy, 2000). This research study, through predominantly an interpretative approach of semi-structured interviewing, explores insights, rather than trends, through personal experiences, where both the participants and the researcher interpret meaning (Mears, 2012) (Appendix C).

The researcher devised an interview schedule with flexibility to allow "immediate dialogue in deconstructing the local negotiation of meaning in context" (Grbich, 2004, 122). The interviewer decided the order of the questions and themes in a "loosely defined framework" (Wellington, 2000, 74). With the semi-structured interviewing process, questioning was not entirely pre-determined, allowing time for probing the participant on their journey of disclosure. Whilst the interview process permits "multi-sensory channels to be used" (Cohen et al., 2011, 409), the interviewer was perceptive to the clues. The researcher was exposed to words, actions and gestures which resonated with the researcher, as she too, had insight into

the world being researched (Pring, 2000). The portrait of the DEIS school will evolve through the collective "negotiated meaning" (Pring, 2000, 109). The researcher assimilated four DEIS schools of "similar situations" (Pring, 2000, 109) to identify emerging patterns. Although the interview schedule has identified leading questions, it is largely the participants' narratives that determined the route that the dialogue pursued. This interpretivist research study had two main features: "intimacy and open-endedness" in the four DEIS primary schools (Howe, 2001, 207). The interviewer established a relationship with the interviewees, some over a long period of time, through tea in the staffroom, and from general conversations before the formal interviewing process, which lessened the interviewees feeling uneasy and holding back (Cicourel cited in Cohen et al., 2011); "The participants are given the power to determine how they will represent their views, their thinking and behaviours into spoken words" (Crawford, 2009, 90).

The analysis of the data is an iterative process, where re-reading and re-interpreting is pertinent to ensuring the correct fit of the data (Yin, 2009). The researcher is not putting one's own interpretation onto the story, purely proposing an interpretation, which in time will be re-interpreted by the reader (Grbich, 2004). The research identified values, understandings, and attitudes that are individual to that participant and also those common to the group, revealing common routines and behaviours in the local DEIS context.

3.9 Semi-Structured Interviews

3.9.1 The Journey

The researcher was surprised with the intensive personal involvement during the first interview (Agar, 1993, cited in Cohen et al., 2011, 181) and, thereafter, leading the interview, whilst being able to recall or refer to earlier assertions (Kvale, 1996). The researcher recognised the importance of multi-sensory channels from verbal to non-verbal to measure knowledge, values, and beliefs (Tuckman, 1972 cited in Cohen et al., 2011, 411), which was vital to probe the reliability, consistency or duplication of information (Patton, 1980). Note

taking provided information, in addition to the transcription of the whole interview. The researcher, through reflection, applied both methods, note taking, and then transcribing each interview. Both methods supported critical reflection and consolidation of learning for the researcher (Neil and Morgan, 2003). The researcher was given the opportunity to gather snap shots of the participants' reality, noting tone, silences, rates of speech, with a collection of notes taken at the time of interview and perceptions after the interviewing process, which gave depth and insight from the interviewees (Yin, 2009; Scott and Morrison, 2006).

3.9.2 The Set-up of the Interviews

All principals in the selected study schools were extremely generous in hosting the interviews in their DEIS schools, in rooms that were inviting and had relaxing chairs that rooted familiarity and a relaxed atmosphere. Two of the four schools had school evaluations in the public domain, accessible through the DES website of Whole School Evaluations, whilst all had school websites. As the study was rooted in the qualitative process, it supported the researcher to be adaptable to changing and emerging situations (Yin, 2009), with flexibility to reschedule interviews due to happenings in a particular DEIS school. The semi-structured interview process is a medium through which the researcher can assimilate unique and personalised data of how participants in the study interpret their world, using qualitative, open-ended interviewing (Cohen et al., 2011), where opportunities for asking and probing is extensive (Tuckman, 1972). At the start of the interview process, the researcher did not turn on the Dictaphone, rather, an informal chat was had. The researcher introduced herself, the study, the researcher's history with the school, and ensuring the consent form was signed. The conversation progressed into "collegial dialogue" (Crawford, 2009, 89) where voices were shared, with a reciprocal gleaning of information including name, years and roles teaching. Notes were taken by the researcher on this information, and then asked the interviewees if the Dictaphone could be turned on. In all cases this was allowed. It was also vital to ensure the interviewee was clear as to the research project and the consent form for the interview process. Once the consent form was signed, the researcher asked for permission to turn on the Dictaphone, which all participants agreed to.

The main focus of the researcher was to collect, analyse, and interpret individualised conversations that support the construction of a portrait and gain access to documentary data

such as English folders mentioned in two of the DEIS schools that supported planning and internal school communication (Grbich, 2004). The individual interviewing process supports a discourse with the interviewee, where there is a flexible structure being pulled, by both the interview and the interviewer (Lichtman, 2013). In Willow School, two teachers were freed from their duties at the same time. Both colleagues worked closely together and had established a strong friendship over the years. Both colleagues arrived together and the researcher invited both interviewees to engage in the interview. The researcher gained rich information from both interviewees, with ideas from one interviewee being extended by the other and critiquing their practices was augmented. Following this experience, the First Steps tutor from Willow School, who was also the deputy principal commenced her interview. During the interview, the principal entered the room. The First Steps tutor engaged the principal in the discussion regarding learning processes, resulting in the principal taking a seat and joining in with the conversation. This unplanned incident enriched the dialogue, supporting more in-depth communication. The researcher observed the genuine professional friendship between the principal and deputy principal and how at ease they were in each other's company. Thereafter, the principal engaged in the semi-structured interview process individually. The prepared questions were flagstones; however, the researcher was comfortable to engage with participants' responses, influencing the particular direction of the interview.

3.9.3 Triangulation

The case-study approach is illuminating, strong on reality and accessible (Wellington, 2000) whilst discovering a truthful and holistic presentation of themes that have emerged. The researcher will analyse and draw together the different sources of data such as the semi-structured interviews and documentary data. The documentary data includes the three year strategic DEIS plan, policies, plans, and the school vision statements. This process engages the researcher in cross-referencing, a process also known as triangulation (Dorman, 2009). Triangulation is looking at a reality from different viewpoints using a variety of sources of data, methods and participants and their role in the research study (Coe, 2012). Comparisons and patterns evolve from the exploration of a variety of sources, settings and participants (Coe, 2012). It is difficult to be certain about practices in DEIS schools, however, there is a story to

be told about how structures, values and beliefs have emerged through the DEIS initiative (Pring, 2000) through people, the school, strategic plans, and choices that have been made. The researcher is attempting to merge personal responses and perspectives to the DEIS initiative, constantly being influenced by values and interpretations. By using a case-study approach in DEIS schools, the researcher can interact with a "chain of evidence" (Yin, 2009, 122).

In addition to semi-structured interviews, a variety of sources of evidence were gathered: direct observation, participant observation, DEIS three year strategic plan, student standardised tests based on Irish national norms in literacy, whole school evaluations, and national DEIS evaluation reports (Cohen et al., 2011; DES, 2011b; ERC, 2011). "A document is defined briefly as a record of an event or process" (Cohen et al., 2011, 249). The documentary data was discussed at interviews, to a varying degree, with some of the data available on the school website or a hard copy in the classroom. Published reports such as Whole School Evaluations can be publically located on the Department of Education website. The researcher found that the Whole School Evaluations needed careful analysis, in order to interpret and ascertain their meaning. The researcher was also present in the staffroom for break times, and observed noticeboards and the documents on display in the educators' rooms. This gave information on everyday life and practices in the schools, highlighting the values of the school (McCulloch, 2012). Some participants in the interviews mentioned a folder or document, which was presented to the researcher and discussed either during the interview or post interview, rather than being accepted at face value. The researcher interacted with the documentation "in such a manner that you can make sense of what you gathered" (Lichtman, 2013, 250), reviewing transcripts where further data can confirm, consolidate, refute, or make sense of the findings. Whilst the documentary data was used to consolidate findings and analysis during and after the interview phase, the researcher found another supportive use for the documents. The researcher created a cross-reference analysis grid for each of the study schools, identifying the themes that emerged predominantly from literature and the interview transcripts and then cross-referencing the themes with the documentary data, triangulating the findings, as illustrated in Table 9. Documentary data supported and strengthened the triangulation of evidence, focusing on an in-depth interpretation of literacy during the DEIS

initiative. The study reflected on experiences of the participants in the study DEIS schools, defining actions and expectations (Stake, 2005).

Table 9. Cross- Referencing the Emerging Themes from the Interview Transcripts with Further Documentary Data

	Pine School										
	Infrastructure				Professional Development				Stimulants		
	Knowledge Building	Moral Purpose	Change Process	Relationship Building	Keeping Up-to-Date	Changing Practices	Experimentation	Reflective Practice	Evaluation	School Culture	Intrinsic Motivation
DEIS Literacy Plan	X	X	X	X	X	X	X	X	X	X	
Literacy Folder	X	X	X		X	X	X		X	X	
Environment	X	X		X		X		X	X	X	X
Staffroom				X						X	X
Noticeboard	X				X	X			X	X	X
WSE (OLD)	X		X	X	X	X	X	X	X	X	
Diagnostic RR Assessment	X	X	X		X	X	X		X		X

3.10 Research Ethics

Ethically, the research is searching for the truth. The researcher must respect the participants in the case studies. Participants would also remain anonymous throughout the research and would be aware of the aims and probable publications of the findings (Pring, 2000; Wellington, 2000). The Irish DEIS school research is based in four DEIS urban primary schools. It is therefore necessary to get permission for the research, not only from the participants, but also from each Board of Management through written correspondence. The research gave the principal and each Board of Management an information sheet clarifying the research study. Each participant in the research received a brochure containing the same information in a question and answer format (Appendix D). If the teachers and Principals agreed to participant in the study, they were asked to fill out a consent sheet, which was signed and dated. All data was stored in compliance with the Data Protection Act 2003. This research followed the University of Lincoln's ethical guidelines and procedures and the British Educational Research Association's ethical guidelines on conducting research (BERA, 1992), which highlighted the responsibilities of the researcher.

3.11 The Researcher's Positionality

As a researcher involved in a qualitative inquiry, the researcher will become an instrument of the inquiry. The researcher interprets the data that is gained from the participants attaching meaning to their experience. This heightens the complexity of communication (Zeni, 1998; Maykut and Morehouse, 1994); "It brings home to us that it is not by looking at things, but by indwelling in them, that we understand their joint meaning" (Polanyi, 1967, 18). The researcher is 'indwelling' (Maykut and Morehouse, 1994, 33), as they do not know exactly what patterns will emerge over a period (Maykut and Morehouse, 1994). It is important that the research is tolerant of ambiguity, where several understandings can accrue of a singular situation, whilst time and more data may illuminate the story; "Our stories are lived experiences to which we, in concert with others give meaning to those experiences" (Maykut and Morehouse, 1994, 38).

The reflexivity of the researcher is continually being taken into account: being a student in a DEIS school, life history, former DEIS advisor, the Principal, parent and teacher in a DEIS school are vital to understanding the modes of data collected (Scott and Usher, 1999). The researcher was a DEIS advisor, employed by the Department of Education and Science and its support organization, Professional Development Services for Teachers (PDST). The researcher was providing sustained support to DEIS schools with regard to curriculum and planning issues. The researcher was an advisor with the four DEIS schools involved with the study. It would be natural to compare the views and biases of staff that could be shared at an interview with what the researcher has noticed them doing in reality. Experiences and background mould the researcher. The reflexive researcher is aware of the influences of social and political factors and the affect that this will have on all research aspects (Morrison, 2007). The researcher will become a part of the construction of meaning of their world with the purpose of comprehending it (Morrison, 2007; Pring, 2004). Through feedback loops and emerging patterns, the researcher and participants interact, react, assimilate, and modify the narrative through an evolving process (Grbich, 2004). MacBeath sees reflexivity as a deconstructive exercise of four parts: the author, the other, the text, and the world (MacBeath, 2011). The researcher needs to be aware of these four aspects in order to reconstruct the emerging themes. When bias becomes apparent, this knowledge supports the researcher to understand their influences on the research (Lichtman, 2013). The reader of the research will in turn be aware of the researcher's history and have a contextual interpretation of the study and its findings.

Having worked as a DEIS advisor, a teacher and now a Principal, it supports background knowledge of school contexts, issues, school setting and management structures, whilst acting as a researcher in the case-study school. It would enhance the researcher's aim of open and two-way communication (Rossi, 2009). Whilst I have insider knowledge of school structures and have opened "windows" (Tickle, 2002, 46) to gain entry, as a researcher my stance is still that of an outsider (Zeni, 1998). As I no longer work in any of the case-study schools and have no professional relationship with any of the establishments, it is essential that clarity is established as to the role as researcher. It is important to negotiate access to the four schools, from participant involvement and the amount of time that will be needed from each participant. It is, therefore, fundamental that the boundaries are negotiated (Schostak, 1999) are clarified.

Therefore, clarity needs to be sought before the research begins as to the role that each participant plays in the research.

3.12 Data Analysis

In order to support collation, interpretation, and elicitation of emerging patterns from qualitative semi-structured interviews, the interviewer has identified broad areas for discussion and in turn sub-sectioned aspects for further discourse in the schedule for semi-structured interviews (Appendix C). Through dialogue, the interviewee can reveal events which corroborate or conflict evidence, which in turn highlights areas for further investigation (Yin, 2009), enabling investigation in a vast range of areas, such as professional development, school responses to national initiatives, collegiality amongst colleagues, and the school climate. As such, qualitative data "could hold pre-eminence over quantitative methods in establishing causation and causal processes" (Cohen et al., 2011, 63). Patterns of dialogue will emerge from the magnitude of data reduction through coding (Tuckman, 1972), which is cyclic and organic. It was valuable for the researcher to commence analysis of information after each interview, creating a composite picture that evolves. The semi-structured interview questions may need to be amended to further probe emerging themes.

Qualitative analysis is not scientific, rather "intellectual craftsmanship" (Wellington, 2000, 150), where the researcher examines the meaning of the participants' words and actions (Maykut and Morehouse, 1994). The researcher used NVivo 10 for her pilot interview and also for a further two transcriptions. The researcher remained objective, whilst also preferring a multi-sensory approach during the process of data analysis. The researcher had the intention of commencing analysing the data and applying nodes following the first two interviews. Concurrently, the researcher transcribed the interviews, inserted a column on the right-hand side, and then inserted descriptive and topic codes (Miles and Huberman, 1994). The interview process progresses in an iterative manner, pursuing different DEIS contexts and the evolving of different conditions (Grbich, 2004). The researcher was mindful to acknowledge and implement the "epoche" process, where "the researcher engages in to remove, or at least become aware of prejudices, viewpoints, or assumptions regarding the phenomenon under

investigation" (Katz, 1987, 36, 37). The researcher became acutely aware of the participants' experiences and the meaning that they attribute to their experiences; the researcher was indwelling whilst concurrently being aware of her presumptions and biases.

The researcher felt closer to the data when dealing with hard copies of the transcripts (Fielding and Lee, 1998). The transcripts with the code/comment/observation column was cut and spread onto an open space, over intervals, the researcher manipulated the codes and re-arranged to examine patterns, links, delete, split and combine codes, an "eclectic activity" (Wellington, 2000, 150). It could be argued that qualitative researcher computer programmes over-emphasize codes and retrieval approached (Fielding and Lee, 1998). The researcher, through consultation at a Lincoln Study School, decided to continue with the hard copy transcripts and stop using NVivo 10 programme for analysis. Coding is essential, however, the researcher wanted to explore and manipulated the data physically before definitive coding was attributed to the data. Tesch (1990) argues that computer programmes cannot replace the researcher's own inquiry, insight, and craftsmanship. The researcher had a lot of data from two interviews and documentary data, which were also complex and intensive.

The most intensive source of data came from the interview process, namely, audio recordings converted into text with the addition of field notes. Information from documentary data was combined with the text throughout the process. The variables that were used (age, gender, teaching experience and years of service) were often attributed to the collected data, data collected from the field or based on analysis. The researcher was drawn to the categories that were used initially to analyse the data, pre-established through the research framework, using priori codes that were based on the literature chapter. Some categories were derived direct from the data. In addition, preparing data for analysis meant that the transcripts, DEIS plans and memos were colour coded to ensure ease of identifying the various sources. This continued throughout the collection and collation of data. Initially, the data was cut into colour coded sections and spread across the floor. This enabled the researcher to get a whole impression, awareness and feel for the data, hearing what the data was saying to the researcher (Rubin and Rubin, 2005). The data expanded on the floor after each transcript. This process gave the researcher time to reflect on the data, re-arrange, and filter the codes over a period. In order to maintain an audit trail, the research devised an initial code to identify the source of the data, such as the pseudo name of the interviewee will be identified by the first two letters

of name, Grace (gr) and also their school (Sch W). Documentation is coded as transcripts (t), DEIS plan (ds) and inspectorate whole school evaluation (WSE), and if the extract was from the interview transcript, the heading section. Initially, the researcher used the page number that the extract derived from, however the sections that the extract originated from gave more meaning for the researcher. Thus an example of a code is Lori/Willow School/transcript/climate (Lo/sch W/t/cli). This form of data display supported the researcher to conceptualise the data (Wellington, 2000). Through an iterative process, the sections and the data changed and moved, creating periods of frustration, clarity, and confusion for the researcher.

The "constant comparative method of analysis" (Maykut and Morehouse, 1994, 126) had a series of stages that were carried out concurrently with the interview and transcription process. With the data being cut into smaller units to compare across all categories of meaning, which later in the analysis process formed the basis for defining more macro categories and themes. Some categories needed refinement through the stages, for example, 'intrinsic motivation' was defined in stage 1 and 3 as 'the importance of routinely encountered affective episodes" (Morgan et al., 2009). There was a need for the researcher to research further definition, and reverted back to the original concept of motivation. Near the end of Stage 1, data was reduced and sorted into three main categories, using the research questions as the macro headings and thereafter into themes and sub-themes. This led to Stage 2 (Table 10).

Table 10 outlines stage two and merging to stage three of data analysis. Definitions were given to the three themes that emerged from the research questions relating to what stimulates DEIS educators to engage in literacy development. It was interesting that in each stage of the analysis process, the salient data was evolving, rather than remaining steadfast. At stage two and three of data analysis, data was divided into manageable themes, which were colour coded, and then divided into sub-themes with codes, as outlined in Table 10. In Stage 2, all data was computerised.

Table 10. Stage 2 of Data Analysis Template

QS 3: What stimulates DEIS educators to engage in literacy development?			
Theme	**Sub-Theme**	**Colour Code**	**Sub-Theme Code**
Evaluation Educational assessment provides evidence regarding progress in individual learning (National Council for Curriculum and Assessment, 2009).	Trends/patterns		Tr
	Planning and goal setting		Pl and g
	Standardised tests		St
	Whole School Evaluations/The Inspectorate		Wse
School Culture 'Based on patterns of people's experiences of school life and reflects norms, goals, values, interpersonal relationships, teaching and learning practices, and organizational structures' (National School Climate Council, 2007, 1).	Cultivate learning environment		Env
	Wisdom of a crowd/Collaboration		Coll
	Power/empowerment		Pow
	Effective leadership • Resources • Paces • Innovation		Ld
Intrinsic Motivation 'The importance of routinely encountered affective episodes' (Morgan et al., 2009, 1).	Response of student/parents		Ch
	Supportive colleague		Fr
	Satisfaction of event/activity		Act
	Achievement and link with self-efficacy		Ach

There were moments during the interview process that sparked an evolving response, through the interview process, reflection, and discussion. Lori was asked about national and international reports on student literacy attainments and sparked a reflective response, which Piaget refers to as "liberated conceptions" (Piaget, 1929, 42)

> "I do think that they do. As with mixed results in those cases, they can be demoralising. We had one, I think the ERC (using standardised tests), I think they may have done Maths and English. It is that old thing, you don't remember what they said, you just remember how you felt. I remember us going 'oh, God' and we were trying so hard. Yes, I think that had an impact and we would say what can we do and are we not doing it. It was a shaking in self-confidence, but then life passes in a school and it is forgotten. (Laugh) it didn't build our confidence" (Lori, Willow School).

At each stage of analysis, the researcher was digesting the data, pulling it apart, and then merging it back together into a new format, with some data being left out. Stage one, the researcher was breaking up the data into manageable chunks and then from stage two onwards, the emphasis is on recombining the data, exploring similar themes and categories. It was a process of "continuous refinement" (Wellington 2000, 136), with data being re-contextualised.

There was also an investigation, where emergent processing of patterns and relationships across categories and also internally in each category developed. At stage two of analysis, themes and category names, with a code, were accompanied by a definition of data in each category (Table 10). Each theme and category was given a definition, establishing the boundaries and its content. The focus was to determine "conceptual similarities, to refine the discriminative power of categories and to discover patterns" (Wellington, 2000, 150). Amendments to some definitions involve rethinking and re-expressing them (Gibbs, 2012). The researcher noted that some sub-themes were actually quite similar and were simply combined, such as under 'Intrinsic Motivation' which was defied as "the importance of routinely encountered affective episodes" (Morgan et al., 2009, 1). The response of the interviewees to 'the effects of responses from students and parents' were similar, thus merged under 'Intrinsic Motivation'.

The researcher used a colour code to identify themes throughout each transcript, ensuring the theme had substance, that it made sense, and has been substantiated through the data with patterns being revealed. The colour codes were tentative and remained tentative. The researcher listened to the audio of each interviewee, listening to tone and turn of phrase, with

analytical notes taken. The researcher had many codes and in phase two of the analysis had six colours attributed to the six themes that emerged from phase one.

During the third phase of analysis, the researcher maintained the theme and categories approach, however, she re-organised the extracts of each category by source - that is, by case-study school and also by DEIS facilitators. This enabled patterns, increased transparency, and validity. The researcher was also able to route concepts, practices, and procedures in each case-study, both positive and negative case occurrences. The analysis was systematic, organised, and inclusive, but not rigid (Wellington, 2000). Analysis is not the last phase of the research process. In this study, it was carried out concurrently with the data collection. With the process being cyclic in nature, information drives or consolidates the process (Wellington, 2000). The process of re-organising the themes and categories by each school in the study, supported the researcher to make statements about the schools, as well as the individual.

Coding is the critical link (Charmaz, 2001), where a connection is established between data collection and in turn creating meaning. The researcher's ontological and epistemological stance informed decisions of the most appropriate method, approach and instruments to be used throughout the study, which affected and influenced the coding system that evolved (Creswell, 2013; Saldana, 2013; Mason, 2012 cited in Saldana 2013). Coding is not reducing the narratives; it is giving the narratives a forum for discovery, albeit a subjective multifaceted interpretation. Participants in the study have varying individual values, beliefs, attitudes and motivations; thus, differences and multiple realities will exist (Saldana, 2013; Sipe and Ghiso, 2004). The researcher needed to manage codes, filter, highlight, capture and extract salient characteristics/features in an organised manner which "actively facilitate the development of categories and thus analysis of their connections" (Saldana, 2013, 8), through the cyclical "transitional process" (Saldana, 2013, 5).

This qualitative inquiry necessitates fastidious attention to the participants' language, tones, contexts, and attitudes that the researcher hoped became more attuned to reorganising, reclassifying and streamlining on the second and third cycle of coding (Saldana, 2013). Auerback and Siverstain (2003) have a reflective notebook, with three main areas, that show the researcher's assumptions, positionality, and tensions (Sustein and Chiseri-Strater 2007, 106).

- What surprised me?
- What intrigued me?
- What disturbed me?

The researcher used a notebook to document emerging patterns, codes, and themes. The reflective notebook supported the interconnection of codes, patterns and themes, supporting the crystallisation of concepts (Saldana, 2013). The researcher used a professional notebook for her role as principal and supported her reflection time on a near daily bass. This practice was transferred to the study.

3.12.1 Saturation

The researcher had reached saturation point following interviewing educators from four DEIS primary schools and four DEIS facilitators. The researcher found the data exhibited recurring themes and relationships. This can also indicate a confidence in generalisabilities and trustworthiness. It is interesting that, after involving nineteen participants directly, Lincoln and Guba (1985) suggest between twelve and twenty people. The researcher stopped interviewing when 'new data' had already been discovered and when the size of the study was deemed to be adequate.

3.13 Quality of the Research

In this chapter, there has been an extensive critique of quality of aims and objectives, case studies, sufficient data, theoretical framework, sample selection and size. Qualitative research is an exploratory activity. The methods were multiple in usage, such as interviewing, observation in the DEIS schools natural setting, collection of the DEIS plan, viewing literacy folders, and two of the schools in the study have completed an inspection with the DES, known in Ireland as a 'Whole School Evaluation'. The researcher cross referenced data gleaned for the interviews with other documentary data. Cross referencing tables were created by the researcher (Table 9) to consolidate, affirm or question emerging portraits (Tuohy, 2008).

Data was collected in a real-life, natural setting, which gave more rich and descriptive data. It also gave the researcher the opportunity to observe and explore the extensive data that was

gleaned from the natural setting (Maykut and Morehouse, 1994). For example, in Willow School, Beech School and Pine School, through the interview process, it became apparent that the literacy co-ordinators had devised a hard and soft data folder of unique literacy content and approaches; the researcher was able to view the literacy folders, probe its application, and see how it is kept up-to-date.

It became clear through the data collection process that the main instrument to glean data was from the participants themselves; other data and documents, such as the DEIS plan enriched the process. However, the researcher was surprised at how comfortable she was with the study emerging and concurred with Wellington that information collected focused, blurred, or sharpened the focus (Wellington, 2000, 133). The data collection and analysis processes were integrated and informative, not separate stages of the researcher study. This strengthened a weakness in the qualitative process that it would not have a data "over-collect and under-analyse" (Wellington, 2000, 133). Using the data from the four DEIS schools was sufficient enough to produce a study of high-quality questions and answers.

3.14 Conclusion

The DEIS schools' identity over the past several years has been changing, forming, reforming, and amending throughout the period of the DEIS initiative. DEIS schools are judged by student attainment assessments, national trends and national policy such as the DEIS initiative. One wonders whether this change is positive. The research must define what they want to learn from the inquiry. The current proposed inquiry is dependent on two main variables. The first variable concentrates on seeking clarity to the research questions and, secondly, it is vital to establish the rationale for posing the questions. The purpose of the research study is the exploration of the concept of 'continuing' development towards school improvement, for both individuals and groups, in DEIS schools, with an emphasis on exploring infrastructures, learning processes, and stimulants.

This chapter supported the author in exploring the possibilities and constraints when carrying out research. Firstly, ontology and epistemology were explored, the study of what we know and the study of how we achieved that knowledge, respectively (Freimuth, 2009). There is a

philosophical commitment to a particular way of seeing the world (Coe, 2012). The interpretative paradigm, the comparative case-study approach, and the qualitative method were all influenced by the research questions and the researcher's ontological and epistemological position. Whilst there are many instruments that would glean valuable data to support the research questions, it was decided that semi-structured interviews would provide rich and in-depth data. The typical case sampling of four urban DEIS schools participated in the study, alongside four PDST DEIS facilitators. Issues of ethics and positionality were also discussed. It is important to conclude that the semi-structured interview instrument, along with other documentary data, provided a good working portrait of the urban DEIS school, which will be outlined in the following chapter.

CHAPTER 4: RESEARCH FINDINGS

'Bit by bit, we could see all the initiatives merging and knitting with each other.

They are all embroidered….they have all merged, they are tailored'

(Patrice, Beech School, Principal)

4.1 Introduction

Chapter four is an exploration of the patterns that have evolved from the research study through semi-structured interviews and other documentary data. The information gleaned from DEIS educators and DEIS advisors with visits to the four DEIS schools have supported the research in building a portrait of the DEIS school. The research study investigated the process of implementation of DEIS literacy initiatives in urban Ireland and its impact on the schools' infrastructures and on DEIS educators.

This chapter explores the development of the theoretical 'Knowledge Productivity in Literacy Framework', from its growth in the literature, to its refinement, during and after the research study collection, collation, and analysis of data. The primary source of data in the study and the evolving framework was from the educators' voices in the four DEIS primary schools, with other documentary data providing additional information. The features of a fertile work environment, which will be explained further under three main areas that will be discussed in this chapter are the key components in DEIS schools' infrastructures, their professional development and the stimulants that can enable action. The themes that emerged from the literature have also appeared in the findings and analysis. The researcher will use the research questions to highlight the findings in the three areas.

4.2 RQ1: What are the key components in DEIS schools' infrastructures that impact DEIS literacy development in disadvantaged primary schools in urban Ireland?

Infrastructures in schools are "the basic systems and services that an organisation uses in order to work effectively" (Cambridge, 2016). The study enabled the researcher to take stock of approaches and developments of literacy in DEIS schools and experience the current reality of literacy initiatives in four DEIS schools. The findings from the study have identified key

components in a DEIS schools' infrastructures and will be discussed further under four main headings: knowledge building, moral purpose, change process, and relationship building (Fullan 2016, 2008, 2007, 2005, 2002).

4.2.1 Knowledge Building

Knowledge building is one of the elements that supports a school's infrastructure in a complex world, which interlinks learning, its development, and teaching to ultimately support student learning. In such a complex and ever-changing world, knowledge building enables the educator to respond to challenges and opportunities in their own school's unique context, developing its capacity (Fullan, 2005). For knowledge to be supported, both for the educator and school context, the study found that a supportive school climate, shared professional accountability (Munby and Fullan, 2016), and resources are key elements to building knowledge, with the potential to sustain it (Fullan, 2008; Fullan, 2007). Each element will be discussed further, with reference to the voices of the educators and DEIS advisors that were interviewed.

4.2.1.1 Creating a School Climate Supporting Knowledge Building

A healthy school climate can support educators when they feel they are trusted and respected. All principals, and sixteen teachers, with specific literacy roles in the study DEIS schools, realise the importance of healthy professional relationships and engagement within the school community:

> *"It is all of the little small things that make a difference than something big. Making time to talk to staff, making time to visit classrooms, to, I think, inculcate a work ethic in the school. An atmosphere that the principal is not afraid to take out the dustpan and brush, don't expect someone to do something that I would not do myself. Have a smile on my face. I do, I still love what I do" (Maria, Principal, Pine School).*

Bryk and Schneider (2002) discovered a correlation between good staff relationships and improved student achievement, where all the DEIS schools have made significant improvements in literacy, using standardised testing and also running records (Clay, 1991) that show reading progresses in a simple yet affective manner. Schools have been engaged in

the DEIS initiative for over a decade, and it is noteworthy that the four principals would acknowledge the slow pace of change:

> *"That is not just about the day that is part of the process of getting the message across, we are a team here. Everybody kind of contributing and working together. It is a slow, slow, slow, slow thing and it is a culture that I am striving to build" (Anya, PDST facilitator/principal).*

The climate in the school influences how teachers feel about being part of the school community and in turn affects how they teach. Eleven teachers in the study, that is, all those teaching in the classrooms revealed the need to feel supported by their peers and the principal, which in turn increases their personal commitment to the school and its community to create individual tailored targets (Fullan and Quinn, 2016; Singh and Billingsley, 1998):

> *"Then , I suppose, our plans are tailored to meet our needs, grown from the grass roots up and I think that we have gone slowly but surely, I think our standards have risen and it has impacted on the senior school" (Maria, Principal, Pine School).*

All the interviews were carried out in the context of the respective DEIS school settings, often when classes were in session in the interviewees chosen familiar environment. As a researcher, taking time to socialise in the staffroom, to walk around the school observing displays, and overhearing voices around the corridors, gave great insight into the mood and climate of each DEIS school at those moments in time. Maslow's basic need for people to work in a safe and caring environment supports school improvement (Maslow, 1954). Fullan states that "you can borrow or steal a technique, but never a philosophy or culture" (Fullan, 2008, 16). The researcher saw attractive and welcoming corridors, comfortable staffrooms, and an extensive arrange of literacy resources for both teachers and students, which enables learning:

> *"We are looking in a DEIS school that if we do need money for books to be purchased we do have it and that is an advantage. It would be rare that we wouldn't be able to purchase anything" (Kayla, Literacy Tutor, Beech School).*

4.2.1.2 Collaborative Professionalism

A portrait evolved from the findings of the study regarding the importance of leadership, where one needs to be adaptable to natural changes and in turn dealing with it. All DEIS schools in the study have administrative principals, with no formal teaching duties. Three of the principals in the study discussed their responsibility for leading changes in the school, supporting improvements (Sugrue, 2003). It is interesting to observe multi-perspectives of team planning and the evolving structures from a whole school perspective that develop. Lara and Lori discussed together the development of their literacy team, where teachers volunteer to take on the extra responsibility, some of whom are senior management, learning support and class teachers. This is creating "new demands on the principal" and teachers, exploring practices that work (Sugue, 2003, 18). The following extract highlights the respectful professional working relationship and the competencies of subject matter and problem-solving skills over a period:

> *"With the English plan, we came a kind of a group who were working on it and then it just became an interim and then carried on (Lara, Willow School, Literacy coordinator)....I think we are really good at listening to one another and really appreciating other people's knowledge... People volunteer a lot" (Lori, Willow School, Principal).*

Leadership as described by Lori and Lara in Willow School is evolving over a decade and displaying collaborative professionalism (Fullan and Hargreaves, 2016), where not everyone on the literacy team has a senior position or receives remuneration. Following literacy meetings, issues are brought to staff meetings a week later, leaning towards democratic professionalism, which emphasises that their students should receive the best programme that can be developed (Fullan and Hargreaves, 2016; Kennedy, 2016). Pine School hosts formal collaborative planning meetings each fortnight to plan together and focus on educational direction at each class level.

> *"We plan with the same milestones per fortnight). We plan for the rest of the subjects...we plan together" (Ann, Pine School, class teacher).*

Oak School was the only school in the study that did not have formalised structures for planning or written strategic plans for literacy development. The principal engaged in a wide

variety of administrative tasks, and allocated his experienced teachers to the learning support team to deal with literacy and numeracy development. Whilst Senior Infants and First Classes engaged in team literacy practices with the Reading Recovery teacher, the majority of classes were planned and structured in isolation and individually. Anya, a PDST literacy facilitator, felt, from her experience, that a leader was pertinent to the development of literacy to fight the constant battle; *"you need somebody to drive it, to pull it or to drag it and to keep it live"* *(Anya, PDST literacy facilitator)*. The school literacy coordinator retired from Oak School several years previously and this post had not been replaced.

> *"I think, if we had a post for it, it might help, someone responsible for English. There is nobody to oversee the whole thing. If there is a weak link, where do you pick it up? It is not picked up at the moment" (Saoirse, Oak School, Support teacher).*

In Oak School, the principal engaged in quite traditional managerial professionalism and the teachers engaged in the teaching and learning role for students (Fullan and Hargreaves, 2016; Whitty, 2008). In this living system, all parts were not interconnecting, isolation was more prevalent and literacy standards remained steadfast. Kate displayed the isolation that was felt when one volunteered for a project with no staff member volunteering to assist her. Whilst undertaking this role for a period, she experienced completing the whole school project as a lonely and self-directed task. It is a project that she would not repeat, thus sustainability weak:

> *"I asked the staff if anyone wanted to help….Everyone is so busy doing their own thing. That I was on my own doing it then" (Kate, Oak School, Class teacher).*

A more realistic view of sustainability is displayed in Willow School, Beech School and Pine School, where changes in literacy and its sustainability need time and experience. In all three schools, the principal was actively involved and ensured structured resources and experienced teachers were driving the literacy projects, as verbalised by two principals, Lori and Maria:

> *"I would like to think three, but five years to really be part of how you do things…It's not the timetable for three or five years, it's the amount of experience as well. It is an interesting one, so it is really a lot slower than you think" (Lori, Willow School, Principal)*

> *"In the beginning was the DEIS plan, the planning and drawing up and being consistent and realistic in our targets, monitoring and reviewing our targets. Planning*

together and reviewing our plans. Looking at the standardised tests and the
observations" (Maria, Pine School, Principal).

4.2.1.3 Resources

With knowledge building, it is important to ensure that resources, such as expertise, time, and sharing ideas are available and valued, which in turn has the potential to build capacity and ensure its sustainability. In this section, some examples are highlighted from the DEIS participant schools, of resources that support knowledge building: expertise, time, and sharing ideas.

Expertise

Covey investigated the creative forces that people exude whilst responding to the relationships in their personal and work lives (2004). This depicts provisions of education and its relationship to developments in society. The focus on knowledge has shifted from things and production goods (Industrial third phase) to people and knowledge (information fourth phase) (Covey, 2004). Fullan extends this concept that people need to be both individually talented and systems talented, where the educators "work in and keep developing cultures of purposeful collaboration" (Fullan, 2008, 71), focusing on human, social, and professional capital (Fullan and Hargreaves, 2016) and investing in it (Fullan, 2008). Knowledge develops through action, which is accompanied by "reflective insight tied to underlying theory that guides further action" (Fullan, 2008, 5). All the DEIS schools expressed that their concept of education embraces the whole student and not only a subject (Kennedy, 2010). In the study, all DEIS schools are focused on the holistic needs of students:

> *"There is a greater understanding of the difficulties that children present with, a focus*
> *on addressing those. I suppose in a way there is a better focus on differentiation"*
> *(Anya, PDST Advisor/Principal).*

The fifth phase of wisdom concentrates on the moral treatment of information with a sense of responsibility and Grace has experience of this phase supporting the DEIS initiative. It is worthy to note that Willow School and Beech School in the study have emerged from the knowledge phase towards the collective "wisdom of a crowd" (Fullan, 2008, 46) in literacy and investing time in professional capital (Fullan and Hargreaves, 2016):

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"The culture did develop over a number of years, I do think the cultural change can happen but I do think that there has to be a number of staff members that have to be dynamic and who are bright. They don't do it because they were asked to do it, there needs to be a sense of moral purpose about it" (Grace, DEIS Advisor).

Grace and her school are aware of their obligation towards supporting the student knowledge platform where risk-taking is encouraged, however, insight and reflection on actions is essential towards problem solving and sustainability (Fullan, 2008).

"Leadership is not the exclusive prerogative of people in positions of authority" (Linsky and Lawrence, 2011, 6). Sugrue argued that "principals are the prime movers of change (Sugrue, 2003, 31). In the study schools, there are post-holders for literacy, teachers with a specific skill base and those with a genuine passion. It is argued that leadership is not a person, it is an action (Fullan, 2015; Linsky and Lawrence, 2011). This is personified in all the DEIS schools in various areas of school life. One DEIS advisor revealed how she took on the role of leadership in her DEIS school and the catalyst that spurred her into a leadership role:

"Teachers were of the mind-set that our students were doing really badly but that is just because it is DEIS 1. There was no expectation that we could or should improve and then, to be honest, when I came into the school, I got quite distressed about the state of the school and how poorly the children were doing" (Grace, DEIS Advisor).

Allocating Time

It takes courage and skill to lead a group or a whole staff into new practices, engaging in professional discussions, where values, beliefs, and habits are being questioned, with a unique shaping of collaborative professionalism (Fullan and Hargreaves, 2016; Fullan, 2008):

"The road to heaven is paved with good intentions, to afford people opportunities to engage in professional dialogue, conversations" (Anya, PDST facilitator/Principal).

All DEIS schools in the study currently engage in various forms of team teaching in the area of literacy in the junior classes, planning together, and discussing progress to date, where choice may be created and trade-offs discussed (Linsky and Lawrence, 2011). Issues are brought into the open for discussion, with resolutions sought. Working in teams has the potential to support capacity building and knowledge sustainability. In Beech and Pine

Schools, there are several educators in a classroom for a certain period, known as literacy hour or station teaching, in order to support literacy development. These schools are balancing the individual and the team, alongside freedom and control. It is interesting that the teams engaged in literacy hour have four adults present in one classroom for a sixty minute period. Each adult steers a group in a specific area of literacy and then the students move through the stations in a carousel manner over the hour period. Planning for literacy hour, also known as station teaching, is carried out in small group settings, with overall progress being discussed at staff meetings. For Beech and Pine School, the smaller group planning for literacy hour seems to be conducive to engaging all four adults to support one's own growth and development (Cotton, 2001):

> *"Within that we would have had monthly goals, targets for levels, targets for phonics, targets for words and very clear specific targets, especially from a teacher's point of view" (Molly, literacy coordinator, Pine School).*

Sharing Ideas

Mintzberg's concept of "learning is not doing, it is reflecting on doing" (Mintzberg, 2004, 228), would imply that the educational journey cannot be planned with certainty. As such, flexibility to re-navigate is important. Three DEIS principals discuss the possibility of being open to surprises; no matter how planned the actions are. The journey can meander before reaching the agreed destination. Therefore, it is incumbent on the principal and literacy teams to observe, monitor, amend, and support the journey through opportunities for open discussions and reflection. Maria captures the essence of the learning journey in the extract below:

> *"I think that the atmosphere and the context of the school is very important. It is knowing when to give a little gentle push, knowing when to commend them and to know when to maybe stand back and let the blossom come forth. There is a two-edge coin, you can have all the lovely plans in the world but if the school is not a happy place, environment to learn, then it is not conducive" (Maria, Principal, Pine School).*

The key components in DEIS schools' infrastructures that impact DEIS literacy development, with the focus on knowledge building encompass creating a school climate, encouraging collaborative professionalism and the availability of key resources. These components build

upon and consolidate the theories and studies of Fullan (2016, 2008, 2007, 2002). The next section will extend Fullan's theories to investigate the importance of moral purpose and its key factors.

4.2.2 Moral Purpose

Moral purpose is rooted in the development of one's beliefs and assumptions whilst also "making a meaningful contribution through one's work and life" (Fullan, 2008, 44) influenced by the school context, wider community, and the world. From the findings of the study, it became apparent that the culture of the DEIS school is similar to a compass, steering and guiding people in certain ways, including structural and human aspects (Bolman and Deal, 1997). The moral compass in the DEIS school context is investigating the participants' views, assumptions, and biases that support or hinder the school to make a difference to student attainment. Moral purpose is the lens that the world is viewed through and is hugely dependent on one's ontological and epistemological stance. The study investigates whether moral purpose (Fullan, 2016, 2005, 2002) affects the development of literacy in a DEIS school in Ireland. This section aims to explore moral purpose under the sub-themes: values and purposeful collaboration

4.2.2.1 Values

Starratt views school culture as an onion, with many different layers becoming apparent as one delves into the layers of meaning in a school environment of operations, programmes, policies, goals and beliefs, with the school's central belief and vision system at the core (Tuohy, 2008; Starratt, 1993). A school without a core may be busy with programmes in place; however, this can lead to fragmentation of energy that is not sourced at the core. Lori's extract depicts the essence of multi-layers impacting on each other (Tuohy, 2008; Starratt, 1993; Senge, 1990), where the majority of teachers on her staff need to drive improvements, in order for them to be sustained:

> *"If collectively it is not being supported, at least by most, I don't think you would get everyone buying into it at the beginning of everything. If most people are not on board with it and it isn't being driven by one or more, then I am not able to do it because I don't have the time" (Lori, Principal, Willow School).*

Values and commitments are not automatically enacted in schools, where there may be extensive resistances and adaptions in each school's vision. Educators, like parents, are "always teaching social, emotional, civic, and ethical as well as intellectual lessons, intentionally or not" (Cohen et al., 2009, 4). Mortimore extends this concept and highlights that the influence of schools in disadvantaged areas has approximately four times more importance than the influence of the home (Mortimore, 1998). DEIS schools need to understand their contexts:

> *"I think the context of our school is important. You know where our starting point is from, it may be different to the school up the road" (Molly, literacy coordinator, Pine School).*

4.2.2.2 Purposeful Collaboration

The question of effectiveness "is not about how smart you are; it is about *how grounded and insightful* your theorizing is" (Fullan, 2008, 2). Anya, a former PDST facilitator supports the concept of reflection-in-action, the teacher "as a reflective practitioner, is to reflect with other people" (Anya, PDST facilitator), consolidating the concept of a shared understanding of the work (Fullan and Quinn, 2016). Anya's viewpoint consolidates Mintzberg's concept of "learning is not doing, it is reflecting on doing" (Mintzberg, 2004, 228), a more organic form of learning. Fullan (2008) argues that the world is too complex for a vision to have certitude. Three out of four DEIS schools are engaged in reflective practices, as outlined by Jackie:

> *"I think as a group we are quite good at it because we do so much team teaching and especially we work really closely with our partner teachers you're used to it" (Jackie, literacy tutor, Beech School).*

DEIS schools are exploring and reflecting their actions. The conversation is created by not questioning if it worked, it is questioning if it is working and in turn taking "calculated risks" (Fullan, 2007, 8):

> *"Well I'll tell you one of the big changes has been and that is since we have brought in all of these new initiatives we have off loaded the Sunny Streets reading schemes and all of that, it's gone out the door" (Gayle, literacy coordinator, Beech School)*

In contrast, Conor, DEIS advisor, is aware that many DEIS schools are undecided about the supports and inputs that they would need, thus professional development sessions are not rooted in the vision of the school. Many of the professional development sessions that Conor facilitates in DEIS schools are during 'Croke Park' hours, which was part of an agreement implemented in 2011 in Ireland, where all teachers must complete thirty-six hours professional development, above and beyond the working day. With no vision to direct literacy needs, input will be given; however, its impact will be limited to short term and will probably dissipate, as there is no leader to drive the input and a fragile reason why the input was facilitated in the first instance, mirroring Sugrue's concept of "knowledge for practice" (Sugrue, 2003, 20):

> *"The typical school doesn't really know what they want, they want some sort of input on literacy and so the advisor will say I can give an input on reading fluency, I can give an input on comprehension or I can... That tends to be the focus of support and that could happen typically in the Croke Park hour and that what you usually have" (Conor, DEIS advisor).*

Creating a vision in the Irish DEIS school, which influences intellectual, social, emotional, spiritual, aesthetic, and moral development, is currently being challenged. The dominant cultural force of the Church gives a religious dimension to the ethos of Irish schools (Brennan, 2011; Tuohy, 2008) with all case-study schools governance being under the Catholic Church. Currently, there is a change in the Irish social context, exaggerated in DEIS schools, which questions the cultural identity of schools. The challenge for Irish DEIS schools is to embrace people from different cultures, reinforcing an Irish culture within this new context. Kate's strong view on the lack of connection between school and home would not be consistent throughout the DEIS school in the study and may also contradict her stance:

> *"The home school links and the parents understanding of what we are doing in class… There is no connection between the school and home" (Kate, teacher, Oak School).*

The European Union's aim is to advance social cohesion through education (Tuohy, 2008). The Department of Education made the decision to band schools in relation to their social and economic status. The housing and apartments that surround all the study schools is mainly council housing, which is a house built and owned by the local council and rented out to tenants. This has serious repercussion when schools attempt to cultivate social cohesion,

ensuring it does not become contrived collegiality (Hargreaves, 1994). Beech School, unlike the other three DEIS schools, has a span of economic status among the students in the school, built amongst private housing and council housing, both new and well-established. The principal of Beech School spoke about the involvement of grandparents in the school and the researcher visited Beech School on an occasion where parents were invited to a celebration at the end of the year with Junior Infant classes. In attendance, the researcher witnessed the attendance of parents, grandparents, and some aunts. The principal indicated that it was not unusual to see grandparents and extended family members actively involved in the young students' educational journeys.

4.2.3 Change Process

The change process explores the process of national policy transcending into action in the classroom and the factors that can affect the transition, from theory to practice. The change process brings learning to life (Fullan, 2005). The change process has the potential to bring all the dynamics in a school into one unit, thus increasing its strength, also known as the multiplier affect (Smyth et al., 2015). The school system is busy, living, and changing on a daily basis, with competencies in knowledge of subject matter and problem-solving being practiced. The change process provides a channel where learning can be brought to life, merging thinking and concepts in an organic context. This section explores the change process under three sub-themes that evolved through the research study, predominantly semi-structured interviewing. The first sub-theme explores the vision of the DEIS school as a living system, where the interconnecting viewpoints of the school are entwined with the potential of working together. The planning process and its activities will be investigated. The final sub-theme, delegation of responsibilities, supporting teaching and learning in an ever-changing world (Section 4.2.3.3).

4.2.3.1 Vision

An active school vision is personal to each school. Vision supports bridging the gap between aspirations and effective action (Fullan, 2008; Tuohy, 2008):

"I have all sort of bits and pieces of ideas, doing courses on it here and there. I do not have a grand plan for it. I have a vision… but I don't have a road map" (Lori, Principal, Willow School).

To create a vision, it appears optimal that, as Freire stated, that there must be "profound trust in people and their creative power" supporting their collective abilities (Freire, 1970, 75), which is captured in the essence of Anya's extract:

"We are a team here. Everybody kind of contributing to the vision and working together. It is a slow, slow, slow thing and it is a culture that I am striving to build" (Anya, Former Literacy Coordinator).

Three of the four study DEIS schools have taken on elements of the DEIS literacy initiative, which have been tailored to suit their individual school needs with a team of leaders to support each school context, whilst battling a "complex web of aspirations, external demands and global influences" (Kennedy, 2015, 1). Only one DEIS school in the study, Oak School does not have a literacy coordinator or active First Steps tutors. Fragmentation has appeared in the school's vision, which was originally written at the start of the DEIS literacy initiative and may have no more weight than the paper it was written on, as the document was stored away and not easily accessed by the staff. Saoirse would confirm this concept and would imply that the school keeps moving onto the next initiative:

"We haven't really looked at that on a regular basis. It was really when we were reviewing literacy, sure the next year, the self-evaluation moves onto the next. Whatever, the target that you set" (Saoirse, Learning Support Teacher, Oak School).

4.2.3.2 Planning Process

The planning process has the potential to enable schools to connect their thoughts to increase power and innovative capacity. The planning process implemented in the study schools was explored and the characteristics identified. The needs of the school rather than global competition (Riley and MacBeath, 2003) seem to have a stronger influence on the schools' focus for learning. Systems thinking promotes the central focus of the learner. One principal acknowledged that the school had its own unique context and that international or national statistics did not have any relevance on their learning context, "through a more organic form

of management" (Geijsel et al., 2009, 410). However, it is interesting that he admitted that there was choice whether to opt in or out:

> *"Not in the slightest. You are where you are, you choose and I opt in as well. You are in a context" (Oscar, Oak School, Principal).*

Conor, a member of the PDST literacy team considered international competition and rankings as background information rather than a driver to increase standards:

> *"It wouldn't have been foremost in my mind going to every school, at all. Man, it was more background than a driver" (Conor, PDST Facilitator/DEIS advisor).*

One DEIS participant showed the researcher a literacy folder that had developed over the past decade in their school. The resources in the folder are personal to the school and can also support teachers in the classroom and at parent teacher meetings. Gayle explained that the literacy folder also contained international literacy levels that supported the teachers to gauge standards of reading, both on a class and on an international basis:

> *"Some of the teachers use these if there is a parent meeting and they give them out ideas and things to do with their kids, that would be that and again together we tried out various different plans but this is the plan that suits us now" (Gayle, Beech School, Literacy coordinator).*

A diffusion of energy due to weak vision in literacy can lead to burnout (Fullan, 2008; Tuohy, 2008; Starratt, 1993). Data has been gained through a variety of contexts, including interviews, on-site visits, and the school plan. The researcher explores the triangulation between the written and living vision. Three out of four schools update and personalise their DEIS literacy plan on a regular basis, using a tailored version of the cyclic planning process: vision, target, action, monitoring, and evaluation. Schools are challenged to respond to ever changing contexts initially through their vision:

> *"I did but we did it collaboratively and I lead it and I had very clear ideas what and where it had to go. But we did work together and reflecting on the process with us and reflecting on what more did we need" (Lori, Principal, Willow School).*

The school development planning process, that was initiated by School Development Planning on behalf of DES, is in use in three of the four DEIS research schools. Whilst the DES provides

resources and professional development, it is noteworthy that Willow, Beech and Pine School have developed their own tailored style of school planning. This supports Sugrue's concept of "knowledge in practice" (Sugrue, 2003, 20) with the lens more on the craft (Eraut, 1994) of planning, constructing and investing knowledge. Each style of planning has targets or shared goals, data and process of reflection (Munby and Fullan, 2016). All three schools have invested in professional training by personnel in their own context or externally resourced facilitators, which the literacy team have identified and also consulted with staff. These schools have soft and hard copies of their current DEIS literacy plan readily available, with targets created, actions identified, time scales planned, and structures for monitoring and evaluating established. It is important to note that valuable time is spent at staff meetings and literacy team meetings engaging in professional discourse, with a participatory problem-solving approach. Ultimately, the literacy tutor and coordinator, in consultation with the principal, created a context for leadership that is conducive to change and adaptable (Linsky and Lawrence, 2011; Crawford, 2003), where support and consultation are encouraged (Boyd, 1992). They have also cultivated an environment where transformation was respected in three out of four DEIS research schools (Fullan, 1991):

> *"We may need to spend more time on it. At our ISM meetings, there is a lot of professional dialogue at our ISM meetings. We do look at each area, like the team members would report around the areas that they are doing, also what is current in this school, we would spend a good bit of time saying, how are we doing it or have we enough time spent on it. And then you try and keep an eye out for the gaps"* (Lara, literacy coordinator, Willow School).

> *"You need allow people the freedom to choose what they need to learn and the level that they need to learn at. They can afford latitude to people as well"* (Anya, literacy Advisor/principal).

There were opportunities for sharing of experiences in all the study schools to varying degrees. The international literacy levels were also being used by Willow School, which took about five years in total to implement throughout the whole school. The principal and literacy team kept literacy development at the fore of staff meetings and also amended their literacy strategic plan in line with increased literacy standards. Willow School displayed the importance of team development and expertise essential to share, with a fertile ground to work with:

"We have worked on where they should have been. We have put them down as target the following year, I think we readjusted them a little bit because of reading ages…. So we brought them up at certain levels and then as well, in the pack we would also have the level that you are hoping to achieve with your average student in the class" (Lara, Willow School, Literacy coordinator).

All four DEIS schools in the study highlighted the importance of teachers sharing experiences and guiding others on the staff, "a more organic form of management" (Geijsel, et al., 2009, 410). Under the umbrella of expertise, a significant number of participants expressed that the talents and experiences needed systems in place to share ideas. The following extract demonstrated that the sharing of ideas was not necessarily new concepts:

"It is very much a sharing of ideas and not so much new ideas because the basis is the same… I think that's what a good teacher does, I think a good teacher shows and teaches people how to do it themselves" (Gayle, Beech School, Literacy coordinator).

The principal and literacy coordinator in three out of four of the study schools had a leadership process that had the potential to enable the translation of intentions and theories to convert into reality, bringing learning to life (Block, 1987). The importance of relationships in the local DEIS context was most important and reflected the comments of the majority of participants.

4.2.3.3 Delegation of Responsibilities

It was very much in evidence from the collated data, the importance of the competencies and expertise of literacy, in conjunction with finding resolutions to the daily battles (Benn, 2011; Kennedy et al., 2007; Senge, 1990) of keeping literacy development to the fore of busy schools. An unexpected outcome of the DEIS literacy initiative was the innovative systemic practices that developed through the guise of literacy developed over the past decade, and the confidence that Willow School, Beech School, and Pine School had in their practices addressing their own contexts.

"But I suppose if you look back on it that is six years of tweaking to come to that, it's not all so simple and logical….we tailor everything to suit the kids that are sitting in front of us. And that is something that came up in the whole school evaluation, they

> *said they liked that we changed things, we don't take everything the way it is and that we change it to suit the kids and adapt it to suit the needs of the kids. And that are able to stand by that decision" (Jackie, Beech School, First Steps Tutor).*

Delegation in Willow School, Beech School, and Pine School had become a tool of professional development, where educators were given freedom in their schools to express opinions, freedom to enact roles, with the principal supporting and believing in the staff's abilities and delegation of responsibilities, affirming Tuohy's stance of the importance of delegation (2008)

> *"Teacher not feeling alone, with the learning support teacher, they were going to find a method that would work for both the teachers and see where it goes" (Lori, Willow School, Principal).*

In Willow School, Beech School, and Pine School, 'adaptive leadership' (Linsky and Lawrence, 2011) was observed.

> *"Well I was just the catalyst but I think that's what spurs people on. You need somebody [literacy tutor] with a drive and somebody who is very passionate about it and then I think if you have that people will come on board" (Gayle, Beech School, Literacy coordinator).*

Only one of the four DEIS schools in the research study had continual attrition issues. With quite a steadfast staff, sustainability of literacy projects or sharing of experiences was made easier (Morgan and Kitching, 2007). Molly spearheaded a new team-teaching literacy initiative in one senior infant class in her school; due to a steadfast staff, she could cascade the experiences of the three teachers involved the following year into maintaining the project at one senior infant level and also expanding into other classes:

> *"Because we started in one class, we now have three teachers that could run it in three classes and that is what we are doing. I will be in one class, E will be in another and A will be in another. Now, we will meet as a group initially, and then we meet the other teachers" (Molly, Pine School, Literacy coordinator).*

The planning process enables a school to connect its parts and create a stronger and more innovative school, as outlined from the voices of participants under this theme. Starkly

apparent in the findings, is that the planning process supports bringing learning to life, not only for the student, but for the educators as well. Characteristics of the planning process have come to the fore in this section, enabling, sustaining, and halting change, which were outlined under the sub-themes: sharing experience, school development planning process and delegation of responsibilities. In the following section, the research data gathered will investigate relationship building.

4.2.4 Relationship Building

It was very much in evidence from the data, that 'a more "organic" form of management' is taking shape in the DEIS schools participating in the study (Geijsel et al., 2009, 410; Fullan, 2005). Opportunities for professional discourse are taking place in a variety of contexts and are tailored to suit each individual school (Campbell et al., 2016; Mutton, 2016; Kennedy, 2005). The data that evolved from the study regarding networking will be discussed from the perspectives of the key players, such as the literacy leader, literacy coordinator/tutor, and parents. There will also be an exploration of the school development planning process and whether links have been established in professional educational bodies that are external to the DEIS school campus (Croft, 2016).

4.2.4.1 Literacy Leaders

The findings from the study reflected the important impact that the principal has in shaping the culture in the DEIS school (Fullan, 2002; Heifetz, 1994; Deal and Peterson, 1990). The principal has a variety of roles, too vast to define and may need to be reactionary to the needs of the school. What is very much in evidence is that the principal was ultimately the leader of the literacy projects, even though there may be a very active literacy team or a literacy coordinator. As DEIS principals leading the school culture, the four principals in the DEIS primary schools support a culture involving management duties taking place and also a culture focused on being responsive to change. The principal supported the development of educational communities, in three of the four study cases, with direct principal involvement supporting the creation of a positive teaching and learning environment. The voices of twelve educators describe the cultivation of a learning environment. With the principal having a macro perspective of developments, with others on staff, both post-holders and volunteers,

leading forums that keep professional discourse, regarding literacy, to the fore. These actions demonstrate the importance of relationships to support both professional and staff development and its sustainability (Fullan and Hargreaves, 2016; Borko et al., 2007; Hargreaves and Fink, 2006; Fullan, 2005) and the willingness to allocate time to explore their identified priorities. Cathy compounds this concept in the extract below. Anya supported this view and the extract demonstrated the powerful messages that a principal can unknowingly communicate.

> *"It was mainly the principal. Often you found that it was the principal even if there was a really good tutor in place or wasn't a good tutor in place. It all boils down to the principal allowing time for the discussion to happen, even though there could be really good structures set-up, with a really good literacy team. If the principal didn't support it or didn't give time for it, it really didn't happen" (Cathy, DEIS advisor).*

> *"The principal has a key role in driving it, not necessarily doing it but whatever a principal comments on, shows an interest in, or doesn't show an interest in is hugely powerful. To acknowledge and affirm is hugely important. To build upon it if people think something is important, I would feel, as a principal, I need to keep on that line as well" (Anya, PDST advisor/principal).*

In three out of four schools, the literacy coordinator had a senior position in the school. Two of the DEIS schools, Willow School and Beech School had a literacy team who worked very closely together and who would meet in advance of staff meetings to critique literacy progress, to date. Furthermore, learning-centred leadership activities were visible and also recounted by interviewees in the study (Flood, 2011; Riley and MacBeath, 2003; Mintzberg, 1997). These activities frequently created a bridge between policy and practice when "constructive" (DiPaola, 2003, 147), as expressed by Lori, a DEIS principal.

> *"A DEIS school is bound by DEIS rules and DEIS funding. So, I think we are reasonably typical of primary schools. If it is something that we have to do, then we go along with it. The extent that it impacts or embeds in this school that is another level" (Lori, Principal, Willow School).*

All four DEIS schools dispersed power and specific functions in the literacy team, where experience is gleaned and transferred to improve their literacy and facilitation skills, corroborating the views of Flood (2011) in the context of Irish schools.

There are different levels of engagement expected in literacy depending on the local context. In Pine School, it was important to outline the professional characteristics that the principal and the literacy coordinator displayed. Both educators had vast knowledge of literacy, coupled with strong interpersonal skills, willingness to learn both academic and facilitation skills, and motivated each other to continually strive to achieve more. Whilst both educators complied with DES directives, their application of DEIS literacy resources in their school were challenged, tailored, and applied to support their literacy targets, an intelligent accountability (Milliband, 2004).

> *"The Department wouldn't allocate resources for power hour, the resources are based on numbers and everything else. So how the human resources are allocated in the school would be a decision that the principal would make. She is fully supportive anything that she thinks will be effective but I need to demonstrate" (Molly, literacy coordinator, Pine School).*

Characteristics of transformative leadership are displayed in three of DEIS study schools, Willow, Beech, and Pine School. Bass (1985), reinforcing Fullan's findings (Fullan, 2016; 2008; 2007) outlining three elements of transformation leadership: vision building, individual support, and intellectual encouragement. Vision building has been discussed earlier in this chapter, where the school's image for the future was clarified. When carried out to a high level, it may increase self-efficacy, personalise school goals and increase confidence to attain goals (Bennis and Nanus, 1985). Secondly, seven out of eight literacy leaders display elements of providing individual support, which has the most impact on transformation leadership, supporting change and its sustainability (Fullan, 2016). Individualised foci, discourses, and linking school goals with personal goals through mentoring have been visible in the research. The extract from Jackie, who is a literacy tutor, had many discourses with the principal about developing specific projects, where time to engage with staff and finance would be key factors to implementation.

> *"I suppose the leadership, the principal has always been very supportive with anybody taking on anything new and she has always freed up your time or given you whatever support you need maybe resource wise. She will always allocate money for things like if you ever go anywhere or ask for money for things she will always give it" (Jackie, literacy tutor, Beech School).*

Thirdly, intellectual encouragement symbolises the importance of organised professional discourses as a forum for participative problem solving. Fullan (2016) refers to this as deep learning with the self, colleagues, students, and parents. This will be discussed in more detail later in the chapter.

For the purpose of analysis, the research will blend the role of literacy coordinator and that of literacy tutor. In general, Willow, Beech, and Pine School in the study had a literacy team, where both the literacy tutors and literacy coordinators were participative. Although Oak School had a literacy team, there was no literacy coordinator in the school, at present; the post was lost due to the Department of Education freezing new posts. In the study schools, the literacy coordinator was in a position of senior management with a financial allowance. The literacy/First Steps tutor had received training by PDST on behalf of the DES. In turn, it was expected of the tutor to cascade the programme throughout the school on one's return from the First Steps course, supporting colleagues during staff meetings to upskill them. It was the role of the principal to pick the First Steps tutors (reading, writing, speaking, and listening); however, four out of eight tutors were not chosen by the current principal in the school. Conor, a DEIS advisor compounded the notion that there was not a specific type of person chosen as the school's literacy tutor.

> *"I think of any of the groups that I had, I would have had a mix of learning support teachers, ordinary class teachers and post-holders. I don't think there was a typical" (Conor, DEIS advisor).*

Comparing findings from all case studies, it is apparent that there are certain characteristics that support the literacy tutor to share concepts and knowledge with fellow staff members. The principal ensured that the tutor had freedom to support, show belief and acknowledge tasks carried out, tapping into one's dignity and respect (Fullan, 2007). Patrice offered a detailed, yet succinct description of her understanding of the qualities of a literacy

coordinator/tutor. The principals in Beech School and Pine School have clear protocols in place for communication; meetings, pace, and documentation to enhance communication:

> *"We are lucky in that our literacy coordinator, who is Gayle, who is RR, teacher has been a very good communicator and is a very good teacher to teachers, as well as to children. That makes the difference...It is all in the delivery and her powers of persuasion (persuading). So, it is also, in fairness to her, the fact that she has been able to generate enthusiasm around the subject" (Patrice, Principal, Beech School describing the literacy coordinator).*

> *"Somebody that would get on with everybody else. Someone who would be, not necessarily the most confident in the school....haven't been necessarily the most confident people but they are confident in their subject knowledge...are very good at passing on the information to the class teachers and the learning support teachers... it happens in every school, we feel that what makes us different is that we have moulded all the initiatives. We are very lucky, we feel advantaged because we are disadvantaged for all those reasons.... People that I would consider quite shy would stand up at staff meetings and deliver terrific in-service because they are so sure footed of their knowledge and they are so sound" (Patrice, Principal, Beech School describing the characteristics of a literacy tutor).*

Conor, a DEIS advisor, highlighted his experience that some literacy tutors were chosen a day or two before the national training sessions by the principal, as that teacher can be freed easily from one's duties. In Conor's experience, mirroring Sugrue's concept of "knowledge for practice" (Sugrue, 2003, 20), the literacy tutor is not actively sharing the knowledge that was gleaned from the PDST training sessions. One of the DEIS schools, Oak School would compound Conor's experiences, thus making whole school literacy improvement unlikely. Further investigation into the reasons how and why the principal selected certain teachers as literacy tutors and the different levels of engagement expected would make for an interesting study that is beyond the scope of this current study.

4.2.4.2 Parents

According to the Irish Constitution (Government of Ireland, 1937), parents are the primary educators of children. Most teachers in the study did not mention the connection of teachers

and parents to support the students, however, three schools highlighted events with parental participation that had a positive bearing on the student, as Lori's example depicts:

> *"The pride that I see parents taking in the child's achievement, again because something has worked, pitched at the right level. That is hugely satisfying. It is also the collaborative work that we do as a team. It really doesn't matter if the thing doesn't succeed" (Lori, Principal, Willow School).*

4.2.4.3 Building Links and Relationships

This section explores building links and relationships by DEIS primary schools. There are three levels where relationships are built upon from a state of dependence, to independence in school groups to interdependence where the educator learns from others whilst maintaining control over one's own learning. Fullan reveals that learning is the main focus of work and that reflective learning forgives the past and remembers, in order to learn from one's actions (Fullan, 2008). There may be a combination of all three states, where one may merge as the more dominant. As Maria outlined in the extract below, her commencement in professional development in the new Language Curriculum (NCCA, 2016) is currently being implemented in schools nationwide:

> *"I think a combination of both. The fact that the principal and the literacy coordinator have a day and then a day for the staff could come together to see what gaps they see in our school. Then go back to the coordinator in Dublin West and invite them to our school, be it for a day or 2 days for a certain period of time" (Maria, Principal, Pine School).*

It is interesting to view the professional development experience of Maria from a different perspective, that of the PDST advisor, who facilitates the Language Curriculum sessions (NCCA, 2016). Conor's experiences, from previous DEIS programme initiatives, depicted a frustration at the uncoordinated approach. Conor presented the new Language Curriculum as a set training day, moving from a PDST tailored approach to a prescriptive PDST approach:

> *"I would probably sit down with all the advisors. There was, to some extent, there was a bit of a scattered approach, we were all doing different bits, breaking our backs. Each one of us had a different type of approach…They [tutor] didn't know how to CPD*

themselves. They didn't know how to put a plan of implementation together themselves. Therefore when we left, they were kind of left in the dark" (Conor, DEIS advisor).

"The quality and credibility of whomever might come in, is absolutely and hugely important. If someone comes in and have practical good ideas, it can go somewhere. If they have the knack of connecting with the staff and done some homework before, they know what you want. The flip side of that is, if you have a facilitator in an independent capacity, part of an organization or freelance, and if there are people in their Croke Park hours and engaging in something that is disappointing, it is unhelpful and has a knock on affect. It is like throwing water at something. It can kill a lot, not just for that, you have taken a step backwards. You need quality" (Anya, PDST/Principal).

4.2.4.4 DES and the Inspectorate

On analysing the interview data relating to the DES and the Inspectorate, there was a dichotomy of views, from Willow and Oak Schools not having a Whole School Evaluation (WSE) in over a decade to Beech School being motivated by the experience. In recent times, the DES and the ERC published reports regarding standards nationally and globally (DES, 2016; ERC, 2016; ERC, 2011). Whilst the majority of interviewees were not affect by the results of the reports in their professional lives, Lori, principal in Willow School, extended this view that it was the feeling that lingered following the reports of the DEIS report, rather than what the report actually said, which echoes the stance of Morgan et al. (2009):

"It is that old thing, you don't remember what they said. You just remember how you felt. I remember us going, oh, God, and we were trying so hard" (Lori, Principal, Willow School).

In the study, Beech School had experienced a WSE in recent times. The school had radically overhauled their reading system and increased their team teaching approach. The WSE commended Beech School's approach to reading and their strategic planning process, both long term and short term. The following extract depicted how the comments were positive and motivational to Gayle, the literacy coordinator:

> *"It made everybody feel really good and it kind of affirmed things because it is a big deal to make a decision out of staff to say were going to off load all the reading schemes now and we are just going to go with these levelled books" (Gayle, Literacy coordinator, Beech School).*

An interesting relationship that was revealed to the researcher through interviewing and discussions in the staffroom, is that of the Irish family and friendships. The research study was only in Irish urban DEIS schools, many of the educators have strong friendships outside their DEIS school, whose profession is in education. This lends itself to an informed forum of professional development and sharing of ideas. Ann described her near relatives and identified those in the profession of education:

> *"Sometimes, there should be a ban on teacher talk (that's hard because they will tell you the truth if it works or not). It is great. Both my sisters-in-law are teachers, so it is shop-talk" (Ann, teacher, Pine School).*

Two of schools in the study, Beech and Pine School had visited another school to view innovative practices in literacy station teaching and Discipline for Learning (INTO, 2002, 56) over the years. This practice appeared to happen only to view a new practice rather than to ameliorate or augment current practices in specific areas:

> *"Gayle is the literacy co-coordinator as part of her post of responsibility. She was probably a natural person to put into Reading Recovery. She in turn brought all of us to another school. We all went there. We went to Rowan for Discipline for Learning" (Patrice, Literacy Coordinator, Beech School).*

4.3 Conclusion

In summary, three out of four Irish Urban DEIS primary schools had a system for building knowledge that was 'live' in the DEIS school. In general, the school's individualised school vision played a role in creating literacy targets that guided the DEIS literacy initiative. Many positive attributes were reported by educators in the area of relationship building. From the data, the majority of schools have an internal system, with a focus on capacity building and professional development (MacBeath, 2006). Many of the literacy groups had a focus, with a

wide range of expertise in the area to support internal professional development, with only a handful of external experts supporting the DEIS schools. The key factors that were highlighted to build and develop a school's infrastructure were:

- A healthy school climate can support educators when they feel they are trusted and respected.

- The school's moral purpose and vision support DEIS schools to bridge the gap between aspirations and effective action by, implementing an individualised planning process, incorporating targets/moral purpose, and through good data, action, and processes for reflection (Munby and Fullan, 2016).

- It is incumbent on the leaders in DEIS primary schools to encourage a shared understanding about the nature of their work (Fullan and Quinn, 2016): observe, monitor, amend, and support the literacy journey through opportunities for open discussions and reflection time.

- "Leadership is not the exclusive prerogative of people in positions of authority" (Linsky and Lawrence, 2011, 6).

- Some DEIS schools are engaged in creative literacy projects, where analysed probabilities are encouraged and supported, with a focus on shared leadership. Shared leadership has the potential to support stability for the school in the future.

- The principal leads the school culture

- Three out of four DEIS study schools have prioritised a senior staff member in the role of literacy coordinator

- A wide variety of literacy experiences were willingly shared through professional discourses at staff meetings and small group planning meetings.

4.4 QS 2: What professional development do DEIS educators practice in the implementation of DEIS literacy initiatives?

In this section, the findings of the study explore how teachers learn and develop their knowledge base in the Irish urban DEIS primary school. In this section, the research study findings delve into approaches and styles that have affected learning by the participants in their respective Irish DEIS urban primary schools. The researcher is interested in exploring

which styles and approaches promote sustained development or if this is dependent on the person rather than the method and if a type of teacher learning which can be recommended. The 'gradual release approach', where models of professional development ascend in quality and critical professional development (West-Burnham, 2010; Kennedy, 2005; Joyce and Showers, 2002), were evident in the study, however, rigorously following the line of development was not apparent (Table 11).

Table 11. Models of Professional Development: Adapted from West-Burnham (2010), Kennedy (2005), Joyce and Showers (2002)

Models	Descriptor	Purpose of Model
The Training model	• Opportunity to up-date skills • Usually presented to the teacher by an expert	Transmission
The award-bearing models	• Validated by universities • Perceived to be academic rather than practical	
The deficit model	• Using CPD to cure/solution the weakness/problem	
The cascade model	• Teachers attending training events and then cascading/disseminating the knowledge to colleagues	
The Standards-based Model	• Standards versus competencies • The real issue is the implementation of the standards in the school	Transitional
The coaching/mentoring model	• One-to-one relationship • Mentoring akin to apprenticeship/hierarchical	
The Community of Practice	• More than 2 people • Allowing the members for that community to exert control/power over the agenda	
The Action Research Model	• Participants are the researchers	Transformative
The transformative models	• Using a range of models, with a sense of power and tensions	

The framework devised by Geijsel et al. (2009), which explored learning activities carried out by teachers in DEIS primary schools, was the clearest and best-fit approach to analysing and collating the voices of the participants in this research study. Using the framework of Geijsel et al. (2009) for learning processes 'is seen as an active and constructive process that is problem oriented, grounded in social settings and circumstances, and takes place throughout adults' lives (Geijsel et al., 2009, 407). The sub-themes that support the examination of learning processes, which will be discussed further, are keeping up-to-date, changing practices, experimentation, and reflective practices.

4.4.1 Keeping Up-To-Date

This section explores "collecting new knowledge and information" (Geijsel et al., 2009, 406) and the contexts that were practiced. For the DEIS First Steps Reading tutor, one had to attend five days training external to the school setting. Thereafter, the DEIS advisor would visit the school, to support the DEIS programmes that the school has implemented. Two teachers from Willow School who were both class teachers and have experience in literacy and numeracy specialized programmes were asked about the schools needs from external supports, such as PDST in the guise of the DEIS advisor. Ailish outlined the schools' criticality towards external supports and evaluated it based on the focus of the school and its needs. Susie extended this concept of a DEIS advisor supporting a school if there was sustained support, where a relationship could be established and professional dialogue could ensue. With the expertise in Willow School in literacy, it was deemed by Susie unnecessary to attend a generalized whole day training that was not personalized to their needs:

> *"It would depend on whether it was something that we had to do or need it. We would have a look at it to see if it was beneficial to the school. Is it going to fit in with everything that we have" (Ailish, Willow School, Class teacher).*

> *"An outsider who is different from your staff and someone that you can build a relationship with, that you can feel comfortable enough to ask questions to, whereas, where you are at a whole day's training, you don't" (Susie, Willow School, Support teacher).*

Critical, rather than continuing professional development (Jones, 2011), was demonstrated in three out of four study schools, not in Oak School, submerged in lifelong learning, where

contemplation, deliberation and questioning new developments and ideas, rather than a mere passive acceptance of change. From the perspective of a DEIS advisor, sustained support has been eliminated, with resources being redirected to other foci. The DEIS advisor is currently reverting back from promoting tailored support to generic packages, according to Conor:

> *"When on the DEIS team, you were designing new stuff, every time you went in almost, whereas what most advisor are doing now is, the is a set…PDST have set packages for things like reading fluency, phonological awareness, for comprehension" (Conor, PDST facilitator).*

In Oak School, where the teachers received generic training from PDST or an affiliated body, with limited or no follow-up discussion amongst the whole staff. In Oak School, there was no assigned literacy coordinator and it was up to each teacher to decide on their individual development needs:

> *"You go for a day with loads of information thrown at you, for a week you are thinking about it and then something else comes up, you move on…You go and then you move on, the book ends up at the end of a pile" (Kate, Oak School, Class teacher).*

The principal in Oak School further discussed that not all staff received the same training, thus whole school discussion may be more difficult in the future. For development and time given for professional discourse, the principal in the other three study schools actively supported change from expertise to making time and resources available. A school in the same room receiving training does not automatically mean that all participants are in agreement and working as a team; it may be mere 'contrived collegiality' (Hargreaves, 1994). In one out of four study schools, there was no move from isolated privatism to collective responsibility (O'Sullivan, 2011), as displayed in the extract below:

> *"Part of the new language curriculum day that we were given by the Department. Half of the staff went to a seminar to an SESS person here, on site, on behavioural management. They came out of it raving. I didn't attend it as I had enough to be doing and that's the type of thing that works" (Oscar, Oak School, Principal).*

It is worth noting here that seventeen of the interviewees described their process of keeping up-to-date happening in bursts (Oates, 2008) when a need for professional development is identified. Continual discourse happened at staff meetings, literacy team meetings or as small groups, which reflected on changing practices, which may be a better descriptor, as outlined by Gayle:

> *"We see ourselves very much as part of a team and we learn from one another so somebody has an idea or somebody reads something new or when I am out in Tallaght, I may pick up so ditty thing and bring it back and everybody is very enthusiastic about sharing what will improve" (Gayle, Beech School, Literacy coordinator).*

Interestingly, Kayla and her approach to learning leans more to using the internet, rather than educational journals, using short articles found on websites or using links from articles that are short and which have quick reference information. With technology becoming a part of everyday life for educators, it would be worthwhile to consider further research regarding innovative professional development, using technology as the main conduit:

> *"Big manuals don't suit me as a learning style generally. I'd read kind of shorter articles or snappier things or something that is kind of reader friendly if you know what I mean but I would research online about stuff" (Kayla, Beech School, FS Reading tutor).*

The following section builds upon the learning process that keep teachers up-to-date with professional practices, which can lead to further action to change literacy practices in the classroom and, in turn, the school.

4.4.2 Changing Practices

Teachers changing practices toward promoting process-oriented student learning, social and meaningful learning and student motivation to learn (Geijsel et al., 2009). One pertinent factor to support changing practices in literacy is the First Steps tutor. From the study schools, three of the principals chose the tutor due to their communication and collegiality with the staff. The principal in Oak School asked the staff who would like to attend, however, evidence of this approach is inconclusive, as the school was affected by the attrition of staff (Morgan and

Kitching, 2007). Conor, from the perspective of a DEIS advisor, gave his stance of the selection of the First Steps tutor.

> *"It all really comes back to the person, the tutor- was this person just plucked out of thin air two days before they had to go on the course, or was the principal stuck or had the principal really thought about it and this is the best person or ask the staff that we have this opportunity to up-skill" (Conor, DEIS advisor).*

Conor extended this view to schools that he found innovative, where First Steps tutors were picked purposely by the principal as an "investment to produce and apply new knowledge" (OECD, 2009) however, a significant majority did not have skills to facilitate change in a school, irrespective of their knowledge of literacy practices:

> *"They didn't know how to CPD themselves. They didn't know how to put a plan of implementation together themselves. Therefore when we left, they were kind of left in the dark. We don't have a DEIS advisor now, so we don't know what to do. So, in order for the implementation, you have to ensure that there are these management systems in place" (Conor, DEIS advisor).*

From the study, it is evident from the interviews and from observing the participants personal expressions of the importance of leadership, which has been highly significant during the changing processes in their respective schools, from allocation of resources, time, support and opportunities to engage in professional dialogue. The following extract from Maria, a principal in Pine School has been active in all areas of change, ensuring a cascading of literacy experiences and expertise to a wider group. Maria would ensure that each of the three First Step tutors was on the management team, to intertwine developments with those in other curricular areas:

> *"Nearly at every staff meeting, there would be a focus on numeracy and literacy….Then, I suppose, our plans are tailored to meet our needs, grown from the grass roots up and I think that we have gone slowly but surely, I think our standards have risen and it has impacted on the senior school, changed all their material" (Maria, Pine School, Principal).*

4.4.3 Experimentation

There can be a huge overlap between the categories of changing practices and experimentation in regard to learning processes. A humorous, yet powerful "battalion" (Gayle, Beech School) of teachers wanted to introduce 'Power Hour', a structured literacy initiative with four stations being facilitated by four adults. Whilst three of the members of the group had attended a variety of training sessions, the ultimate test for Gayle and her team was to visit a school and see the initiative in action. This is an example of changing practice and also experimentation. Gayle, a literacy leader could get a whole group of staff members to engage in critical discourse to radically change literacy in Beech School. Whilst the initiative commenced five years ago, it has been changed, improved, updated, with a system to train new teachers in their school implemented:

> *"A whole battalion of us one morning got into our cars and we drove up between half nine and half ten and we went into those classrooms, we came out and we went oh my god" (Gayle, Beech School, Literacy coordinator).*

Gayle's description of observing classes and watching teachers model 'Power Hour' classes, when they returned to their own school, experimenting and amending over the past five years. There is prominence in the majority of schools for literacy experimentation. Indeed, findings from three of the DEIS study schools consolidates Eraut's idea that learning from one context can be quite limited and seeking resolutions from a variety of contexts is preferable (Eraut, 2014). Experimentation explores the "intentional effort of teachers to try something new within the classroom" (Kwakman, 2003, 153). To enhance literacy practice, experimentation needs to be followed by discussing and sharing practices if the intended practice is to expand and be sustained (Fullan, 2008), otherwise it is knowledge that is kept in isolation:

> *"The idea, in the long term, train these teachers really well and then in the long term, those teachers will be going into other classes and they will be very well skilled, do you know what I mean" (Molly, Pine School, Literacy coordinator).*

4.4.4 Reflective Practices

Reflective practices acknowledges that teachers have their own style and method of teaching, which also enables "reflection on the practices which may result in changes to routine behaviour" (Kwakman, 2003; Schon, 1983) and practices tailored to suit the local context.

> *"It's enthusiasm even that your there after ten years. For example we pay each other visits out to schools so the last visit somebody came in to watch me teach and reading recovery is all about watching people teaching and giving suggestions and helping them and maybe saying, well we need more of this or that and then maybe I watch you and then you support. I saw her using that in her reading recovery lesson and I thought I really like that" (Gayle, Beech School, Literacy coordinator).*

Time is given to professional discussion in all of the study schools, however three of the four schools, Willow, Beech, and Pine Schools, have structures of action-reflection and action (Megginson and Whitaker, 2007), which is expressed by Gayle, through the context of staff meetings, senior management meetings, and class level team meetings, both on a formal and informal basis.

The participants in the interviews and also the researcher's attendance in the staff room at break times reflected the professional relationships and friendships that developed. Professional development and the sharing of practices have moved from solely an intellectual level to encompassing an attitudinal, social, and behavioural level, consolidating the views of Evans (2010). There appeared to be a connection between knowledge productivity or professional development embodying personal, social and professional 'domains' (Bell and Gilbert, 1996). Jackie talked about her relationship with her colleagues as natural and at ease with each other:

> *"It's just professional friends comfortable enough with each other to expose weaknesses and strengths and share" (Jackie, Beech School, FS Reading tutor).*

It is interesting following a conversation in the staff room of Pine School where there was a discussed regarding the strong link of family and friends that were part of the Irish educational domain. This linked literacy educational discussions with the teachers' life outside their DEIS school context. Ann talked about sharing ideas and knowledge amongst her friends and

relatives during meals in restaurants and feeling at ease to discuss strengths and challenges. It is a form of professional community or mentoring that has evolved for Ann.

> *"I think it is great learning from your peers, as well. Especially speaking to my own friends who are teachers. Just getting different ideas off them, it is great. You could be doing the same thing every day and think it is going fine and you exhaust one idea. It is great getting different ideas off people….Sometimes, there should be a ban on teacher talk. It is great. Both my sisters-in-law are teachers, so it is shop-talk" (Ann, Pine School, Class teacher)*

There is a plethora of government driven policies that have imposed DEIS literacy solutions with literacy standards to be achieved (Land, 2004) that have not directly stimulated learning; rather, it appears that it is the leader who spearheads action at a localized level that has more impact. The impact of professional development is improved student outcomes (DES, 2016; Earley and Porritt, 2010), which is apparent in the majority of the study schools from standardized assessments, running records, and reading levels. There does not seem to be a 'gradual release method' from modelling and accentuating along the continuum to learning communities. The purpose and modes of the learning process model is more important as to the quality of knowledge productivity, which promotes shared dialogue from transmission, transitional to transformative (Kennedy, 2005), rather than the type of event, such as training or coaching.

4.5 RQ3: What stimulates DEIS educators to engage in literacy developments?

This section will explore the stimulant factors in the Irish urban DEIS primary school context that drives, implements and reinforces the change process, which will integrate as the school climate over time. The stimulants are motivation factors that can explain how certain behaviours start, stop, or are sustained (Addison and Brundrett, 2008). There are no control groups to compare schools in the DEIS initiative, thus, it is vital to get behind the "political arithmetic" (Pring, 2004, 97) of the literacy improvement in DEIS primary schools and develop a portrait (Tuohy, 2008) of what stimulates educators in Irish DEIS schools to engage in the literacy journey.

4.5.1 Evaluation

4.5.1.1 Trends and Patterns

Most DEIS schools in the study tended to consider the importance of assessment of student achievement on a summative basis, using a suite of assessment tests, including Irish standardised testing in literacy, with half of the study schools (Willow and Beech School) using Marie Clay's diagnostic assessment to identify literacy knowledge at the Junior class levels. Although each school must submit standardised results for 2nd, 4th and 6th class levels to the DES, all DEIS schools in the study use standard assessments with all classes from 2nd upwards on an annual basis. Findings showed a consensus in terms of measuring, collating, analysing, and accumulating literacy progress annually, using Irish standardised literacy assessments to affirm patterns in literacy throughout the school. Three out of four of the Irish DEIS research primary schools, excluding Oak School, presented summative analysis, which in turn acted as a platform to initiate professional discourse on celebrating achievements and focus on areas of challenge in literacy. In Oak School, the Reading Recovery teacher used the standardised results solely to indicate those students that required further diagnostic testing or required further literacy intervention:

> *"We have totally transformed the way that we teach reading because we would have had one or two readers per year and it came from a request from teachers that children in the class were so below that level and some were above that. It just wasn't matching what we needed in our school" (Lara, literacy coordinator, Willow School).*

The notion of year on year school improvement in literacy in a school is questionable (Fullan, 2008; Oates, 2008; Gray, 1999) and the four Irish DEIS study schools support this. In Willow School, running records (Clay, 1991) highlighted improved reading levels on a frequent basis, however, the improvement had not transferred to the standardised literacy scores. Through literacy team meetings and staff meeting discussions, targets were directed towards comprehension skills over a three year period. In turn, support from PDST and training was sought by Lara, the literacy co-ordinator, to support the three-year target. In time, the amelioration of standardised results was expected and achieved. "Bursts" (Gray et al., 2003, 88) is a more realistic descriptor of patterns and trends relating to improvement, with a focus on maintaining this, rather than year on year school improvements. From an external

viewpoint, a PDST DEIS advisor described the impact of literacy improvement at a professional level, observed in the DEIS context:

> *"You can see the improvement for week to week, children's copies, teachers saying that the results we are seeing is great. That is where you say 'wow', this is actually making a difference, this is not all about me, it's all about the teachers to keep going. That for teachers is where the motivation comes from to keep going, to keep going with an initiative" (Conor, CPD Facilitator).*

An unexpected consequence of collating standardised testing results, was that three teachers in different DEIS contexts, who personalised the targets in the school to improve literacy, had tracked their students as they advanced through the school to review the consolidation of literacy gains that were made. Two comments from Kayla and Grace demonstrate their determination and their drive to go beyond the personalization of school goals to setting up students as "readers for life" (Kayla, First Steps Reading Tutor, Beech School). Furthermore, Kayla and Grace's comments displayed a passion that motivated their contribution to literacy improvement, not only to their school, but also to society at large:

> *"I know it's only one side of things but I like to measure things as well, like you get your results and measure progress and how much they have progressed. It makes sense to do it like that to me anyway" (Kayla, First Steps Reading Tutor, Beech School).*

> *"Yeah, I was always waiting to get that result. Waiting for my students to get standardised tests in first class and then I was saying, now that they are not with me, I was waiting to see if their progress would continue. I actually used to track them when they went up to the senior school to see how the class were doing and did they keep up with those improvements. I also wanted to see overall our results were improving every year" (Grace, DEIS advisor).*

4.5.1.2 Planning and Goal Setting

In Willow School, Beech School, and Pine School, whole school literacy folders, both soft and hard copies, were readily available to clarify the layout of literacy content, the literacy DEIS plan, and amendments that have been made over the DEIS decade. The three literacy coordinators in these DEIS schools, demonstrated the power that has been exerted in the

schools to tailor the plans and its content to suit their own schools, respectively. What was very much in evidence from the literacy coordinators was their openness to describe the style that has evolved to up-date the folders and how the folders support their respective teachers' planning. The researcher observed in the three DEIS schools the pride that the literacy coordinators had in the evolution of their DEIS plan:

> *"I suppose at a staff meeting you see a list of things that come up and the things that you should be doing, oh dear God, there is a list of things that I should be doing. They keep you on track of what exactly we are doing and slight reminders, as a school of what we are doing. It kind of affirms what you are doing really" (Ailish, Teacher, Willow School).*

> *"The reward is that vibe from a staff and seeing the child move up a bit in their numbers" (Susie, Teacher, Willow School).*

These comments are very much in agreement with Geijsel et al. (2009) and Morgan et al. (2009) that school targets and goals have been subsumed into personal goals by three out of four DEIS schools in the study. Ten years after the commencement of the DEIS initiative, an intriguing consequence of the initiative was the team dimension exhibited in the DEIS schools and the reference to 'we' when discussing goals and actions. These comments were also reflective of teachers' self-efficacy increasing when the improvement was resolutely rooted in goals that have been created by the individual school that are clear and realistic (Bandura, 1997).

In Oak School, whilst it was not apparent that school goals were created, active, or personalised in recent times, nor was documentation made available; this does not necessarily imply that teachers are not using goals as a motivator, however. It is worth noting here that a teacher supporting students with learning difficulties creates an 'Individual Education Plan' for each of her students. Over time, Saoirse has applied the experience she has gained over her years of teaching and tailored the style of the 'Individual Education Plan' to suit her needs and documents with information that is pertinent, from Saoirse's perception, to support the student with learning difficulties:

> *"I might do a little more of that. But then again, I have made my planning practical for me. Whereas at the beginning, I used to say, what will I do but now I think they are*

closer: how I plan and how I think someone wants me to plan. I can justify it. It is experience. Experience, yeah" (Saoirse, Reading Recovery teacher, Oak School).

4.5.1.3 Standardised Testing

The evaluation process of DEIS, by the DES, for the most part is summative with the ERC carrying out specially devised normative testing, based on the Drumcondra standardised assessments, for reading and mathematics. This focus and emphasis on reading and mathematics mirrors international studies, such as PISA, PERLS and TIMSS; as one principal commented, "it's the old thing, what is measured matters…they pay attention to it because of that" (Lori, Principal, Willow School). Twelve of the interviewees reported that standardised testing motivated them, however, international reports on literacy had little or no affect, either positive or negative, on teachers or their school. It is worth noting that all DEIS schools emphasised that they are more concerned with what patterns emerged at a localised individual school basis, rather than nationally or globally, which echoed Morgan et al. findings (2009).

> *"Oh absolutely yes and when I see my bell curves I get very happy. But I suppose you feel like you have done a good job that's one side but I suppose the other side of it is knowing that you have set up readers for life and that is a bigger part of it, you know" (Kayla, tutor, Beech School).*

The DEIS primary schools in the study were very much aware of 'the multiplier affect' (Smyth et al., 2015, vi), in urban areas, designated disadvantaged, and how they have little or no control over many aspects of their students' lives, which can demotivate and at times frustrate teachers:

> *"Sometimes it is hard when the child is just not getting it and you are trying to find different avenues to make it click with them. Sometimes when attendance is shocking, it is so unfair to the child, not getting to reach to their potential and it is not their fault either. That de-motivates me. Out of your hands? It is very hard when you see a child with so much potential and they are not going to reach it. It is out of their hands that they are not coming to school but..." (Ann, Teacher, Pine School).*

The stimulants to keep teachers wanting to improve standards in their classroom are based on more than standardised testing alone. There are combinations of forces from teacher

observation, comments, copies, and a variety of other methods that are dependent on qualitative methods that, in turn, inform teaching and learning:

> *"Absolutely and so in many ways it is qualitative and not just quantitative. I think the qualitative for us is more important because it is such a cliché, but it is so true. If we can generate a love of reading that is a life skill. That is something that they would carry forever" (Patrice, Principal, Beech School).*

Across the data collated from interviews, documentary data available in the DEIS research schools and researcher observation in the DEIS context, there is a strong propensity to view teacher observation and formative data as vital to constructing a snapshot of student development and attainment to support student monitoring and evaluation.

4.5.1.4 The Inspectorate

According to Kushner (2000), the role of the Inspectorate is primarily evaluative and thereafter supportive in improving the quality of the educational journey for the student, teacher, principal, and parent. Through personal and professional experience, Anya used an analogy of 'a goose laying a golden egg' to describe the teacher who is doing one's best and should be acknowledged by the inspectorate for the positives and then exposed to new methods in an empathetic manner, leaning towards an individualistic response rather than an institutional response. The following is an extract from Anya's discussion regarding the Inspectorate and their Whole School Evaluation (WSE) process:

> *"They can but I would not be convinced that they utilise that power that they have… Sometimes there are better scores and better ways of doing things but you cannot be top dog at everything and it is important to see that when somebody has all four engines going as best as they can, they get a well done. I think to be realistic, don't kill the goose that lay the golden egg. I mean it is very important to be realistic…to make sure there is a sense of understanding, empathy and support" (Anya, PDST advisor and principal).*

Further to Anya's viewpoint, it is pertinent to note that two of the four urban DEIS primary schools, Willow School and Oak School did not have a WSE during the appointment of the current principals, who were appointed over a decade ago, Beech School had a WSE eight

years ago and Pine School had a WSE within the last academic year. The teachers who were interviewed from the DEIS school, who had a WSE within the last year, commented on affirming practices that have been implemented since the DEIS initiative commencement and from reviewing the WSE report. Teachers were motivated, through transactional leadership practices, to review the WSE from a stance of educational responsibility, rather than accountability, which personifies Sugrue's aspiration (2011) and that of Sahlberg's professional discourse (2015).

> *"We made teams after the whole school evaluation to see where weaknesses were and to slide into roles and lead a team to focus on that area and to have a targets" (Jackie, First Steps tutor, Beech School).*

It is interesting to note that Jackie and the teachers merged the relevant recommendations in their professional opinion in the WSE and, in turn, incorporated them into their current DEIS Plan.

4.5.2 School Culture

4.5.2.1 Cultivating a Learning Environment

Active literacy teams steered literacy learning in three of the four DEIS schools, where time was given at staff meetings to engage in professional discourse and to keep agreed literacy targets to the fore. Oak School had no literacy co-ordinator in over five years due to her retirement and a DES moratorium was placed on recruiting a replacement; 'when she went, it went with her' (Saoirse, Learning Support teacher, Oak School). Without a literacy leader, much of the literacy development takes place on an individual teacher basis, rather than on a school focus. The principal in the urban DEIS school was extremely busy, with an expansive unending role. The principal voiced that the learning support team managed the literacy intervention with their expertise in the area and excluded himself from the task.

> *"My people are meeting as we speak. They will be here until 3pm or not. I don't care. I don't sit in on it. They are the experts and they have skilled up" (Oscar, Principal, Oak School).*

These comments are not collaborated by the other three DEIS schools, where the principal had an active role in keeping up-to-date with literacy developments in the DEIS initiative.

Findings show a consensus in terms of the importance of the principal to see the macro developments in literacy and keeping it to the fore of professional dialogue at staff meetings and professional development sessions. All teachers in the four study schools identified the importance of the principal's input and support in order to resource and give time to ensure literacy stays at the fore of the school's agenda.

> *"As a team, the dynamic among the team to help one another, to support one another and to share the resources, the team excel on those things" (Cathy, DEIS advisor).*

Sustained visits to DEIS schools by the DEIS advisor, where improvements could be observed, have been abandoned, thus one of the main sources of motivation and self-efficacy for DEIS advisors had disappeared. The extract demonstrated one common response from the DEIS advisors:

> *"I guess it's the feedback from the people that you are working with and the change that you see from visit to visit. This is where the thing lies now, when the model isn't sustained, you don't get to see improvements" (Conor, DEIS advisor).*

4.5.2.2 Collaborative Culture

> *"If there is something that we need, we are willing to work on. People are willing to give things a go and say if it is not working" (Lara, Deputy Principal, Willow School).*

All four DEIS schools in the study have Reading Recovery teachers currently in their schools. This raises the issue of linking the Reading Recovery training with at least one teacher in each of the DEIS schools, with actively supporting the literacy developments at the lower class levels of the DEIS school. Each school reported a variety of modifications that they implemented for example, using individual levelled readers, rather than class readers. There was a focus on expertise and a willingness to share the new literacy knowledge, which was strongly reflected in the responses of the teachers, trained in Reading Recovery.

To foster cooperation in sharing practices and expertise, Cathy, a DEIS advisor recounted how she started a Professional Learning Community (PLC) and invited local schools to engage in

this community. Interestingly, this PLC motivated Cathy to let the agenda evolve with the literacy PLC members. It is important to note that the concept of the 'wisdom of a crowd' (Fullan, 2008, 46), supporting and enhancing adult learning in interschool PLCs, would be interesting to explore, however, it is beyond the scope of this study:

> *"Offering to come out into a community of learning to engage in some aspect of literacy- for them to get involved to any extent that really gives you motivation to facilitate whatever they are looking for" (Cathy, DEIS advisor).*

These comments highlighted the importance of cultivating a collaborative culture where teachers were engaged in designing and tailoring the DEIS initiative. All DEIS schools engaged in the study were open to new ideas and the majority appeared to be 'genuinely participative' (Riley and MacBeath, 2003). The majority of the DEIS teachers, nine out of eleven class teachers, created their short-term plans with the teachers at the same class level, informed by the school literacy plan. Through scheduled planned meetings, three of the four schools maintained their stance on changing the 'class reader' in the junior classes to individualised levelled readers. In these DEIS schools, staff meetings, one-to-one meetings, senior management team meetings, and class level meetings supported professional dialogue to investigate the areas of literacy reading that were strengths and challenges. The staff created the agenda, whilst ensuring their targets for that period stayed to the fore. From the responses of the interviewees, the meetings appeared to enhance teachers' appreciation of their professional self-efficacy:

> *"I like working together, it brings its own energy. Like, I love working down with Kayla. I just absolutely love it and Kayla thinks the same as I do and we have a bit of a laugh and we also don't take it too seriously like they are kids" (Gayle, Teacher, Beech School).*

> *"Staff said that they needed more help around group work. Then we had to set aside time at staff meetings to collectively figure out how we would do that" (Lori, Principal, Willow School).*

4.5.2.3 Effective Leadership (resources, pace and innovation)

The current data collected in the research study, enabled further depth as to what main leadership factors motivated teachers in urban Irish DEIS primary schools to engage in literacy improvements. The data collected, supports Senge's concept of teachers having the power to alter their schools' systemic systems (1990), however, the degree of power exerted is varied:

> *"The stress levels come and the inhibitors come when you don't have the time. The inhibitors come when you don't have the time, then there are gaps…. lack of parental support. You are struggling and trying your best" (Lara, Deputy Principal, Willow School).*

> *"I suppose the timing can be wrong, sometimes I may not have left enough time in embedding something down even though I may think they are entwined" (Maria, Principal, Pine School).*

Starkly apparent across all schools was the issue of time and the pressure to keep literacy targets to the fore. Lara and Maria voiced typical responses from all the DEIS schools regarding timing and pace to develop literacy. It would appear for Maria's comment, linked with further discussions that it was through reflective experience of initiatives and reflective practices that knowledge can be gleaned to support the next initiative, becoming more knowledgeable of times, pace and structures that work best in the individual DEIS school.

The principal played a hugely significant role in resourcing the DEIS literacy initiative. The principal has a DEIS school budget where decisions on spending were ultimately dependant on the principal:

> *"I think its constant affirmation, ensuring that they feel supported. Assuring them that if there is a training course that they want to go on, they have picked out, that we will provide the finances for that and get substitute cover for that" (Patrice, Principal, Beech School).*

Interestingly, the DES had commenced the initial training for schools with their new Language Curriculum. Schools had one day of school-based training for the whole staff, where the students stayed at home. Anya highlighted a basic issue that affected their school's preparation for their school based development day, namely the DES not issuing the Language Curriculum

books in time for Anya's school, thus, she relied on two staff members' input who attended an introduction day by the DES:

> *"Well, at its most basic level, for the language curriculum, the day has come and gone and we are still waiting for the books" (Anya, PDST advisor, Principal).*

Due to the economic crisis in Ireland, since 2008, the DES enforced a moratorium on appointing teachers to new senior positions in schools or replacing senior staff member that leave or retire. All personnel in the state school system had their pay reduced significantly and currently await its reinstatement. This has affected schools throughout the country.

> *"So, the motivator isn't about…you are a professional, you are paid professionally. Actually, the loss of 25% was really a big de-motivator. And also losing your senior management team, we have no senior management team here, we have an assistant principal" (Oscar, Principal, Oak School).*

The majority of schools in the study, with a strong culture of collaboration, were supporting each other and kept their literacy improvements to the fore, working as a team. This pragmatic stance was articulated by Lori and the extract from Lori's interview provided a clear example of collaboration that supports 'the wisdom of a crowd' stance by Fullan (2008):

> *"You know that collectively we can support one another and I do think that we have a culture of we can do better. It is alright to look and say that we can do something better" (Lori, Principal, Willow School).*

From the interview process, the evidence suggested that there was broad agreement reflecting the view that the principal played a pivotal role in supporting innovation in the DEIS school. In the study, the principal's influence to motivate or demotivate teachers to engage in "calculated risks" (Fullan, 2007, 8) was strong. 85% of the teachers interviewed voiced that the principal's support was vital to enacting innovation and making aspirations become realities:

> *"I had spoken to the group that spear headed the initial plan and where I was coming from. I don't think that I explained myself very well because it kind of took nearly the whole year to get a little bit, we got there. We really embedded it this year, you know"* ***(Maria, Principal, Pine School).***

One principal in Oak School firmly opposed this viewpoint and was unequivocal in his view that energy needed to be conserved to deal with managing the school and to leave academic issues to the teachers, where the expertise was situated:

> *"Because if I put professional input into that, my burnout of the rhythm would be gone by October. My battery levels will be gone so low that I won't be able to get them back up'....No, no, no. A principal in Ireland is a ridiculous role. It is a ridiculous role. It is too many things to too many people. Only people in the job would understand, you lose sight of the classroom within probably a day. And you don't have to catch sight of the classroom again in your career" (Oscar, Principal, Oak School).*

Oscar offered a more detailed breakdown of the role of the DEIS school principal in Ireland and its complexity. All four principals in the DEIS study schools, and a DEIS advisor who is currently a principal, would concur with Oscar that the role of the principal was diverse, extensive, and unending; however, three principals in the study prioritised their involvement in curriculum issues. This would seem pertinent in the smooth system running of the DEIS school, especially when innovations required financing, resourcing, and a time schedule for implementation. Lara, offers a more detailed interpretation of the importance of the principal and literacy coordinators to support new learning in the school, irrespective of professional development offered by the DES. It was the school leaders that supported the cascading of new learning, even though official time to share new learning was sparse or non-existent:

> *"They did that with the writing where they gave us a day. We didn't have any time when we came back, bar what time to could get yourself. You were given the knowledge, given very good training but you weren't given the timing when you came back, official time when you came back" (Lara, literacy coordinator, Willow School).*

4.5.3 Intrinsic Motivation

Significant motivators for teachers in DEIS schools appears primarily to be intrinsic (Addison and Brundrett, 2008). Four main areas of motivation, both positive and negative, have emerged from the semi-structured interviews. The main dimensions that have emerged under the umbrella of intrinsic motivators are; responses of students and parents, supportive colleague,

satisfaction gains from event, and achievement that is linked with self-efficacy. These personal expressions of intrinsic stimulants are highly significant and support the development of a framework by the researcher to encourage the constant striving towards improvement. The findings from all schools reflected the positive impact that students milestones and achievements had on entire school communities. What is very much in evidence from the data was the frequency of the affective episodes and that they occurred frequently and continuously:

> *"I feel like the more I do the more I get out of it" (Jackie, Reading tutor, Beech School)*

> *"I love seeing the kids saying things like: I can read, I remember Alice saying 'I can read now' and it was only because she was given the right book. Scary. That sort of thing, that the children feel success. That is hugely important. Or the pride that I see parents taking in the child's achievement" (Lori, Principal, Willow School).*

These comments are in agreement with Morgan and Kitching (2007) that motivation stems from affective episodes that occur in the daily life of the school. An unexpected response during the interviews was the deep moral purpose that teachers and principals expressed to assist students to read. The extra drive towards giving students' life skills that would support them throughout their adult life. Grace described a conversation with some fellow teachers when she commenced in a DEIS 1 primary school where teachers had low expectations for their students attaining an Irish Leaving Certificate qualification at the end of their educational journey in Secondary school. She spoke of how this conversation motivated herself, under the guise of First Steps Reading tutor, to inspire staff that their students deserved more, eventually moving towards collective responsibility (O'Sullivan, 2011):

> *"As I said there was a moral sense of purpose, these children are never going to get a leaving cert in literacy" (Grace, DEIS advisor).*

4.5.3.1 Support of Parents and Colleagues

Three-quarters of class teachers (nine out of twelve, including Grace when she was a class teacher, who is currently a DEIS advisor) are actively engaging parents in their drive towards literacy improvement in the study. With parents viewed generally as a positive resource in

increasing literacy attainments, this again was powerfully reflected in the responses from teachers and principals:

> *"Getting feedback from parents and they have come on so much. All of that feeds into motivation" (Ailish, Learning Support, Willow School).*

> *"I wanted the parents to see what a living classroom looked like and to see all the areas and the lovely displays and the colours on the wall" (Jackie, Beech School).*

Cathy, a DEIS advisor, would affirm the view that parents' parental involvement is important and actually happening in urban DEIS schools, which was viewed as a positive community development which "is recognised, not a threat, it is actually happening" (Cathy, DEIS advisor).

On analysing the interview data relating to motivation, the support of colleagues was a strong stimulant to motivate teachers to continue improving. Three out of four principals, excluding Oak School, kept track of literacy developments and the response of teachers on a timely basis. Indeed, it was evident for the collated data, that it was vital that principals observed and monitored, not only what one saw, but also what one felt was the school climate:

> *"When the teachers are happy and satisfied, it's very obvious and there is an energy that they give off. It is like anything, when you are doing something that you love and that you are getting satisfaction from, it doesn't seem like work, so people are quite happy. You would know very quickly if people were unhappy, really pull the plug and re-think" (Patrice, Principal, Beech School).*

> *"It might sound a bit utopic, we do have a really good staff that are willing to, and sometimes if people are saying that it is not a good idea, then, they have a good reason for it" (Lori, Principal, Willow School).*

Whilst ten teachers in the study experienced collaborative practices, it was interesting to note that self-efficacy can be reinforced on an individualised basis also. Saoirse is a Reading Recovery teacher who is motivated by the Reading Recovery initiative; "It has kept me going. It is successful" (Saoirse, teacher, Oak School). The students that Saoirse took for Reading Recovery increased their literacy levels, which supported the development of her self-efficacy.

4.5.3.2 Satisfaction of Event/Activity

Across the interviews, three out of four schools were engaged in new practices in reading, where the class reader was obsolete and an individualised reading level system was being used. The extracts highlight the sense of achievement that the majority of DEIS schools in the study were experiencing and, furthermore, the sense of achievement from enjoyable literacy tasks. Reading had become more child-centred in the study DEIS schools and the extracts highlighted the passion that they had for literacy and how this in turn promoted self-satisfaction:

> *"There is a better way of teaching, children are enjoying it, children are succeeding" (Lara, literacy coordinator, Willow School).*

> *"I don't know I just love it and I just like seeing results. I feel like the more I do the more I get out of it" (Jackie, tutor, Beech School).*

> *"I like it, I am interested in it, I think it is important, valuable" (Molly, Literacy coordinator, Pine School).*

4.5.3.2 Achievement and Link with Self-Efficacy

Teachers in Ireland with high self-efficacy have a desire to explore better and effective methods of teaching which are highlighted in the extracts from the literacy co-ordinators in DEIS primary schools (Morgan and Kitching, 2007). Lara echoed some of the views that are expressed in the literature chapter where achievement has links to self-efficacy. The three literacy co-ordinators, Willow School, Beech School, and Pine School, wanted literacy scores to improve, acquiring skills and ability to fulfil that target. Lara's extract depicted a group of teachers exploring and ameliorating their best practices, rather than searching for new or next practices:

> *"Because we are teachers. We just want kids to do something a little bit better. If you stop trying to raise standards for yourself…You are always reflecting. If you are not reflecting, you are just coasting along. If you promote being a reflective practitioner, then when you see the gaps, you have to try… you want to try and improve it" (Lara, Literacy coordinator, Willow School).*

Cathy, DEIS advisor visited about thirty schools annually and provided sustained support to DEIS schools nationwide. Cathy revealed that the PDST literacy group in her view had a very high calibre of facilitators on the team. Cathy's extract demonstrates the high levels of self-efficacy and passion of DEIS facilitators entering DEIS schools, who appear motivated to make a difference:

> *"Yep, I think the name of the team, 'literacy' draws a certain type of people in. The people that have joined the literacy team are all very hard workers. They would be ones that are really committed to schools. They are probably all ones that have engaged in personal CPD and are highly motivated" (Cathy, DEIS advisor).*

4.6 Conclusion

The 'Knowledge Productivity in Literacy Framework' has evolved throughout the study, with the main amendments and affirmations becoming transparent during the analysis phase. The development of the framework (Figure 3) promoting the characteristics that support the development of a rich and fertile landscape in a DEIS school, referred to as infrastructure, initially evolved from the literature chapter. This framework further developed from the analysis phase of the study. Some of the main elements that emerged for the analysis phases will be summarised.

The establishment of a vision is important to support the development of literacy in the DEIS school, to provide focus and direction. It is incumbent of the leaders in the DEIS school to drive the vision, providing a safe and trusting climate to enact it. However, the research study indicates that the key leaders are not necessarily solely the principal; it may also be the literacy leader or the First Steps tutor. The leadership of the principal was found to be vital to enable opportunities of resources, time and support to literacy projects/initiatives, and developing a style of knowledge productivity in literacy that worked in their own school. The skills of the principal and other leaders appear to have been 'caught rather than taught'. The research study found that the majority of professional development was internal to the school, where critical and focused development occurred during staff meetings and literacy group meetings amongst staff members, with external intervention rare and infrequently.

<table>
<tr>
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Aim of Research Study:

The focus of the study is to investigate the process of implementation of DEIS literacy initiatives in disadvantaged primary schools in urban Ireland and its impact on schools' infrastructures, and on DEIS educators.

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Research Question:

What are the key components in schools' infrastructures that impact literacy development in disadvantaged primary schools in urban Ireland?

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Research Question:

What professional development do DEIS educators practice in the implementation of DEIS literacy initiatives?

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Research Question:

What stimulates DEIS educators to engage in literacy development?

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Key components in DEIS schools' infrastructures

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Professional Learning and Development

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Stimulants for Engagement

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Knowledge Building

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School Climate

Collaborative Professionalism

Resources
- Expertise
- Allocating Time
- Sharing Ideas

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Keeping Up-to-Date

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Evaluation

    Trends and Patterns

    Planning and Goals

    Standardised Testing

    The Inspectorate

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Moral Purpose

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Values

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Changing Practices

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School Culture

    Cultivating a Learning Environment

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	Purposeful Collaboration		Collaborative Culture Effective Leadership • Resources • pace • innovation
Change Process	Vision Planning Process Delegation of Responsibilities	Experimentation	Intrinsic Motivation Satisfaction of Event Achievement and Link with Self-Efficacy
Relationship Building	Literacy Leaders Parents Building Links and Relationships DES and the Inspectorate	Reflective Practices	

Figure 3. Knowledge Productivity in Literacy Framework

The study explored how teachers were developing their knowledge base of literacy in DEIS schools, with the styles and approaches being identified. With time being valuable to educators, professional development has become more critical, tailored, and focused. Professional development seemed to cater for the school's individual local needs, rather than continuing professional development that was general or being offered by PDST. Engaging in critical discourses suggested that action-reflection-action practices were being discussed. Through interviewing educators, this was affirmed. The main forum for critical and continual discourse of literacy development occurs at staff meetings and in some schools, literacy leader meetings between the principal, literacy coordinator, and literacy tutors. It is interesting some of the literacy tutors were chosen in the majority of schools in the study due to their communication and collegiality skills with educators. The learning that took place to enable knowledge productivity in literacy was not following the 'gradual release model' (Kennedy, 2005; Joyce and Showers, 2002). The purpose and model of learning appeared to be more important than the type of event, such as modelling or learning communities. The focus of knowledge productivity in literacy and shared dialogue form transmission to transformative practices (Kennedy, 2005) were extremely important components to literacy development.

Having a DEIS plan with literacy targets was effective in DEIS schools, as it kept the school focused and steadfast in their projects. Educators in schools who had active DEIS plans had indicated through interviews that school targets had, in the majority of cases, been subsumed into personal goals. This supported the focus being maintained on literacy development. End-of-year assessments, with continual improvements, did not appear to be a strong stimulant to DEIS educators, however, 'bursts' of improvements may be a more realistic descriptor (Gray et al., 2003, 88), as life in school was not solely focused on literacy. Echoing Morgan et al. (2009) and Morgan and Kitching (2007), motivation stemmed from affective episodes that happened in daily life in the school. The main occurrences that were verbalised by educators in DEIS schools that supported intrinsic motivation were linking with self-efficacy, the responses of students and parents, supportive colleagues, and satisfaction gained from classroom events.

CHAPTER 5: DISCUSSION CHAPTER

5.1 Introduction

Since the inception of DEIS, there were reservations whether the DEIS literacy initiatives and changes have truly redesigned the education experiences for students in DEIS schools. This research study took time to take stock of the developments and the current situation of literacy in four DEIS primary schools in order to outline emerging opportunities for multiple approaches that could inform future literacy developments. Currently, 825 schools participate in DEIS, 640 being primary schools, costing €97.62 million to the State. DEIS schools continue to remain below the national average of literacy attainment in Ireland, however, with the Department of Education and Science focusing on schools with the greatest concentration of students at risk of disadvantage. The DEIS programme in 2005 was designed to give tailored support to schools, with one component being literacy. A new DEIS Plan, 2017, has been devised by the Department of Education and Science as part of the Interim Review from the National Strategy on Literacy and Numeracy for Learning and Life 2011-2020[10]. The insights gleaned from this research study could enrich the focus of literacy development.

With the new national DEIS Plan and policy changes outlining a series of 'hard' targets, it is vital to acknowledge, both planned and unplanned changes when a composite picture is being brought into focus. In 2017, new goals have been published (DES, 2017), in terms of improved outcomes for students in literacy, all of which are 'hard' targets (Downes, 2007) based on student outcomes from standardised summative assessments, similar to the structure advocated in the original DEIS Plan from 2005. When dealing with people and school communities, targets are not always predictable or followed rigidly. This research study explored the soft targets (NESF, 2009; Downes, 2007), such as competencies, school climate, learning processes, and stimulants that will affect the new DEIS Plan 2017. When nurtured

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[10] **National Strategy: Literacy and Numeracy for Learning and Life 2011-2020** was launch in July 2011 by the Minister of Education, Ruairi Quinn with a strong focus on literacy and numeracy skills, with a wide-ranging programme reform including teacher education, professional development, content of curriculum. National targets in literacy and numeracy, using standardized testing have been set in second and sixth class level.

and developed, they will provide a rich fertile environment to build upon the amelioration of student learning outcomes. This chapter summarises what was involved in creating the conditions and fertile environment where literacy change had been implemented, married with a theoretical base and in turn unveiled the roles, infrastructures, learning processes, and relationships that have developed, traversing the DEIS educational system in four Irish urban DEIS primary schools which could genuinely inform the new national DEIS Plan 2017.

In this chapter, the rationale for the study and the original contribution of the 'Knowledge Productivity in Literacy' framework will be discussed. The limitations of the study and suggestions for future research are also highlighted, before the chapter closes with a conclusion.

5.2 The Rationale for the Study

The ERC published a report regarding Ireland's placing in the PISA 2015 rankings, applying a 95% confidence interval, which takes account of measurement and sampling error. Ireland's true rank is between 2nd and 6th amongst participating countries (ERC, 2016). The mean performance of Ireland, in relation to literacy, is similar in PISA 2012 and 2015. Ireland is featuring well in literacy on an international platform. Thus, it is timely to focus on this research study, which although small in scope, is rich in evidence. The rationale for engaging with the current study includes the following:

- The findings can inform, at a national and international level, alternate discussions amongst educators and policy makers. At a local level, it can also guide schools with a variety of approaches when engaging with change.
- The findings in this research study have been revealed and experienced in real local contexts through, and by, the voices of educators at the fore of DEIS implementation, unveiling engagement in the DEIS literacy initiatives and models of practice that developed in recent times.
- Change is a natural daily occurrence in a school context amongst teachers and students, in tandem with the DEIS literacy initiative, a large-scale project that is more akin to incremental growth, rather than "bursts" (Gray, et al., 2003, 88) of implementation.

- This research study has valuable information on educational practice and outcomes in individual schools to inform decisions regarding, resource allocation, and future DEIS policy direction. Innovative practice has been developed in recent years, supporting the embedding of good practice and encouraging innovation and creativity; the opposite is also discussed.

- It is important to ensure the setting is optimal for sharing of learned practices, both those that were successful or not, and the factors that supported or hindered development. The information in this research study needs to feed back to the school system and act as a catalyst for professional discourse, supporting a wider audience in their quest to improve school performance at a local context. The Department of Education and Education Research Centre published reports that, largely, did not filter down into the DEIS study schools or become part of staffroom discussions, according to all of the schools in the study. Thus, the study explored, under the section 'Learning Processes' the most effective channels to disseminate good practice effectively, which depended heavily on the type of learning that was being sought, from the voices of educators, when minimal networking is occurring presently and contrived collegiality is counterproductive.

5.3 Thesis Contribution and Implications of the Research

The significance of this study stems from its designed approach, execution, exploration, and analysis into the impact of DEIS literacy initiatives in the urban DEIS Band 1 primary schools in Ireland and the key components that emerge. The key contributions that this study adds to educational research are:

- This study used a qualitative approach to unearth the "soft implementation factors" (NESF, 2009), also known as the school culture,: knowledge building, moral purpose, change process and relationship building that contributed to literacy improvement, through/from the voices of educators from four urban DEIS schools in Ireland: principals, literacy coordinators, First Steps tutors, class teachers, learning support teachers, and DEIS advisors from PDST.

Chapter 5: Discussion Chapter

- This study built upon national assessments of literacy improvement in DEIS schools through an exploration of underlying reasons, trends, and opinions from the viewpoint of educators in four urban DEIS schools. This study provided a space for teachers' reflection and dialogue on practices, both by the individual and their respective school, regarding literacy and infrastructural practices in their own DEIS school.

- This study found that educators in DEIS schools have created cultures of shared understanding about the nature of their work (Fullan and Quinn, 2016), where support, reflection, and consultation are encouraged. There were signs of schools taking positions of shared professional accountability (Munby and Fullan, 2016), with shared goals, good data use, and processes of action and reflection established. Policy makers need to pay adequate attention to ways that DEIS schools and their educators have been mobilised to raise literacy performance levels and, in turn, provide platforms on which they can be shared both locally and nationally.

- The 'Knowledge Productivity in Literacy Framework' (Figure 3) that emerged from the evidence in the study gives an insight into the components, with a possible multiplier effect, that support programmes and initiatives in four urban DEIS primary school. The importance of professional development activities and sharing of best practices have been identified in this study as being essential components of sustainability (components of infrastructures, professional learning and development, and stimulants for engagement) and this aligns closely with what Fullan stated about sustainability of practices being fundamental/ important for school improvement (Fullan, 2016, 2008, 2005, 2002).

- The study, echoing the findings of Morgan et al. (2009), found that motivation stemmed from effective episodes in the daily lives of teachers. The educators in the study outlined the main occurrences that supported intrinsic motivation linking with self-efficacy, developed from responses of children and parents, supportive colleagues, and satisfaction gained from classroom events, with end-of-year assessments having less impact. This finding could be a catalyst for discussion at principals' professional development courses, under the module of motivating teachers and sustaining practices.

- This thesis interviewed DEIS advisors to give a unique micro insight into literacy initiatives in urban DEIS schools. This is the first time that DEIS advisors from PDST have been interviewed in-depth and voices heard concerning literacy initiatives and practices in urban DEIS schools in Ireland. A key piece of evidence voiced by the DEIS advisors, was that some professional development occurring in the DEIS school, was tailored, critical, and focused towards the needs of the individual school, This type of professional development was more effective than attending external generic literacy workshops. This would have implications for the PDST and their process of professional development delivery.

- This thesis contributes to the field of literature regarding professional learning and development of teachers in four DEIS schools, acknowledging the seminal work of Kennedy (2005), specifically, the impact of rationale, purpose, and context for professional development as being correspondingly important factors for adults engaging in professional development.

- This research identified that school leaders have a key role in developing and sustaining school improvement. The school leader of the literacy initiatives in DEIS schools was identified as the principal or a senior members of the school staff, with a focus on shared leadership. The study found that shared leadership had the potential to support stability for the school in the future. This implies that professional development needs, for principals and senior members of staff, should be varied. It suggests that conditions need to be created where principals can discuss, collaborate, and learn about professional development from others.

5.4 Original Contribution: The Knowledge Productivity in Literacy Framework

This research study of literacy initiatives and its implementation in urban DEIS primary schools in Ireland has been informed by international research, national policy, and the centrality of schools and teachers tailoring change to their own school context and climate. With the Irish economic recession and public sector restructuring, schools have engaged with the change process in a challenging environment and responded in a variety of ways to

progressing literacy development and progressing in the majority of DEIS schools, which have been studied. This study gives a unique perspective of the internal working of the DEIS school during a period of literacy change that has led to the development of 'The Knowledge Productivity in Literacy Framework', with some main features being discussed in this section. My study has shown that what is valuable and important in DEIS schools to empower change that is unique to each school is a fertile environment and supportive school climate. My findings show that the characteristics of a fertile environment include fostering competencies in system thinking, clear vision, leadership, and clear channels of communication both internally and externally.

- In the study, knowledge productivity in literacy has its foundations based in the complexities of schools' infrastructures (Fullan 2016, 2008, 2007, 2005, 2002). The research study's schools revealed that change can aspire to a more tailored fit between the national directives on national policy and DEIS initiatives and the organic individual needs of each schools, as direct agents of knowledge productivity in literacy in teaching and learning.

- Although change comes in a variety of methods, it must be rooted and connected to the school's vision and self-authored targets. It is important for DEIS schools to have a collective clarity of vision that will be pursued by agreed actions, and amended and reflected upon through an iterative process, where effective communication, monitoring, evaluation, and re-articulation become the norm. The researcher notes that the written DEIS plan devised in schools did not exactly portray what has been enacted in the school.

- In the study, the strength of the leader is vital in contending with the multiple pulls on the school's attention and resources in DEIS schools, competing with multiple innovations, initiatives, and local issues. The leaders of literacy, the principal and literacy coordinators in the majority of schools in the study were balancing the needs of professionalism between the teachers own needs, the school's needs, and the needs of the State (Bell and Bolam, 2010). It was found in the study that the conditions that are beneficial to learning and powering schools through infrastructural developments, investment, and knowledge productivity in literacy need to be steered by the principal or another designated leader in the school. The leader needs to ensure channels are

established to ensure effective communication amongst the school community, with clear intentions agreed, and continual review mechanisms formed to critically engage in the cyclic process of change, committing to become "what we would naturally become, which is human communities, not machines" (Senge, 2000, 58). In the participating schools in the study, it was essential for practices to be embedded, to have staff members with specialist knowledge with the capacity and reliability to deliver sustained effort, persistently striving to improve literacy in the individual school.

- The majority of DEIS schools in the study have already established literacy structures, which intertwine with the complexity of change in the DEIS initiative, augmenting the lack of controllability, not only with the task at hand but with school life. The teacher is not a solitary vehicle of change, systems thinking reveals that there are interconnections of subsystems. Change takes time and the study revealed that it is vital that the leader monitors the pace of change that supports progression and development, rather than overwhelming the community.

- A strong message from the study is the realisation that teachers are the ultimate agents of change. For multifaceted change to develop in schools on a local and national basis, there needs to be a review, by the DES and PDST, on how to forge links and develop effective relationships with schools. Currently, the four DEIS schools in the study had minimal contact with the Inspectorate, who was deemed to have an evaluative role, as the PDST DEIS advisor post no longer exists. To develop sustained lasting change, there needs to be a focus on developing relationships, addressing the power struggle balance, which is complex, with fluid structures that will take time and effort to implement and even longer to embed and sustain.

- There is still an emphasis on accountability rather than responsibility. Rather than solely exploring proposals to identify pilot projects in literacy, using research studies and engaging in dialogue with researchers would enhance the focus of practices to enrich the teaching and learning experiences for teachers, transcending, ultimately, to the students in the DEIS classroom.

- The DEIS Plan 2017 (DES, 2017) will explore the creativity of future pilot projects in DEIS schools to support literacy and numeracy development. Through PDST, this study can support and add to the school landscape, the exploration of literacy pilot projects' development and innovation in schools.

5.5 The Learning Process

The National Assessment in English Reading and Mathematics (NAERM) 2014 (Shiel et al., 2014) showed higher levels of results for the learners in English and Mathematics since its previous administration in 2009, in one hundred and fifty schools nationwide where targets set out in the 'National Strategy to Improve Literacy and Numeracy among Child and Young People 2011-2020' had already been achieved since 2014. The NAERM 2014 (Shiel et al., 2014) assessment revealed that reading time in classes increased by twenty-nine minutes per week from 2009 to 2014. Some of the practices in the research study schools reveal innovative practices in literacy and systems established to share practices in the majority of study schools. Rich information on the quality of practices needs to be shared, rather than there being a focus on merely increasing the time spent on reading. There is a focus in the DEIS Plan 2017 to focus on training for principals and increasing leadership capacity. The NAERM 2014 (Shiel et al., 2014) shows an increase in 2nd class teachers attending continuing professional development from on average 2.2 professional development days in 2009 to 5.6 days of professional development in the previous 2 years prior to NAERM 2014, where compulsory professional development, known as the Croke Park agreement must be furnished, some of which includes professional development attendance. The research study focuses on the type of learning processes that should be shared in DEIS schools in Ireland. This research gives educators a voice to retrospectively respond to learning practices to keep-up-to date, change practice, experiment, and engage in reflective practices (Geijsel, 2009). This focus on professional development does not merely engage in quantity; it explores the quality of practices, the channels that supported the vision of the individual teacher, and in turn the application of what has been learned in the school system. Some of the main discoveries made include, capacity development practices in schools, leadership beliefs and its navigation, learning being ever-present, and effective communication systems.

- The DEIS Plan 2017 targets an increase in the capacity of school leaders through training courses, both for the principal and deputy principal, ultimately to strengthen teaching and learning. There is a focus on PDST to continue its support of professional development. Interestingly, there is an emphasis on the development of a positive

school climate, however, it is stated in the DEIS Plan (DES, 2017) that the focus is on policies of anti-bullying and codes of behaviour. The findings from the study's 'Knowledge Productivity in Literacy Framework' would emphasise a re-visioning.

- There is a basic level of investment to reach deep change such as resources, finances, and support by people in positions of leadership roles that are optimal for engagement in change. Whilst it is beneficial for leaders to engage in effective communication with fellow stakeholders and similar schools, it is worthy to note the importance of professional development being a partnership between the individual leader and its tailored school development, which straddles the individual and school needs. The DEIS Plan 2017 advocates for school leaders to engage in professional leadership, accredited training, and preparation courses, in situ, for newly appointed principals. Although attending training sessions is an isolated activity, the emphasis should explore training in the areas of individual need, rather than adopting a 'one size fits all' attitude. In addition, although learning happens from action and reflection, there is not enough focus at this effective stage of learning for leaders, echoing the study's findings, where learning occurs from action-reflection-action, through dialogical engagement with fellow colleagues to refine and, in turn, embed practices that make a difference to the students, rather than those that are in vogue at the time. The leadership courses should have flexibility to adapt to its audience and also explore the competencies of knowledge productivity, supporting the development of productive efficient environments. This may, in time, provide the foundations for the leaders to engage the whole school community in a "cohesive, collective and collaborative engagement with external stakeholders and the community at large" (DES, 2017, 9).

- The DEIS literacy initiative has evolved over a decade and is still evolving. Through the experiences of the four study schools to embed and sustain new practices in literacy, there is an inadequate appreciation of time. There is a disparity between the conception and delivery of the DEIS literacy initiative, that is between 'policy rhetoric and policy achievement' (DoH, 1999, 3). Training a First Steps tutor for five days does not equate to the school implementing and embedding the practice with minimal support and time for the tutor to engage in a distributed leadership role. In DEIS schools, the study explored the DEIS initiative building upon previous changes and learning with persons and groups acknowledging individual underlying beliefs,

dispositions, and routines being shaped by experiences. There needs to be acknowledgement of the importance of moral aspects and creativity. Teachers need to be accredited as authors of genuine/authentic knowledge, giving them autonomy to tailor their teaching and learning at a pace, style, and vision that embraces and nourishes individual personal and professional beliefs and values. Change joins the ever-present flow of teaching and learning, persuading, guiding and being, in turn, affected by it. The leader needs to support change in order to optimise learning and knowledge production to enable exploratory communication in an environment of trust and respect.

5.6 Stimulants that Promote Literacy Development in DEIS Schools

"We still do not know enough about what is happening in individual schools in terms of the effectiveness of particular interventions, or combinations of interventions"

(DES, 2017, 53)

A monitoring and evaluation framework is currently being developed by the DES, which will provide the DES with an annual report from each DEIS school. It is unclear who will be creating the annual reports, their purpose, and who will collate and analyse the composite report. Another new feature of the DEIS Plan 2017 is the establishment of a School Excellence Fund (SEF) to reward proposals that outline new approaches that will be trialled, with inner city schools getting priority. The Inspectorate will provide "support, advice and challenge to projects by engaging in co-professional dialogue" (DES, 2017, 30), however, the practicalities of this project are hazy and lack clarity. The Inspectorate is primarily an evaluative body, therefore, power struggles may inhibit the development of co-professional dialogue, especially when the Inspectorate is also the same body that facilitates Whole School Evaluations. From the research study, the participants were very open and honest regarding what stimulated and drove them to maintain improvement and also what hindered change. Some of the main stimulants will be outlined, including, transformational practices, beliefs being imprinted on a personal and professional level, making a difference to the lives of students, and the effect of evaluative reports in driving projects.

- In the study, change has encroached on the professional and personal values and beliefs of the teachers. Practices that are transformational "focused on changing attitudes resulting in changes in practice and development of shared values" (King, 2011, 151). The literacy changes forced teachers to review what they believe, whilst others were at a stage of denial of the need to change or strive towards improved practices. The stimulants that motivate teachers and DEIS advisors is their moral purpose, making a difference to the educational lives of students, thus the drivers are both personal and professional.

- The DEIS schools identified the development of the First Steps tutor, a form of distributed leadership, as having undertones of coercion into roles and responsibilities to cascade practices in literacy. Having a First Steps tutor in the school does not automatically imply critical professional development (Jones, 2011) will ensue. The study has shown that passive acceptance lacks robustness and emotional engagement without imprinting on one's beliefs, both professionally and personally, thus sustainability on a whole school basis is virtually untraceable, with sprinkles of individual imprints visible. The teaching union for primary schools in Ireland, the Irish National Teachers Organization (INTO), issued a press release that no substitute cover will be provided for the DEIS Plan 2017 (INTO, 2017), thus making time to share new or refined practices with other staff members difficult, hindering sharing and support practices, and thus increasing pressure on the DEIS school.

- Echoing Fullan (2005), the provision of training as an on-going support is essential, however, the support must be tailored to suit the needs of individual schools, rather than ready-made packages that are currently being provided to DEIS schools. For sustained support to be effective, there is a need for the DEIS advisor to build a relationship with the school, become part of the school community with mutual respect, and have knowledge of the targets that the school have set. Professional development may involve systemic maintenance, improvement, and the broadening of a knowledge base, rather than professional development that assumes knowledge is open to a set formula. There needs to be as much or even more time and energy to pursue the execution of personal and professional responsibilities/obligations in the individual's life in the DEIS school.

- The acknowledgement of change with the DES is mainly through statistics, rather than recognition of accomplishments at a local level. In the four DEIS schools engaged in the study, appreciation or contribution to the changes anchored from the DEIS initiative have been minimal, with only one school having direct communication with the Inspectorate within the last five years. In the DEIS Plan 2017, the DEIS school will be required to produce an annual report outlining the 'SMART' targets (DES, 2017), however, the study has revealed that projects and innovative practices take five years or more to amend, refine, expand and embed practices incrementally, with results taking time to feature in standardised assessments, if at all, which are then submitted to the DES on an annual basis, online.

- The Education Research Centre were commissioned to evaluate part of the School Support Programme measuring the effectiveness of the programmes in DEIS schools, mainly focusing on literacy and numeracy. However, the ERC are the same body that selected schools to join the programme. The 'multiplier effect' (Smyth et al. 2015, vi) represents a concentration of students from disadvantaged backgrounds that have poorer academic outcomes, even when account is taken of their individual social backgrounds. It is difficult to isolate the 'multiplier effect' (Smyth et al., 2015) in DEIS schools to verify if the DEIS initiatives are effective. The ERC also carried out the NAERM in 2009 and 2014 (Shiel et al., 2014), which showed that there was no reduction in the gap between DEIS and non-DEIS schools except in second class in DEIS 2 schools (Shiel et al., 2014). Thus, it would seem ideal that a control group be established so that statements of comparison could be made. This would echo Denny's concept that "one would need to know the counterfactual: what would have happened if the same children had not participated in the program" (Denny, 2015, 2). It would have been optimal to compare schools that had just qualified for DEIS and those that just failed to qualify, using a methodology known as 'regression discontinuity design' (Denny, 2015). Alternatively, by using the NAERM 2014 analysis and the national 'Growing Up in Ireland' longitudinal study, a more rounded view could be gathered and collated, with information regarding schools, students, teachers, and parents making an analysis of the DEIS literacy initiative more powerful. This research study adds to the official ERC analysis of DEIS schools, giving the voice of those experiencing the DEIS programme first hand importance, not only with regard to

summative analysis, but also to the efficiency and dynamic processes that emanate from DEIS schools, both in a positive and negative lights, and giving more focus to the portrait of the DEIS school.

5.7 Answering the Research Questions

The key objective of the study was to investigate the key components in DEIS schools' infrastructure that affect DEIS literacy initiatives implementation and their impact on DEIS educators through their engagement and professional development in disadvantaged primary schools in urban Ireland. The research questions gave foundations to the study and anchored the journey throughout this study. In this section, the questions will be outlined, along with a summary response, in relation to the findings that emerged.

Question 1: What are the key components in schools' infrastructures that impact literacy development in disadvantaged primary schools in urban Ireland?

The key components in a DEIS school's infrastructure form a large part of the 'Knowledge Productivity in Literacy' Framework (Figure 3, Chapter 4). The infrastructure factors stemmed mainly from Fullan's research and writings on school sustainability and its complexities (Fullan, 2016, 2008, 2007, 2005, 2002). The main components that are highlighted are: knowledge building, moral purpose, change process and relationship building which are at the core, enveloped by the strength of leadership and the interconnections with educators. The school infrastructure and its components support a living and organic school context, that need to be flexibles and adapt to the constant changing needs of a DEIS school. The infrastructure components of knowledge building, moral purpose, change process, and relationship building that developed from the findings of this research, are not prioritised in order of importance. They are not formed as a linear model, rather a cyclic layered model that is repeated and adjusted to the needs of the individual schools, adjusting to the needs of the school, as influenced by the work of Senge (1990), interconnecting and forming interrelationships, affecting and influencing educators and their individual DEIS school context.

Question 2: What professional development do DEIS educators practice in the implementation of DEIS literacy initiatives?

The study found that the climate of professional development in the majority of DEIS schools is moving from a climate of control towards a culture of professional dialogue and responsibility, rather than mere accountability (Sugrue, 2011). The majority of participants in the study focused on the purpose of learning that is needed, seeking the best path of professional learning and, in turn, pursuing the model that is optimal. Interestingly, many participants had reduced their attendance at external training sessions to gain information; rather, the educator had specific requirements for information and many participants researched the internet, registered for webinars and share links with colleagues. The participants were focused on refining and improving or sustaining current practices, rather than searching for new practices (Baker et al., 2004). There was strong evidence that critical professional development was developing, both with colleagues and at staff meetings. Dialogue at staff meetings was amongst colleagues, displaying group reflective practices, with the principal's leadership role being vital to enable and encourage critical discourse, where skills and expertise could be shared at an individual and group level. Critical dialogue amongst staff members encourages social, behavioural and attitude responses (Bell and Gilbert, 1996). It also encourages information to be converted into knowledge, ultimately making a difference in the classroom for students.

Question 3: What stimulates DEIS educators to engage in literacy development?

The study explored what stimulated DEIS educators to engage in literacy development in each of the four DEIS schools and the driving forces that support certain behaviours to commence, continue, or terminate. The three main themes that emerged were evaluation, school culture, and motivation that is intrinsic. Evaluative assessments were school based and analysed in line with the school's self-authored targets at a local level, rather than at a national level; as such, they had much more impact in providing information on literacy progress, echoing Morgan et al.'s findings (2009). Rather than evaluative practices highlighting literacy progress which occurred on a year-on-year basis, it appeared that "bursts" (Gray, et al., 2003, 88) of improvement was a more realistic descriptor (Fullan, 2008; Oates, 2008; Gray, 2003). Secondly, the majority of the study schools put a great emphasis on soft targets, encompassing characteristics of their school culture (NESF, 2009; Downes, 2007) during literacy development, which were evaluated through teacher observation, comments from principals and DEIS advisors, and feedback from teachers. The main learning environment for literacy

development was the individual DEIS schools themselves, with the forum of staff meetings providing a rich fertile landscape to engage in professional development in the majority of the study schools. It was voiced by teachers that they were exploring, not new practices, but improving current ones, enabling critical discourse in three out of four DEIS schools.

Motivation was the third main stimulant revealed in this study. It would appear that the majority of the study schools were moving towards "professional responsibility" (Sugrue, 2011, 59) in literacy in their own school, rather than the sole focus being in professional accountability by standardised assessments for the Department of Education in Ireland. The principals in the study who engaged directly with literacy development could motivate staff members in literacy development through providing adequate resources, being realistic with timeframes and controlling the pace of change. There is strong evidence from this study that educators' sense of accomplishment was consolidated by positive episodes, which in turn promoted self-satisfaction (Morgan et al., 2009). The educators voiced their own deep moral purpose to support their students in improving their literacy ability.

5.8 Limitations of the Research Study

The research is a comparative multi-case-study, comprising four Irish urban DEIS primary schools, stemming from an interpretative paradigm stance (Lichtman, 2013). The researcher only included DEIS urban primary schools in the county of Dublin. The main rationale for this decision was that DEIS rural schools' literacy standardised results were similar to non-DEIS schools and did not receive the same quantity of DEIS literacy initiatives. Urban DEIS schools were prioritised by PDST. It would therefore have been less clear to analyse progress in literacy initiatives in rural DEIS school. Through semi-structured interviews, members of DEIS schools provided reflective experiences of literacy developments in their schools. All "legitimate types of data" (Lichtman, 2013, 147), such as the DEIS literacy plans, documentation and Whole School Evaluation reports helped to extend and clarify 'how' and 'why' DEIS schools endeavour to improve literacy. There was a small sample size in the study, however, the focus was in-depth in nature, using the voices of educators in the DEIS urban school context to give unique personal perspectives to literacy development and, in turn, supporting the triangulation of information, building upon national literacy assessment results

of DEIS schools' literacy improvements by the Educational Research Centre and the Department of Education. Whilst the study was small, the voices of educators was wide ranging: principals, literacy coordinators, First Steps tutors, class teachers, learning support teachers, and DEIS advisors from the Department of Education's professional support service. Attrition of teachers in DEIS schools has been widely voiced (Smyth et al 2015; Morgan and Kitching, 2007), which would limit the richness and involvement in DEIS literacy experiences. Fortunately, all of the educators that participated in the study had been involved since the commencement of DEIS literacy development in their school, with the variability being in years of teaching experience and their roles in the literacy initiative processes in their respective schools. The development of the 'Knowledge Productivity in Literacy Framework' developed from international literature and a small study sample, thus, this study cannot claim that the framework would be reflective or representational of the other educational system in Ireland; however, the framework is insightful regarding developments in some Irish schools and useful as a reference framework for discussion.

5.9 Suggested Future Research

The research study has explored literacy development in four DEIS urban primary schools in Ireland. Some aspects of future research are unearthed and discussed in this section.

It would be interesting and informative to further explore the uses that teachers make of knowledge gained across learning processes and what type of teacher learning should be promoted or recommended in the Irish context to accomplish the educational targets that are set in individual school contexts, complementing learning experiences for both teachers and students in the classroom. It would be timely to share the findings of the study with the Professional Development of Services for Teachers, with a focus on the skills that are pertinent to support leadership in curriculum development in schools.

This research cohort could widen to non-DEIS primary schools, going beyond the statistical data of literacy improvement in all types of schools in Ireland (National Assessment in English, Reading and Mathematics, 2009; 2014) and exploring 'what' and 'how' changes have occurred in non-DEIS school, using a similar qualitative approach.

Future research from this study would explore the attrition of leaders in DEIS schools, such as principals, literacy leaders, and First Steps tutors, as well as the durability of literacy development beyond its original leaders, looking at whether power and responsibility have been embedded into the vision and ethos of the school.

Whilst this study has revealed examples of schools that have moved past climates of control towards a "culture of professional responsibility" (Sugrue, 2011, 59), it would be timely to explore this concept in non-DEIS schools where literacy improvement has been achieved and what stimulates the school community to reposition its focus in literacy.

It became apparent to the researcher during the visits to DEIS schools, that many of the participants in the study had developed friendships with staff members outside of school time and had relatives working in education. It would make an interesting extension to the models of professional development (Kennedy, 2005; Joyce and Showers, 2002) in this study to explore the influence of informal professional development groups, their levels of engagement, including an exploration at how this influences teaching and learning in the classroom.

5.10 Conclusion

The research study highlights a variety of approaches to the literacy change process. Using a qualitative approach, the value of discourse to support educators to reveal the practicalities, practices, and procedures in their respective school system can give schools greater autonomy and resilience to maintain agreed direction. The majority of DEIS schools in the study have engaged in effective processes of learning and its application in its respective community. This research study gives support towards a debate on key issues that support and hinder school improvement, in particular, knowledge production in literacy, and its management. It is a time for critical reflection, that success of literacy initiatives should not be as heavily based on summative assessments of students or the assumptions that external support or expertise is needed in a school. Embedding projects in the DEIS study schools took several years to reap the rewards of improved reading standards. In all the schools, there were examples of distributed leaders where practices, both positive and negative, should be shared, with lessons learned. It is important to acknowledge that every leader needs followers, however, practices

that support the growth of critical followers, rather than passive followers, make knowledge production more dynamic and complex.

On a national level, teachers should not be viewed as an instrument, or as passive followers, in implementing initiatives; rather, they should engage in an authentic collaborative and participative process. The teacher should not be viewed as a product of change; rather, they should be seen as a key agent to channel the changes into the classroom. The study reported strengthened levels of collaboration and liaison in schools; however, the opposite is true with regard to outside agencies. It is timely to explore how the inspectorate, DES, NCCA, and PDST can be viewed as a partner in teaching and learning, rather than as external bodies where power struggles seem to dominate. When contrived congeniality (Hargreaves, 1994) dominates, then sustainability will be under question. For example, in one of the DEIS study schools, the principal solely manages while the teachers focus on the education of the students without any intertwining. A channel to share the school's opportunities and potentialities of change needs to be explored, by understanding the dynamics of changes from the context of the teacher, student, and individual school. The current PDST set packages for training opportunities will need to be reviewed, to generate an effectual dynamic model to support tailored change in DEIS schools, acknowledging and learning lessons from finely tuned dynamics that have developed in DEIS schools throughout the duration in the DEIS initiative. Whilst the opposite is also true, lessons on what hinders and provides barriers to change is worthwhile and augments a valuable knowledge base.

REFERENCES

Addison, R. and Brundrett, M. (2008) Motivation and demotivation of teachers in primary schools: the challenge of change. *Education,* 3(13) 79-93.

Alexander, R.J. (2012) *Visions of Education, Roads to Reform. The global educational race and the Cambridge Primary Review.* In: Univeridad Gabriela Mistral, 30 October 2012. Available from: robinalalexander.org.uk. [accessed 14 April 2018].

Alexander, R.J. (2010) *Children, their world, their education: Final report and recommendations of the Cambridge Primary Review*. Abington: Routledge.

Alexander, P. (1997) The Path to competence: A lifespan developmental perspective on reading. *Journal of Literacy Research*, 37(4) 413-436.

Allison, P. and Pomeroy, E. (2000) How shall we "Know"? Epistemological concerns in research in experiential education. *The Journal of Experiential Education,* Fall 2000, 23(2) 91-98.

Anderson, G. (1998) *Fundamentals of educational research.* London: Falmer Press.

Auerbach, C. and Silverstein, L. (2003) *Qualitative data: An introduction to coding and analysis.* New York: New York University.

Baker, J., Lynch, K., Cantillon, S. and Walsh, J. (2004) *Equality: From theory to action.* Basingstoke: Palgrave MacMillan.

Ball, S. (2006) *Education policy and social class.* Abington: Routledge.

Bandura, A. (1997) *Self-efficacy: The exercise of control.* New York: W. H. Freeman.

Barber, M., Whelan, F. and Clark, M. (2010) *Capturing the leadership premium: How the world's top school systems are building leadership capacity for the future. London: McKinsey and Company*.

References

Barnardos (2009) *Written out written off: Failure to invest in education deprives children of their potential.* Dublin: Barnardos.

Barnett, W.S. (1995) Long-term effects of early childhood programs on cognitive and school outcomes. *The Future of Children.* 5 (3) 25-50.

Baskerville, D., and Goldblatt, H. (2009) Learning to be a critical friend: from professional indifference through challenge to unguarded conversation. *Cambridge Journal of Education*, 39(2) 205-221.

Bass, B. (1985) *Leadership and performance beyond expectations*. New York: Free Press.

Bell, L. and Bolam, R. (2010) Teacher professionalism and continuing professional development: Contested concepts and their implications for school leaders. In: T. Bush, L. Bell and D Middlewood (eds.) *The principles of educational leadership & management.* London: Sage.

Bell and Gilbert (1996) *Teacher development: Model from Science Education.* London: Falmer Press.

Benn, M. (2011) *School wars. The battle for Britain's education.* London: Verso.

Bennett, N. (2003) Structure, culture and power in organisations. In: N. Bennett, M. Crawford and M. Cartwright (eds.) *Effective educational leadership*. London: Paul Chapman Publishing.

Bennis, W. and Nanus, B. (1985) *Leaders.* New York: Harper and Row.

BERA (1992). *Ethical guidelines for educational research*. Edinburgh: British Educational Research Association.

Beyer, L. (2002) The politics of standardization: teacher reduction in the USA. *Journal of Education for Teaching*, 28 239-245.

Black, P. and Wiliam, D. (2001) *Inside the black box raising standards through classroom assessment.* King's College London School of Education: BERA.

Black, R., Lemon, B. and Walsh, L. (2010) *Literature review and background research for the National Collaboration Project: Extended service school model.* Melbourne: FYA.

References

Block, P. (1987) *The empowered manager.* San Francisco: Jossey-Bass.

Bolman, L.G. and Deal, T.E. (1997) *Reframing organisations: Artistry, choice and leadership*. San Francisco: Jossey-Bass.

Boreham, N. (2000) In: A. Kennedy (2005) Models of continuing professional development: A framework for analysis. *Journal of In-service Education,* 31(2) 235-250.

Borko, H., Liston, D. and Whitcomb, J.A. (2007) Genres of empirical research in teacher education. *Journal of Teacher Education*, 58(1) 3-11.

Borg, W. R. and Gall, M. D. (1979) Educational research: An introduction, 3rd edition. London: Longman.

Boyd, V. (1992) *School context: Bridge or barrier for change*? Austin, Texas: Southwest Educational Development Laboratory.

Bracken, S. (2006) Discussing the importance of ontology and epistemology awareness in practitioner research. *Worchester Journal of Learning and Teaching*, 4 1-9.

Breakspear, S. (2012) The policy impact of PISA: An exploration of the normative effects of international benchmarking in school system performance. *OECD Education Working Papers,* 71, OECD Publishing. Available from https://www.oecd-ilibrary.org/education/the-policy-impact-of-pisa_5k9fdfqffr28-en [accessed 30 October 2018].

Brennan, N. M. (2011) Governance matters. In: H. O'Sullivan and J. West-Burnham (eds.) *Leading and managing schools*. Dublin: Institute of Public Administration, 367-378.

Bryk, A.S. and Schneider, B. (2002) Trust in schools: A core resource for school reform. *Educational Leadership,* 60(6) 40-45.

Burch, P. and Spillane, J. (2003) Elementary school leadership strategies and subject matter: Reforming mathematics and literacy instruction. *The Elementary School Journal.* 103(5) May, 519-535.

Burkard, T. (2004) *After Literacy Hour, may the best plan win.* London: Centre for Policy Studies

References

Burrell, G. (1998) Modernism, postmodernism ad organizational analysis: the contribution of Michel Foucault. In: A. Kinlay and K. Starkey (eds.) *Foucault, management and organization theory.* London: Sage Publications Ltd.

Cambridge (2016) *Cambridge advanced learner's dictionary.* Available from http://dictionary.cambridge.org/dictionary/english/infrastructure [accessed on 29 December 2017].

Cameron, D. (2011) Prime Minister David Cameron has outlined his vision for the education system at a visit to a newly-opened free school in Norwich, 9 September. Available from https://www.gov.uk/government/speeches/pms-speech-on-education--2 [accessed September 2018].

Campbell, C., Osmond-Johnson, P., Faubert, B., Zeichner, K. and Hobbs-Johnson, A. (2016) *The state of educator's professional learning in Canada.* Oxford, OH: Learning Forward.

Carpenter, H., Papps, I., Bragg, J., Dyson, A., Harris, D., Kerr, K., Todd, L. and Laing, K. (2013) *Evaluation of Pupil Premium: Research Report*. London: Department of Education.

Charmaz, K. (2001) Grounded Theory. In: R. Emerson (ed.) Contemporary field research: Perspectives and formulations, 2nd edition. Prospect Heights, IL: Waveland Press, 335-352

Clarke, J. (2011) Supporting a parent's role as prime educator to increase student attainment in literacy. In: H. Willoughby, B. Culligan, A. Kelly and G. Mehigan (eds.) *From Literacy research to classroom practice: Insights and inspiration: Proceedings of the 2012 Annual Conference of the Reading Association of Ireland.* Dublin: Reading Association of Ireland.

Claxton, G. (2010) *Building learning power, helping young people become better learners.* Bristol: TLO Limited.

Clay, M. (2005) *Literacy lessons designed for individuals. Part one: why? when? who?* Auckland: Heinmann.

References

Clay, M. (1991) Becoming literate: the construction of inner control. *New Zealand Journal of Educational Studies*, 26 87-91.

Coburn, C.E. and Russell, J. L. (2008) Getting the most out of professional learning communities and coaching: Promoting interactions that support instructional improvement. *Learning Policy Brief*, 1(3) 1-4.

Coburn, C. (2003) Rethinking scale: Moving beyond numbers to deep and lasting change. *Educational Researcher* 32(6) August/September, 3-12.

Cochran-Smith, M. (2002) The research base for teacher education: Metaphors we live. *Journal of Teacher Education*, 53(4) 283-285.

Coe, R. J. (2012) Conducting your research. In: J. Arthur, M., Waring, R. Coe and L.V. Hedges (eds.) *Research Methods & Methodologies in Education. Los Angeles: Sage,* 41-52.

Cohen, L., Manion, L. and Morrison, K (2011) *Research methods in education*, 7th edition. London and New York: Routledge.

Cohen, J, McCabe, E.M, Michelli, N.M and Pickeral, T. (2009) School climate: Research, policy, teacher education and practice. *Teachers College Record*, 3(1) 180-213. Available from http://www.tcrecord.org/Content.asp?ContentId=15220 [accessed 30 October 2018].

Cohen, L., Manion, L. and Morrison, K. (2000) *Research methods in education,* 5th edition. London: Routledge Falmer.

Coleman, M. and Briggs, A. (2002) *Research methods in educational leadership and management*. London: Sage Publications Ltd.

Comptroller and Auditor General (2006) *Report on value for money examination-Educational disadvantage initiatives in the primary sector*. Dublin: C and AG.

Conca, L., Schechter, C. and Castle, S. (2004) Challenges teachers face as they work to connect assessment and instruction. *Teachers and Teaching: Theory and Practice.* 10(1) February, 59-75.

Conway, P.E. and Murphy, R. (2013) A rising tide meets a perfect storm: New accountabilities in teaching and teacher education in Ireland. *Irish Educational Studies,* 32(1) 11-36.

Coolahan, J. (2007) *A review paper of thinking and policies relating to teacher education in Ireland. Teaching Council, December 2017.* Available from https://www.teachingcouncil.ie/en/Publications/Research/Documents/A-Review-Paper-on-Thinking-and-Policies-Relating-to-Teacher-Education-in-Ireland.pdf [accessed on 12 September 2018].

Corbetta, P. (2003) *Social research, theory, methods and techniques*. London: Sage Publications Ltd.

Cotton, K. (2001) *New small learning communities: Findings from recent literature.* Northwest Regional Education Laboratory.

Covey, S. (2004) *The 8th habit: From effectiveness to greatness*. New York: Simon and Schuster.

Crawford, K. (2009) *Continuing professional development in Higher Education: Voices from below*. PhD. University of Lincoln.

Crawford, M. (2003) Inventive management and wise leadership. In: N. Bennett., M. Crawford and M. Cartwright (eds.) *Effective Educational Leadership*. London: Paul Chapman Publishing.

Creemers, B. (1994) *The effective classroom.* London: Cassell.

Creswell, J. (2013) *Qualitative inquiry & research design,* 3rd edition. Thousand Oakes, CA: Sage.

Creswell, J. (1994) *Research design: Qualitative and quantitative approaches*. Thousand Oakes, CA: Sage.

Croft, J. (2016) *Collaborative overreach: Why collaboration probably isn't key to the next phase of school reform.* London: Centre for the Study of Market Reform of Education.

Cumming, J. (2002) Working together as a profession. *Unicorn*, 28(2) 1-4.

Dáil Éireann (2007) *Educational Disadvantage.* Dublin: Volume 630.

Day, C. and Sachs, J. (2004) *International handbook on the continuing professional development of teachers*. Berkshire: Open University Press.

Deal, T. (1990) Foreword. In: T. Sergiovanni, *Value-added leadership: How to get extraordinary performance in schools*, v-ix. Orlando, FL: Harcourt Brace Jovanovich.

Deal, T. and K. Peterson (1990) *The principal's role in shaping school culture.* Washington, D.C.: US Office of Educational Research and Improvement.

Dean, M. (1996) Foucault, government and the enfolding of authority. In: A. Barry, T. Osborne and N. Rose (eds.) *Foucault and political reason: Liberalism, neo-liberalism and rationalities of government.* Chicago: Chicago University Press, 209-230.

Denny, K. (2015) *The evaluation of the School Support Program under DEIS: An assessment.* Dublin: UCD School of Economics and Geary Institute for Public Policy.

Department of Children and Youth Affairs (2011) *Comprehensive review of expenditure-vote 43: Report of the Department of Children and Youth Affairs*. Available from http:/www.dcya.gov.ie/documents/publications/cre2011.pdf. [accessed on 12 September 2015].

Department of Education and Skills (2017) *DEIS Plan 2017*. Dublin: Department of Education and Skills.

Department of Education and Skills (2016) Action plan for education 2016-2019. Available from https://www.education.ie/en/Publications/Corporate-Reports/Strategy-Statement/Department-of-Education-and-Skills-Strategy-Statement-2016-2019.pdf [accessed 31 October 2018].

Department of Education and Skills (2016) *Review of national and international reports on literacy and numeracy.* Dublin: Department of Education and Skills.

References

Department of Education and Science (2015) *Looking at action planning for improvement in DEIS primary schools.* Dublin: Department of Education and Skills.

Department of Education and Skills (2014) *Focused policy assessment- Early Start programme, Early Years Education Policy Unit*. Dublin: Department of Education and Skills.

Department of Education and Science (2012) *Review of the primary schools general allocation model*. Dublin: Department of Education and Skills.

Department of Education and Skills (2011a) *Literacy and numeracy for learning and life. The national strategy to improve literacy and numeracy among children and young people 2011-2020.* Dublin: Department of Education and Skills. Available from https://www.education.ie/en/Publications/Policy-Reports/lit_num_strategy_full.pdf [accessed 31 October 2018].

Department of Education and Skills (2011b). *An evaluation of planning processes in DEIS primary schools. Inspectorate evaluation studies.* Dublin: Inspectorate, Department of Education and Skills. Available from https://www.education.ie/en/Publications/Inspection-Reports-Publications/Evaluation-Reports-Guidelines/insp_deis_primary_2011.pdf [accessed 31 October 2018].

Department of Education and Science (2005) *DEIS: Delivering Equality of Opportunity in Schools- An action plan for educational inclusion*. Dublin: DES.

Department of Health (DoH) (1999) *Continuing professional development: Quality in the new NHS.* Department of Health Circular HSC 1999/154.

Deschamp, P. (1995) *Case studies of the implementation of the First Steps project in twelve school.* Perth: Western Australia Education Department.

DiPaola, M.A. (2003) Conflict and change: daily challenges for school leaders. *Effective Educational Leadership.* London: The Open University.

Dorman. B. C. (2009). *An evaluation of middle school literacy coaching in a Central Florida District. North Southeastern University.* Available from *https://files.eric.ed.gov/fulltext/ED511293.pdf* [accessed 31 October 2018].

Downes, P. (2007) Why SMART outcomes ain't always so smart. In: P. Downes and A-L. Gilligan (eds.) *Beyond educational disadvantage*. Dublin: Institute of Public Administration, 57-69.

Draper, J., O'Brien, J. and Christie, F. (2004) First impressions: the new teacher induction arrangements in Scotland. *Journal of In-service Education,* 30, 201-223.

Duke, N. and Pearson, P. (2002) Effective practices for developing reading comprehension. In: A. E. Farstup and S.J. Samuels (eds.) *What research has to say about reading instruction.* Delaware: International Reading Association, 205-242.

Earley, P. and Porritt, V. (2010) *Effective practices in continuing professional development.* London: University of London.

Economic and Social Research Institute/ Trinity College Dublin (ESRI) (2015) *Learning from the evaluation of DEIS. Research Series Number 39, April 2015.* Dublin: The Economic and Social Research Institute (ESRI). Available from https://www.esri.ie/pubs/RS39.pdf [accessed 15 June 2018].

Education Act, 1998 (c.51) Dublin: Irish Statute Book. Available from www.irishstatutebook.ie/eli/1998/act/51/enacted/en/html [accessed on 20 Jun 2018].

Educational Disadvantage Committee (2003) *Educational disadvantage forum: Report of the inaugural meeting: 18 November 2002 in Dublin Castle.* Dublin: Department of Education and Skills.

Educational Research Centre (ERC) (2016*) Results of PISA 2015 released! Education Research Centre, 6th December.* Available from*: http://www.erc.ie/2016/12/06/erc-pisa-2015-results-launched/* [accessed 31 October 2018].

Educational Research Centre (ERC) (2011*) A report on the first phase of the evaluation of DEIS. Report to the Department of Education and Skills.* Dublin: ERC. Available from: http://www.erc.ie/documents/deis_p1_main.pdf [accessed 31 October 2018].

Eivers, E. and Clerkin, A. (2012) *PIRLS & TIMSS 2011, Reading, mathematics and science outcomes for Ireland.* Education Research Centre. Ireland: ePrint Limited.

Eivers, E., Shiel, G. and Shortt, S. (2004) *Reading literacy in disadvantaged primary schools.* Dublin: Educational Research Centre.

Eraut, M. (2014) Development knowledge for qualified professionals. In: O. McNamara, J. Murray and M. Jones (eds.). *Workplace learning in teacher education. Professional learning and development in schools and higher education*. Dordrecht, Springer, 10 47-72.

Eraut, M. (1994) *Developing professional knowledge and competence.* London: Falmer Press.

Ericsson, A. and Pool, R. (2016) *Peak: Secrets form the new science of expertise*. New York: Houghton Mifflin Harcourt.

Evans, L. (2010) Leadership for faculty development: confronting the complexity of professional development. In: *Annual Meeting of the American Educational Research Association.* May, Denver Colorado, 1-19.

Evans, L. and Bertani Tress, M. (2009) What drives research-focused university academics to want to teach effectively? Examining achievement, self-efficacy and self-esteem. *International Journal for the Scholarship of Teaching and Learning*, 3(2) 1-17. Available from https://digitalcommons.georgiasouthern.edu/ij-sotl/vol3/iss2/12/ [accessed 31 October 2018].

Field, J. (2002) Governing the ungovernable: why lifelong policies so much yet deliver so little. In: R. Edwards, N. Miller, N. Small and A. Tait (eds.) *Supporting lifelong learning, Volume 3, Making Policy Work*. London: Routledge, 201-216.

Fielding, N.G. and Lee, R.M. (1998) *Computer analysis and qualitative research.* London: Sage Publications Ltd.

Finn, J., Gerber, C., Achilles, C. and Boyd-Zaharias, J. (2001) The enduring effects of small classes. T*eachers College Records*, 103 (2) 145-183.

First Steps (2004) *First Steps reading*. Singapore: Craft Print International ltd.

Fitzgerald, J. (2007) *Addressing issues of social exclusion in Moyross and other disadvantaged areas of Limerick city: Report to the Cabinet Committee on*

social inclusion. Dublin: Department of the Environment, Community and Local Government.

Flood, P. (2011) Leading and managing Irish schools: A historical perspective. In: H. O'Sullivan and J. West-Burnham (eds.) *Leading and managing schools*. London: Sage Publications Ltd.

Foster, D. and Long, R. (2018) *The Pupil Premium.* House of Commons Library, Briefing Paper Number 6700, 17 April 2018. Available from http://researchbriefings.files.parliament.uk/documents/SN06700/SN06700.pdf [accessed 31 October 2018].

Freiberg, H. J. (1999) *School climate: Measuring, improving and sustaining healthy learning environments.* Philadelphia: Falmer Press.

Freimuth, H. (2009) Educational research: An introduction to basic concepts and terminology. *UGRU Journal,* 8 1-11.

Freire, P. (1970) *Pedagogy of the oppressed.* New York: Herder and Herder.

Friedman, A., Williams, C., Hopkins, S. and Jackson, L. (2008) *Linking professional associations with Higher Education institutions in relation to the provision of continuing professional development.* Bristol: Professional Associations Research Network.

Fullan, M. (2017) Interviewed by J. Graham. *Public school improvement and the role of school leadership in that process*. 22 October 2017. Transcript available from https://michaelfullan.ca/wp-content/uploads/2017/11/04_Fullan_School-improvement-and-leadership-1.pdf [accessed 31 October 2018].

Fullan, M. (2016) Developing humanity, education's emerging role. *Principal Connections*, 20(2) Winter, 10-12.

Fullan, M. (2015) *Leadership from the middle, A system strategy.* Education Canada: Canadian Education Association.

Fullan, M. (2012) Leading the change series, Q & A with Michael Fullan. *AERA Educational Change Special Interest Group*, 16, February. Available from

https://michaelfullan.ca/wp-content/uploads/2016/06/13514675730.pdf [accessed on 31 October 2018].

Fullan, M. (2008) *The six secrets of change.* San Francisco: Jossey-Bass.

Fullan, M. (2007) *The new meaning of educational change.* New York: Teachers' College Press.

Fullan, M. (2006) *Quality leadership- quality learning: Proof beyond reasonable doubt.* Cork: Irish Primary Principals Network.

Fullan, M. (2005) *Leadership & sustainability, system thinkers in action*. California: Corwin Press.

Fullan, M. (2002) The change leader. *Educational Leadership.* 59 16-20.

Fullan, M.G. (1991) *The new meaning of educational change.* London: Cassell.

Fullan, M. and Hargreaves, A. (2016) *Bringing the profession back in: Call to action.* Oxford, OH: Learning Forward.

Fullan, M. and Quinn, J. (2016) *Coherence: The right drivers in action for schools, districts, and systems.* Thousand Oaks, CA: Corwin Press.

Fullan, M. and Rincon-Gallardo, S. (2017) *California's golden opportunity. Taking stock: Leadership from the middle.* Michaelfullan.CA: Motion Leadership.

Gaffney, M. (2009) *Child literacy and social inclusion: Implementation issues. Supplementary Report, Issue 39.* Dublin: National Economic and Social Fund. Available from edepositireland.ie/bitstream/handle/2262/72770/No_39_Child_Literacy_%26_Social_Inclusion_Implementation_Issues.pdf?sequence=1&isAllowed=y [accessed 31 October 2018].

Gavrielatos, A. (2015) Preface. In: G. Little (2015) *Global education 'reform'. Building resistance and solidarity*. Britain: Manifesto Press

Geijsel, F., Sleegers, P. S. and Kruger, M. (2009) *The effect of teacher psychological and school organizational and leadership factors on teachers' professional learning in Dutch schools. The Elementary School Journal*, 109(4) 406-427.

Gibbs, G. (2012) Software and qualitative data analysis. In: J. Arthur, M. Waring, R. Coe and L.V. Hedges (2012) *Research methods & methodologies in education.* Thousand Oaks, California: Sage Publications Ltd.

Gleeson, M., Courtney, A., Bowe, T., Smith, L., Hurley, F., Hanley, M. and Lehane, D. (2010) Building bridges of understanding: Comprehension taught not caught! In: T. Concannon-Gibney, A. Kelly and K. Willoughby (eds.*) Literacy in the 21st century: Perspectives, challenges and transformations.* Dublin: Reading Association of Ireland.

Government of Ireland (1937) Bunreacht na hÉireann The Irish Constitution. Dublin: the Stationery Office. Available from https://www.taoiseach.gov.ie/eng/Historical_Information/The_Constitution/Bunreacht_na_hÉireann_October_2015_Edition.pdfpdf [accessed 31 October 2018].

Graham, G. (2008) *Universities: The recovery of an idea*. Exeter: Imprint Academic.

Gray, D.E. (2004) *Doing research in the real world.* London: Sage Publications Ltd.

Gray, J., Goldstein, H. and Thomas, S. (2003) Of trends and trajectories: Searching for patterns in school improvement. *British Educational Research Journal,* 29(1) 83-88.

Gray, J. H. (1999) *Improving schools: Performance and potential.* Buckingham: Open University Press.

Grbich, C. (2004) *New approaches in social research.* London: Sage.

Hagger, H. and McIntyre, D. (2000) What can research tell us about teacher education? *Oxford Review of Education,* 26(3-4) 483-494.

Hall, G.E. and Hord, S.M. (1987) *Change in schools: Facilitating the process.* New York: State University of New York Press.

Handy, C. (1993) *Understanding organizations*, 4th edition. London: Penguin Group.

Hargreaves, A. (2013) Professional capital and the future of teaching. In: T. Seddon and J.S. Levin (eds.) *Educators, professionalism and politics. Global transitions, national spaces and professional projects.* London: Routledge, 290-310.

References

Hargreaves, A. (1994) Changing teachers, changing times. New York: Teachers' College Press.

Hargreaves, A. and Fullan, M. (2012) *Professional capital.* London: Routledge.

Hargreaves, A. and Shirley, D. (2009) *The fourth way: The inspiring future of educational change.* Thousand Oaks, CA: Corwin.

Hargreaves, A. and Fink, D. (2000) The three dimensions of reform. *Educational Leadership*, 57(7) 30-34.

Harris, A., Andrew-Power, K., Goodall, J. (2009) *Do parents know they matter? Raising achievement through parental engagement.* London: Continuum International Publishing Group.

Hartwig, M. (2007) *Dictionary of critical realism*. London: Routledge.

Heckman, J. (2011) The economics of inequality- The value of early childhood education. *American Educator*, Spring, 31-47.

Heckman, J. (2006) *The economics of investing in children.* Dublin: UCS Geary Institute Policy Briefing No.1.

Heifetz, R. (2003) Adaptive work. In: T. Bentley and J. Wilsdon (eds.) *The adaptive state*. London: Demos.

Heifetz, R. (1994) Leadership without easy answers. Cambridge, MA: Harvard University Press.

Hitchcock, G. and Hughes, D. (1989) *Research and the teacher*. London: Routledge.

Hoban, G.F. (2002) *Teacher learning for educational change*. Buckingham: Open University Press.

Hobson, A. and Malderez, A. (2005) *Becoming a teacher: Student teachers' motives and preconceptions, and early school-based experiences during initial teacher training* (ITT). Nottingham: The University of Nottingham.

Hofer, B. (2001) Personal epistemology research; Implications for learning and teaching. *Educational Psychology Review*, 13 353-384.

References

Hopkins, D., Ainscow, M. and West, M. (1994) *School improvement in an era of change*. London: Cassell.

Hord, S.M. and Huling-Austin, L. (1986) Effective curriculum implementation: Some promising new insights. *The Elementary School Journal*, 87(1) 97-115.

Horkheimer, M. (1972) *Critical theory: Selected essays.* New York: Herder and Herder.

Howe, K. (2001) Qualitative educational research: The philosophical issues. In: V. Richardson (ed.) *Handbook of research in teaching*. Washington DC: American Educational Research Association, 201-208.

Hulme, M. (2016) Analysing teacher education policy: comparative and historical approaches. In: *The Teacher Education Group, teacher education in times of change.* Bristol: Policy Press, 37-54.

Irish National Teachers' Organization (2017) *Long overdue DEIS plan is heavy on bureaucracy but light on resources.* INTO Press Release, 13 February. Available from https://www.into.ie/ROI/NewsEvents/PressReleases/PressReleases2017/DEIS2017 Plan130217/Title,40988,en.php [accessed 31 October 2018].

Irish National Teachers' Organization (2002) *Discipline in the primary school*. Dublin: INTO Publications.

Jensen, J. L. and Rodgers, R. (2001) Cumulating the intellectual gold of case study research. *Public Administration Review*, 61(2) 236-246.

Jones, K. (2011) Central, local and individual continuing professional development (CPD) priorities: changing policies of CPD in Wales. *Professional Development in Education* 37(5) 759-776

Joyce, B. and Showers, B. (2002) Student achievement through staff development, 5th edition. Alexandria, VA: Association for Supervision and Curriculum Development.

Katz, L. (1987) In: P. Maykut and R. Morehouse (1994) *Beginning qualitative research, a philosophic and practical guide.* London: Falmer Press.

References

Kaufman, B.S. and Epstein, D. (2016) *Practice doesn't make perfect: Scott Barry Kaufman and David Epstein reconsider the science of "10,000 Hours" to greatness*. Available from https://heleo.com/conversation-practice-doesnt-make-perfect-scott-barry-kaufman-and-david-epstein-reconsider-the-science-of-10000-hours-to-greatness/11478. [accessed 24 October 2018].

Kavanagh, L., Weir, S. and Moran, E. (2017) The evaluation of DEIS: Monitoring achievement and attitudes among urban primary school pupils from 2007 to 2016. Report to the Department of Education and Skills. Dublin: Educational Research Centre.

Keating, M. (2004) Socialism, territory and the national question. In: G. Hassan (ed.) *The Scottish Labour Party: History, institutions and ideas*. Edinburgh: Edinburgh University Press, 233-247.

Kelly, D. and Kellaghan, T. (1999) *The literacy and numeracy achievements of the first cohort of early start children (1994-1995) when they were in second class (1998-1999)*. Dublin: Education Research Centre.

Kennedy, A. (2016) Professional learning in and for communities: Seeking alternatives discourses. *Professional Development in Education*, 42, September, 667-670. Available from https://www.tandfonline.com/doi/full/10.1080/19415257.2016.1220541 [accessed 31 October 2018].

Kennedy, A. (2015) *Educating our teachers: A straightforward and uncontroversial task?* Glasgow: University of Strathclyde. Available from https://www.research.ed.ac.uk/portal/files/21639961/Kennedy_A_Educating_our_teachers_a_straightforward_and_uncontroversial_task.pdf [accessed 31 October 2018].

Kennedy, E. (2007) Literacy in designated disadvantaged schools. In: P. Downes and A-L Gilligan (eds.) *Beyond educational disadvantage.* Dublin: Institute of Public Administration, 202-215.

Kennedy, A. (2005) Models of continuing professional development: A framework for analysis. *Journal of In-service Education*, 31(2) 235-250.

Kennedy, A., Christie, D., Forbes, J., Fraser, C., MacDonald, A., Menter, I., Paton, G. and Reid, L. (2007) Changing teachers, changing Scotland? *Scottish Educational Review*, 39(1) 60-71.

Kennedy, E. (2014) *Raising literacy achievement in high-poverty schools.* London: Routledge, Taylor & Francis Group.

Kennedy, E. (2010) Raising literacy achievement in high-poverty schools. In: H. Willoughby, B. Culligan, A. Kelly and G. Mehigan (eds.) *From literacy research to classroom practice: Insights and inspiration: Proceedings of the 2012 Annual Conference of the Reading Association of Ireland.* Dublin: Reading Association of Ireland.

Kessels, J. and Keursten, P. (2002) Creating a knowledge productive work environment. *Lline, Lifelong learning in Europe*, 7(2) 104-112.

Kessels, J.W. (1996) Knowledge productivity and the corporate curriculum. In: J.F. Schreinemakers (ed.) *Knowledge management organization competence and methodology. Advances in Knowledge Management.* Wurzburg: Ergon Verlag, 1, 168-174.

Keursten, P., Verdonschot, S., Kessels, J. and Kwakman, K. (2006) Relating learning, knowledge creation and innovation: case studies into knowledge productivity. *International Journal Learning and Intellectual Capital,* 3(4), 405-420.

King, F. (2011) The role of leadership in developing and sustaining teachers' professional learning. *Management in Education,* 25(4) 149-155.

King, N. and Horrocks, C. (2010*) Interviews in qualitative research.* London: Sage Publications.

Kirk, G., Beveridge, W. and Smith, I. (2003) *Policy and practice in education: the chartered teacher.* Edinburgh: Dunedin Academic Press.

Konstantopoulos, S (2008) Do small classes reduce the achievement gap between low and high achievers? Evidence from Project STAR. *The Elementary School Journal,* 108(4) 275-291.

Korthagen, F.A. (2004) In search of the essence of good teacher: Towards a more holistic approach in teacher in teacher education. *Teaching and Teacher Education,* 20(1) 77-97.

Kuhn, D. (1999) A developmental model of critical thinking. *Educational Researcher,* 28, 16-26.

Kushner, S. (2000) *Personalising evaluation.* London: Sage.

Kvale, S. (1996) *Interviews: An introduction to qualitative research interviewing.* Thousand Oaks, CA: Sage.

Kwakman, K. (2003) Factors affecting teachers' participation in professional learning activities. *Teaching and Teacher Education*, 19, 149-170.

Lamb, S. and Rice, S. (2008) *Effective strategies to increase school completion report.* Melbourne: State of Victoria.

Land, R. (2004) *Educational development: Discourse, identity and practice*. Berkshire: SRHE and Open University Press.

Levin, B. (1998) An epidemic of education policy: (What) can we learn from each other? *Comparative Education,* 24(2) 131-141.

Levin, H.M. (2009) The economic payoff to investing in educational justice. *Educational Researcher,* 38(1) 5-20.

Lewis, M., Shortt, E. and Archer, P. (2011) Achievements of early start pupils in Junior-Infant classes. *Irish Journal of Education,* 15(3) 265-283.

Lichtman, M. (2013) Qualitative research in education, A user's guide, 3rd edition. Thousand Oaks, CA: Sage.

Lincoln, Y. and Guba, E. (1985) *Naturalistic inquiry*. Beverly Hills, CA: Sage.

Lingard, B. (2000) It is and it isn't: vernacular globalisation, educational policy and restructuring. In: N. Burbules and C. Tores (eds.) *Globalization and education.* New York: Routledge.

Linsky, M. and Lawrence, J. (2011) Adaptive challenges for school leadership. In: H. O'Sullivan and J. West-Burnham (eds.) *Leading and managing schools.* Dublin: Institute of Public Administration, 367-378.

Little, G. (2015) *Global education 'reform'. Building resistance and solidarity.* Britain: Manifesto Press.

Little, C. (2001) Counting the cost of exams. *The Times Educational Supplement.* 1 June. In: N. Bennett, M. Crawford and M. Cartwright (eds.) *Effective Educational Leadership.* London: Paul Chapman Publishing.

Louis, K., and Miles, M. (1992) *Improving the urban high school: What works and why.* London: Cassell.

MacBeath, J. (2011) Education of teachers: The English experience. *Journal of Education for Teaching*, 37(4) 377-386.

MacBeath, J. (2006) New relationships for old: Inspection and self-evaluation in England and Hong Kong. *International Studies in Educational Administration*, 34(2) 2-18.

MacBeath, J., Moos, L. and Riley, K.A. (1996) Leadership in a changing world. In: K. Leithwood, J. Chapman, D. Corson and A. Hart (eds.) *International handbook for educational leadership and administration.* Dordrecht: Kluwer Academic Publishers.

Machin, S. and McNally, S. (2004) *The Literacy Hour.* London: Centre for the Economics of Education.

Malhotra, Y. (2000) Role of organizational controls in knowledge management: Is knowledge management really an "oxymoron"? In Y. Malhotra (ed.) *Knowledge management and virtual organizations.* Hershey: Idea Group Publishing, 245-257.

Martin, M. and Morgan, M. (1994) Reading literacy in Irish schools: A comparative analysis. *Irish Journal of Education*, 28 3-101.

References

Malone, S. (2003) Ethics at home: informed consent in your own backyard. *Qualitative Studies in Education,* 16(6) 797-815.

Maslow, A.H. (1954) *Motivation and personality.* New York: Harper and Row.

May, H., Sirinides, P., Gray, A. and Goldworthy, H. (2016) *Reading Recovery: An evaluation of the four-year i3Scale-up. Philadelphia: Consortium for Policy Research in Education*.

Maykut, P. and Morehouse, R. (1994) *Beginning qualitative research, A philosophic and practical guide*. London: The Falmer Press.

Schostak, J. F. (1999) Action research and the point instant of change. *Educational Action Research*, 7(3) 403-420

McCoy, S., Banks, J., Frawley, D., Watson, D., Shelvin, M. and Smyth, F. (2014a) *Understanding special class provision in Ireland: Phase 1: Findings from a national survey of schools*, 31(2) 119-138.

McCoy, S., Smyth, E. and Banks, J. (2014b) The effects of school social mix: Unpacking the differences. *Irish Educational Studies,* 33(3) 307-330.

McCoy, S., Banks, J. and Shevlin, M. (2012) School matters: How context influences the identification of different types of special educational needs. *Irish Educational Studies,* 31(2) 119-138.

McCulloch, G. (2012) The history of secondary education in history of education. *History of Education*, 41(1) 25-39.

McGonagill, G. (1987) Board/staff partnership: the key to the effectiveness of state and local boards. *The Phi Delta Kappan,* 69(1) 65-68.

McMaster, M. (1995) *The intelligent advantage: Organising for complexity*. Virginia: Knowledge Based Development Co.

McNamara, G., O'Hara, J., Lisi, P. and Davidsdottir, S. (2011) Operationalising self-evaluation in schools: experiences from Ireland and Iceland. *Irish Educational Studies,* 30(1) 63-82.

References

Mears, C. L. (2012) In-depth interviews In: J. Arthur, M. Waring, R. Coe and L.V. Hedges (eds.) *Research methods & methodologies in education. Los Angeles: Sage.* 24, 170-175.

Megginson, D. and Whitaker, V. (2007) *Continuing professional development,* 2nd edition. London: Chartered Institute of Personnel and Development.

Mehigan, G. (2013) Oral reading fluency: A link from word reading efficiency to comprehension. In: H. Willoughby, B. Culligan, A. Kelly and G. Mehigan (eds.) *From literacy research to classroom practice: Insights and inspiration: Proceedings of the 2012 Annual Conference of the Reading Association of Ireland.* Dublin: Reading Association of Ireland.

Meiers, M., Reid, K., McKenzie, P. and Mellor, S. (2013) *Literacy and numeracy interventions in the early years of schooling: a literature review: Report to the Ministerial Advisory Group on literacy and numeracy*. Available from https://research.acer.edu.au/policy_analysis_misc/20 [accessed on 31 October 2018].

Menter, I. (2016) Introduction. In: The Teacher Education Group. *Teacher education in times of change.* Bristol: Policy Press, 37-54.

Menter, I. (2011) Teacher education research - past, present, future. *Research Intelligence,* 116 11-13.

Merriam, S. B. (1998) *Qualitative research and case study applications in education*. San Francisco, CA: Jossey-Bass Publishers.

Merrill Lynch Bank of America (2014*) A transforming world, the thundering word.* Available from: https;//corp.bankofamerica.comdocuments/16303/855792/The_Thundering_Word [accessed 12 February 2018].

Miles, M.B. and Huberman, A.M. (1994) *Qualitative data analysis*. Thousand Oaks, CA: Sage.

Milesi, M. and Gamoran, A. (2006) Effects of class size and instruction on kindergarten achievement. *Educational Evaluation and Policy Analysis,* 28(4) 287-313.

Milliband, D. (2004) *Personalised learning building a new relationship with school.* Speech by David Milliband, Minister of State for School Standards. In North of England Education Conference, Belfast, 8th January 2004, Belfast. Available from https://www.google.ie/search?q=Personalised+Learning+Building+a+New+Relationship+with+School.+Speech+by+David+Milliband,+Minister+of+State+for+School+Standards.+In+North+of+England+Education+Conference,+Belfast,+8th+January+2004,+Belfast.&ie=&oe= [accessed 31 October 2018].

Mintzberg, H. (2004) *Managers not MBAs.* San Francisco: Berrett-Koehler.

Mintzberg, H. (1997) Managing on the edges. *International Journal of Public Sector Management.* 10(2) 131-153.

Morgan, M. and Kitching, K. (2007) Teaching in disadvantaged schools: Job satisfaction of beginning teachers. In: P. Downes and A-L. Gilligan (eds.) *Beyond educational disadvantage*. Dublin: Institute of Public Administration, 367-378.

Morgan, M., Ludlow, L., Kitching, K., O'Leary, M. and Clarke, A. (2009) What makes teachers tick? Sustaining events in new teachers' lives. *British Educational Research Journal*, 1-18.

Morrison, M. (2007) What do we mean by educational research? In: A. Briggs and M. Coleman (eds.). *Research methods in educational leadership and management.* London: Routledge Falmer, 13-36.

Mortimore, P. (1998) *The road to improvement. Reflections on school effectiveness*. The Netherlands: Swets and Zeitlinger Publishers.

References

Mourshed, M., Chijioke, C. and Barber, M. (2011) How the world's most improved school systems keep getting better. Available from http://www.avivara.org/images/How_School_Systems_Keep_Getting_Better.pdf [accessed 31 October 2018].

Mulford, B. (2003) Leadership in education: losing sight of our interests. In: N. Bennett, M. Crawford and M. Cartwright (eds.) *Effective educational leadership*. London: Paul Chapman Publishing.

Munn, P. and Ellis, S. (2005) Interactions between school systems and Reading Recovery programmes- Evidence from Northern Ireland. *Curriculum Journal* 16(3) 341-362.

Munby, S. and Fullan, M. (2016) *Inside-out and downside-up. How leading from the middle has the power to transform education systems. A think/action piece.* Michael Fullan, CA: Motion Leadership.

Mutton, T. (2016) Partnership in teacher education. In: The Teacher Education Group (2016) *Teacher education in times of change.* Bristol: Policy Press.

National Council for Curriculum and Assessment (NCCA) (2016) *The Primary Language Curriculum,* English. Dublin: The Stationery Office. Available from https://www.curriculumonline.ie/Primary/Curriculum-Areas/Language [accessed 31 October 2018].

National Council for Curriculum and Assessment (NCCA) (2010) Innovation happens, classrooms as sites of change. Available from https://www.ncca.ie/media/2098/innovation_happens_classrooms_as_sites_of_change.pdf [accessed 31 October 2018].

National Council for Curriculum and Assessment (NCCA) (2009) *Leading and supporting change in schools: Discussion Paper.* Available from http://www.sdpi.ie/NCCA_Materials/Leading_and_Supporting_Change_in_Schools_NCCA.pdf [accessed 31 October 2018].

National Council for Curriculum and Assessment (NCCA) (1999) *Primary School Curriculum, English.* Dublin: The Stationery Office.

References

National Economic and Social Forum (NESF) (2009) *Child literacy and social inclusion: Implementation issues.* Dublin: National Economic and Social Forum.

National Council for Curriculum and Assessment (NCCA) (2009) *Aistear, the early childhood curriculum framework.* Dublin: The Stationery Office. Available from https://www.ncca.ie/media/2021/aistear_partnership_in_action.pdf [accessed on 31 October 2018].

National School Climate Council (2007) *The school climate challenge: Narrowing the gap between school climate research and school climate policy, practice guidelines and teacher education policy.* Columbia University: Teachers College. Available from http://www.ijvs.org/files/Publications/School-Climate.pdf [accessed 31 October 2018].

Neil, P. and Morgan, C. (2003) *Continuing professional development for teachers: From induction to senior management.* London: Kogan Page.

Nichols, S.L. and Berliner, D. (2007) *Collateral damage: how high-stakes testing corrupts America's schools*. Cambridge MA: Harvard University Press.

Nicotera, A. M. (1995) Thinking about communication and conflict. In: A. M. Nicotera (ed.) *Conflict and organizations: Communicative processes.* Albany: State University of New York Press.

Nieto, S. (2003) What keeps teachers going? *Educational Leadership*, 60(80) May, 14-18.

Nisbet, J. and Watt, J. (1984) Case study. In: J. Bell, T. Bush, A. Fox, J. Goody and S. Goulding (eds.) *Conducting small-scale investigations in educational management.* London: Harper and Row, 70-92.

O'Connor, J. and McDermott, I. (1997) *The art of systems thinking.* London: Thorsons.

O'Doherty, T. (2016) Teacher education in the Republic of Ireland: a challenging and changing landscape. In: The Teacher Education Group (eds.) *Teacher education in times of change.* Bristol: Policy Press.

O'Sullivan, H. (2011) Leading and managing professional learning in schools. In: H. O'Sullivan and J. West-Burnham (eds.) *Leading and managing schools.* Dublin: Institute of Public Administration, 367-378.

Oates, T. (2008) Going round in circles: temporal discontinuity as a gross impediment to effective innovation in education and training. *Cambridge Journal of Education*, 38(1) 105-120.

Ochs, K. (2006) Cross-national policy borrowing and educational innovation. *Oxford Review of Education,* 32(5) 599-619.

Ouchi, W. (2003) *Making schools work: A revolutionary plan to get your children the education they need.* Michigan: Simon & Schuster.

Office for Standards in Education, Children's Services and Skills (Ofsted) (2013) *Spending the Pupil Premium*. London: Ofsted.

Office for Standards in Education (Ofsted) (2002) *The Curriculum in successful primary schools*. London: Ofsted.

Organisation for Economic Co-operation and Development (OECD) (2013) *Education at a glance 2013: OECD indicators*. Paris: Centre of Educational Research and Innovation. Available from http://www.oecd.org/education/eag2013%20(eng)--FINAL%2020%20June%202013.pdf [accessed 31 October 2018].

Organisation for Economic Co-operation and Development (OECD) (2012) *Equity and quality in education: Supporting disadvantaged students and schools.* Paris: Centre of Educational Research and Innovation. Available from https://www.oecd.org/education/school/49603587.pdf [accessed 31 October 2018 2018].

Organisation for Economic Co-operation and Development (OECD) (2011) *Strong performers and successful reformers in education: Lessons from PISA for the United States.* Paris, France: Centre of Educational Research and Innovation.

Organisation for Economic Co-operation and Development (OECD) (2010) *PISA 2009 Results: What students know and can do – Student performance in reading, mathematics and science.* Paris: Centre of Educational Research and Innovation.

Available from *https://www.oecd.org/pisa/pisaproducts/48852548.pdf* [accessed on 31 October, 2018].

Organisation for Economic Co-operation and Development (OECD) (2009) *Policy responses to the economic crisis: Investing in innovation for long-term growth* (June 2009). Paris: Centre of Educational Research and Innovation. Available from https://www.oecd.org/sti/42983414.pdf [accessed September 21 September 2014].

Oscailt (2013) *Report of dormant accounts funded scheme to enable DEIS schools in Limerick city to maximise community use of premises and facilities.* Limerick: Oscailt.

Ozga, J., Dahler-Larsen, P., Simola, H. and Segerholm, C. (2011) *Fabricating quality in education: Data and governance in Europe.* London: Routledge.

Ozga, J and Jones, R (2006) Travelling and embedded policy: the case of knowledge transfer. *Journal of Education Policy,* 21(1) 1-19.

Owens, R. (1998) *Organizational behavior in education*. Needham Heights, MA: Allyn and Bacon.

Paris, S. (2005) Reinterpreting the development of reading skills. *Reading Research Quarterly*, 40(2) April/May/June, 184-202.

Patton, M. Q. (2002) *Qualitative research and evaluation methods,* 3rd edition. Thousand Oaks, CA: Sage.

Patton, M. Q. (1990) *Qualitative evaluation and research methods, 2nd Edition*. London: Sage.

Patton, M. Q. (1980) *Qualitative research & evaluation methods.* Thousand Oaks, CA: Sage.

Pearson, P. and Gallagher, M. (1983) The instruction of reading comprehension. *Contemporary Educational Psychology*, 8 317-344.

Perkins, D. (2003) *King Arthur's Roundtable.* New York: Wiley.

Pfeffer, J. and Sutton, R.I. (2006) Evidence-based management. *California Management Review* 48(3) 77-100.

References

Pfeiffer, W. et al. (1989) *Shaping strategic planning.* San Diego, CA: Scott Foresman.

Piaget, J. (1929) *The child's conception of the world.* London: Routledge and Kegan Paul.

Pitt, E. (2001) *Ready Set Go Maths.* Belfast: Council for Curriculum Examinations and Assessment.

Polanyi, M. (1967) *The tacit dimension.* Chicago: The University of Chicago.

Pring, R. (2004) *Philosophy of educational research*, 2nd edition. London: Continuum.

Pring, R (2001) The virtues and vices of an educational researchers. *Journal of Philosophy of Education,* 35(3) 407-421.

Pring, R. (2000) *Philosophy of educational research*, 1st edition. London: Continuum.

Quinn, R. (2012) The future development of education in Ireland. *Studies: An Irish Quarterly Review,* 101(402) 1-3.

Ravitch, D. (2015) An alternate universe. In: P. Sahlberg (ed.) *Finnish lessons 2.0.* Columbia University: Teachers College.

Ravitch, D. (2010) *The death and life of the great American school system.* New York: Basic Books.

Reading Recovery Europe (2013) *Reading Recovery annual report for Ireland: 2012-13.* European Centre for Reading Recovery, Institute of Education, London. Available from http://www.pdst.ie/sites/default/files/Ireland%20annual%20report%202012-13v2.pdf [accessed on 31 October 2018].

Reid, A-M. and Kelly, M. (2013) Doodle Den: A Community-led literacy intervention. In: H. Willoughby, B. Culligan, A. Kelly and G. Mehigan (eds.) *From literacy research to classroom practice: Insights and inspiration: Proceedings of the 2012 Annual Conference of the Reading Association of Ireland.* Dublin: Reading Association of Ireland.

Reissman, C. K. (2008) *Narrative methods for the human sciences.* Thousand Oaks, CA: Sage Publications.

Riley, K. and MacBeath, J. (2003) Effective leaders and effective schools. In N. Bennet, M. Crawford and M. Cartwright (eds.). *Effective educational leadership*. London: Paul Chapman Publishing.

Robertson S.L. (2013) Teachers' work, de-nationalisation and transformation in the field of symbolic control: comparative account. In: T. Seddon and J.S. Levin (eds.) *Educators, professionalism and politics. Global transition, national spaces and professional projects*. London: Routledge, 77-96.

Robson, C. (2002). *Real world research: A resource for social scientists and practitioner-researchers*, 2nd Edition. Oxford: Blackwell.

Rossi, T. (2009). Research methods in education, 6th edition. *The Australian Educational Researcher*, 36(2) 147-148.

Rubin, H. and Rubin, I. (2005). *Qualitative interviewing: The art of hearing data*. Thousand Oaks, CA: Sage.

Ryan, S. (1999) *The Home-School-Community Liaison scheme- Final evaluation report, revised edition.* Dublin: Education Research Centre.

Sachs, J. (2003) Teacher professional standards: controlling or developing teaching? *Teachers and Teaching: Theory and Practice*, 9(2) 175-186.

Sahlberg, P. (2015) *Finnish lessons 2.0.* New York: Teachers College Press.

Sahlberg, P., Munn, P. and Furlong, J. (2012*) Report of the international review panel on the structure of initial teacher education provision in Ireland: Review conducted on behalf of the Department of Education and Skills*, Dublin: Department of Education and Skills. Available from https://www.education.ie/en/Publications/Education-Reports/Report-of-the-International-Review-Panel-on-the-Structure-of-Initial-Teacher-Education-Provision-in-Ireland.pdf
[accessed on 31 October 2018].

Sahlberg, P. (2011) The fourth way of Finland. *Journal of Educational Change,* 12 (2) 173-185.

Saldana, J. (2013) *The coding manual for qualitative researchers,* 2nd edition. London: Sage.

Sayer, A. (1992) *Method in social science: A realist approach*, 2nd edition. London: Routledge.

Schön, D.A. (1983) *The reflective practitioner: How professionals think in action.* New York: Basic Books.

Schön, D. (1971) *Beyond the stable state.* New York: Norton.

Schraw, G and Olafson, L (2008) Assessing teachers' epistemological and ontological worldviews. In: M. Khine (ed.) *Knowing, knowledge and beliefs: Epistemological studies across diverse cultures.* Perth, Australia: Springer, 25-44.

Scott, D. (2000) *Realism and educational research: New perspectives and possibilities.* London: Routledge Falmer.

Scott, D. and Morrison, M. (2006) *Key ideas in educational research.* London: Continuum.

Scott, D. and Usher, R. (1999) *Researching education: Data, methods and theory in educational inquiry.* London: Cassell.

Seddon, T. and Levin, J.S. (2013) *Educators, professionalism and politics. Global transitions, national spaces and professional projects,* London: Routledge, 290-310.

Seidman, I. (2006) In: J. Arthur, M. Waring, R. Coe and L.V. Hedges (2002). *Research methods & methodologies in education.* Los Angeles: Sage.

Senge, P.M. (2000) *Schools that Learn.* London: Brealey.

Senge, P.M. (1993) *The fifth discipline: The art and practice of the learning organisation.* London: Century Business.

Senge, P.M. (1992) Mental models. *Planning Review*, 20(2) 4-44. Available from http://dx.doi.org/10.1108/eb054349 [accessed 31 October 2018].

Senge, P. (1990) *The fifth discipline; The art and practice of the learning organization.* New York: Doubleday.

Sergiovanni, T. J. (2000) *The lifeworld of leadership. Creating culture, community, and personal meaning in our schools.* San Francisco: Jossey Bass.

Sergiovanni, T. J. (1992) *Moral leadership.* San Francisco: Jossey Bass.

Shadish, W.R., Cook, T.D. and Campbell, D.T. (2002). *Experimental and quasi-experimental designs for generalised causal inference.* Boston, MA: Houghton Mifflin.

Sheth, J. (2007) *The self-destructive habits of good companies.* Upper Saddle River, New Jersey: Wharton School Publishing.

Shiel, G. and Hogan, J. (1997) Teaching beginning reading: A survey of teachers of pupils in first class. *Irish Educational Studies*, 16 235-249.

Shiel, G., Kavanagh, L. and Millar, D. (2014) *The 2014 national assessments of English Reading and Mathematics volume 1: Performance report*. Dublin: Educational Research Centre.

Shulman, L.S. (1986) Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2) 4-14.

Singh, K. and Billingsley, B.S. (1998) Professional support and its effect on teachers' commitment. *Journal of Educational Research,* 91(4) 229-240.

Sipe, L. and Ghiso, M. (2004) Developing conceptual categories in classroom descriptive research: Some problems and possibilities. *Anthropology and Education Quarterly*, 35(4) 472-485.

Slavin, R. (2008) *Effects of sample size on effect sizes in systematic reviews in education.* Paper presented at the annual meeting of the Society for Research on Educational Effectiveness. Crystal City, VA.

Slavin, R. and Madden, N. (2003) *Success for all/ roots and wings: 2003 summary of research on achievement outcomes*. Baltimore: John Hopkins University, Center for Research on the Education of Students Placed at Risk.

Smylie, M. A. (1995) Teacher learning in the workplace: Implications for school reform. In: T. A. Guskey (ed.) *Handbook of research on educational administration.* San Francisco: Jossey-Bass, 297-322.

References

Smith, J. (2012) Initial teacher education in Ireland: transformation in the policy context. In:
F. Waldron, J. Smith, M. Fitzpatrick and T. Dooley (2012) *Re-imagining initial
teacher education: Perspectives on transformation.* Dublin: The Liffey Press.

Smyth, J. (1991) Developing and sustaining the critical. In: J. Smyth (ed.) *Teachers as
collaborative learners, challenging dominant forms of supervision.* Philadelphia:
Oxford Press.

Smyth, E. and McCoy, S. (2009) *Investing in education: Combating educational
disadvantage. Research series, 6,* May. Dublin: The Economic and Social Research
Institute.

Smyth, E., McCoy, S. and Kingston, G. (2015) *Learning from the evaluation of DEIS.
Research series 39.* Dublin: Economic and Social Research Institute (ESRI).
Available from https://www.esri.ie/publications/learning-from-the-evaluation-of-
deis [accessed 31 October 2018].

Spillane, J. (2015) Leadership and learning: Conceptualizing relations between school
administrative practice and instructional practice. *Societies*, 5 277-294.

Stake, R.E. (2005) Qualitative case studies. In: N.K. Denzin and Y.S. Lincoln (eds.) *The
Sage handbook of qualitative research,* 3rd edition. Thousand Oaks, CA: Sage
Publications, 443-466.

Stake, R. (1995) *The art of case study research.* Thousand Oaks, CA: Sage.

Stanley, G.E. and Stronach, I. (2013) Raising and doubling standards in professional
discourse: A critical bid. *Journal of Education Policy*, 28(3) 291-305.

Stanovich, K. E. (1986) Matthew effects in reading: Some consequences of individual
differences in the acquisition of literacy. *Reading Research Quarterly,* 21 360-397.

Starratt, R. (1993) *The drama of leadership.* London: Falmer Press.

Strauss, A.L. and Corbin, J. (1998) *Basics of qualitative research: Techniques and
procedures for developing grounded theory.* London: Sage Publications Ltd.

Sugrue, C. (2011) Autonomy and accountability. In: H. O'Sullivan and J. West-Burnham (eds.) *Leading and managing schools.* Dublin: Institute of Public Administration, 367-378.

Sugrue, C. (2003) Principals' professional development: Realities, perspective and possibilities. In: P. O'Conchubhair (ed.) *Oideas.* Cork: Department of Education and Science, 8-39.

Syed, K.T. (2008) A Chinese teacher's perspective on professional development in literacy education. *International Electronic Journal for Leadership in Learning,* 12(10). Available from https://www.esri.ie/publications/learning-from-the-evaluation-of-deis/ [accessed 31 October 2018].

Te Riele, K. (2012) *Learning choices: A map for the future.* Melbourne: Dusseldorf Skills Forum.

Tesch, R. (1990) *Qualitative research: Analysis types and software*. London: Falmer.

The Irish Times (December) (*2010) The year that Irish education fell to Earth.* Dublin: Independent Press.

Tickle, L. (2002) Opening windows, closing doors: Ethical dilemmas in educational action research. In: M. McNamee and D. Bridges (eds.) *The ethics of educational research.* Oxford: Blackwell Publishers Ltd, 41-57.

Townsend, T. (2011) Searching high and low, searching east and west: Looking for trust in teacher education, *Journal of Education for Teaching,* 37(4) 483-500.

Tuckman, B. W. (1972) *Conducting educational research.* New York: Harcourt Brace Jovanovich.

Túsla (2016) *Chid Care Act 1991 (Early Years Services) Regulations 2016*. S.I. No. 221 of 2016. Available from http://www.tusla.ie/uploads/content/20160510ChildCareActEarlyYrsRegs2016SI221of2016.pdf [accessed 31 October 2018].

Tuohy, D. (2008) *School leadership and strategic planning.* Dublin: SPELL Training and Development.

Tymms, P. (2004) Are standards rising in English primary schools? *British Educational Research Journal* 30(4) August, 477-494.

Van Velzen, W. M. (1985) *Making school improvement work: A conceptual guide to practice.* Leuven: Accor.

Vygotsky, L. S. (1978) *Mind in society: The development of higher psychological processes.* Cambridge, MA: Harvard University Press.

Weir, S., Archer, P, O'Flaherty, A. and Gilleece, L. (2011) *A report on the first phase of the evaluation of DEIS*. Dublin: Educational Research Centre.

Weir, S. and Denner, S. (2013) *The evaluation of the School Support Programme under DEIS: Changes in pupil achievement in urban primary schools between 2007 and 2013.* Dublin: Educational Research Centre.

Weir, S., McAvinue, L., Moran, E. and O'Flaherty, A. (2014) *A Report on the evaluation of DEIS at second Level*. Dublin: Educational Research Centre.

Weir, S. and Ryan, C. (2000) *Interim report on the evaluation of the Breaking the Cycle scheme in Urban Schools.* Report to the Department of Education and Science. Dublin: Education Research Centre.

Wellington, J. (2000) *Educational research: Contemporary issues and practical approaches.* London: Continuum.

Wenger, E. (1998) *Communities of practice: Meaning and identity*. Cambridge: Cambridge University Press.

West-Burnham, J. (2010) From schooling to learning. In: M. Coates (ed.) *Shaping a new educational landscape.* London: Continuum.

Whitty, G. (2008) Changing modes of teacher professionalism: traditional, managerial, collaborative and democratic. In B. Cunningham (ed.) *Exploring professionalism*. London: Institute of Education, University of London, 28-49.

Wilson, D.S. (2007) *Evolution for everyone.* New York: Delacorte Press.

Woodward, I. (1996) Dimensions of continuing professional development. In: I. Woodward (ed.) *Continuing professional development*. London: Cassell, 1-18.

References

World Bank (2013) What matters most for teacher policies: A framework paper. *SABER Working Papers*, 4, April. Available from http://documents.worldbank.org/curated/en/503591468331856077/What-matters-most-for-teacher-policies-a-framework-paper [accessed 31st October 2018].

Wright, R.J. (1991) An application of the epistemology of radical constructivism to the study of learning. *Australian Educational Researcher* 18 (1) 75-95.

Wright, R.J., Cooper, M., Stafford, A., Stranger, G. and Stewart, R. (1994) The Mathematics Recovery Project- a project based report: specialist teachers working with low-attaining first graders. *Proceedings for the 17th Annual Conference of the Mathematics Education Research Group of Australia,* 2 709-716.

Yin, R. K. (2009) *Case study research: Design and Methods*, 4th edition. Thousand Oaks, CA: Sage Publications.

Yin, R. K. (1984) *Case study research: Design and methods*. Beverly Hills, CA: Sage.

Zeni, J. (1998) A guide to ethical issues and action research. *Educational Action Research,* 6 9-19.

APPENDICES

Appendix A: Summary of Literacy Initiatives Implemented in DEIS Schools

- **Write to Read (Kennedy, 2014)**
  Write to Read (Kennedy, 2014) commenced with one DEIS Band 1 junior school, with four first class levels, encompassing four class teachers, five special educational needs teachers and parents for three sessions per week. There were reviews and regular up-dates through whole school planning days. The focus on literacy was broken down into a suite of components: alphabetic, comprehension, vocabulary, fluency and writing. Formative assessment tools, such as conferencing, checklists, running records, analysis of work samples and daily data of writing, an on-going reflection and focus on student achievement. Both qualitative and quantitative data was collected and analysed to

advance the knowledge base between teaching and learning. Teachers and the researcher adopted 'an investigative stance and worked together to discover solutions' (2010, 12), ensuring that teachers explored 'zones of proximal development for each other' (Kennedy, 2010, 12; John-Stein, 2000, 189). The intervention findings found that Kennedy's literacy intervention capitalised on students' achievement in literacy and also an interest in reading, supporting personalised goals. Professional development was the key to success over a two year period, facilitated by the researcher and by teachers. The professional development was on-site and tailored to the needs of the individual school. The school developed a research-based literacy framework, with the school working as a collaborative professional learning community, engaging and increasing parental involvement.

- **Reading Recovery (Clay, 2005; 1991)**

Reading Recovery is a programme based on the works of Marie Clay, a developmental psychologist, whose theories on students becoming literate formed the foundations of the Reading Recovery programme (Clay, 1991, 2005). Monaghan Education Centre is the main centre for Reading Recovery in Ireland and decentralised into Education Centres around Ireland. Reading Recovery is a school-based short term literacy intervention for the lowest literacy achievers in Senior Infants, mainly in DEIS schools and also those schools designated to have particular needs. Reading Recovery is twelve to twenty weeks of one-to-one lessons daily for thirty minutes with a specific lesson structure. Schools partaking in this intervention are not allocated extra teachers and therefore must allocate time and resources from current staffing allocation. Each lesson is composed of five main components: re-reading of two familiar texts, running record of new book from previous day, letter identification making and breaking, sentence writing and orientation to new text. The training of teachers for Reading Recovery is structured and set. Once a teacher is trained and certified, there is on-going professional development as a professional learning community at timed intervals each year. The University of Pennsylvania carried out a large four-year study targeting first grade students with a treatment and control group, as part of the Center for Research in Education and Social Policy. The final report of the four-year study (May et al. 2016) found there was strong

evidence on the short-term impact of Reading Recovery on first grade students. The analysis of results of students in third grade however, four years later, proved insignificant. May et al., 2016 stated that further investigation was warranted. In Ireland, to-date there is no study has been published regarding the sustained impact of Reading Recovery on students four years after completion of the Reading Recovery programme. May et al. (2016) found a strong implementation fidelity to the programme model that was designed and delivered from teacher training, professional development and the structure of one-to-one lessons. In this research study, the researcher interviews some Reading Recovery teachers in Irish DEIS schools and unveils practices in their individual schools.

- **Early Years' Literacy Initiative: Individual School (Clarke, 2011)**
  Clarke's early year's literacy initiative (2011) focused on aspects such as phonics, comprehension, paired reading. The power source that ignited this literacy initiative was the role of parents as primary educators to increase student literacy attainment. Clarke established and confirmed the link between student attainment and home environment that has the potential to mitigate negative effects of low educational attainment (DES, 2011b; Harris et al., 2009). The four-part early intervention programme in junior infants focused on facilitating parental skills and understanding how to support their student's learning. Clarke organised in-school workshops on a fortnightly basis for parents, whom also helped organise educational trips, building links with the wider community. Building trust relationships, Clarke explored parents' role as co-teaching in the class. It is clear that the expectations of this early year's initiative was driven by the school and parents, with a joint responsibility for student's literacy development. Growing Up in Ireland Study (McCoy et al., 2012) reinforce the findings of this study, where out of school experiences are crucial to the educational development of students, and can make a marked difference between social classes.

- **Doodle Den (Reid and Kelly, 2013)**

Reid and Kelly (2013) led a community-based literacy intervention programme called 'Doodle Den', an after-school literacy programme for Senior Infants students in West Tallaght, a disadvantaged area. The 'Youngballymun' is a sister intervention programme jointly funded by the Department of Child and Youth Affairs in Ireland and The Atlantic Philanthropies. Story was used as a context to explore phonics, writing, comprehension, oral language through ninety minute sessions. There were parent programmes and families were encouraged to support one organised activity per term, such as library visits and story-telling session. The Department of Child and Youth Affairs described the interventions as 'testing innovative ways of delivering services and early interventions for students and young people, including the wider family and community setting' (Department of Children and Youth Affairs, 2011:15). An independent evaluation team from the Centre for Effective Education in Queen's University, Belfast reported moderate improvement in students' literacy, improved attendance at school, enhanced relationships between student and home supporting literacy outside of school. Doodle Den expanded into primary schools in Limerick and continued expanding in West Tallaght.

- **Building Bridges (Glesson et al., 2010)**

  Irish studies found that comprehension was one of the weakest aspects of reading instruction (DES, 2005; Martin and Morgan, 1994; Shiel and Hogan, 1997). Building Bridges (Glesson et al., 2010) is an intervention, focusing solely on eight key comprehension strategies, identified as an integral part of understanding a range of text genres. The pedagogical approached supports the gradually release of responsibility model (Duke and Pearson, 2002) using collaborative learning, not only in English comprehension, but across all curricular areas (Glesson et al., 2010), teaching students 'how to orchestrate, coordinate and apply multiple strategies' (Glesson et al, 2010:79). Professional development consisted of monthly seminars for the teachers and visits to the teachers on-site were facilitated. There was also debriefing sessions with the students on

what they learned. The findings of this intervention for all class levels found that students were more eager to attack challenging work and also raised a love of literature.

- **Peer Tutoring in Literacy (King, 2012)**

  King initiated a collaborative professional development initiative regarding teachers' teaching and learning in five urban disadvantaged schools in Ireland. She focused her study on the impact of professional development and its sustainability, with the importance of leadership emerging from the study. Materials were provided for the collaborative professional development initiative along with substitute cover for teachers to attend a day focusing on how to implement Peer Tutoring. King facilitated two school visits during the ten week period and further support via email and telephone. Students in third class, averaging nine year old students with the class teacher and special educational needs teacher to work collaboratively within the mainstream classroom to facilitate Peer Tutoring over a ten week period, for thirty minutes, four days a week. The main findings of the study found the alignment between the value of the principal and teachers to be pertinent. For example, timetabling was cited by teachers as one area where they needed the support of principals to ensure sustainment. The study supported creating capacity for change within the school, which in turn empowered some teacher to establish professional learning communities to share knowledge and experiences.

Appendix B Linking the Research Questions

Linking the Research Questions		
Research Aim:		
The investigation of the process of implementation of DEIS literacy initiatives in disadvantaged primary schools in urban Ireland and its impact on schools' infrastructures, and on DEIS educators.		
Framework	**Research Question**	**Sources**
The School Culture • Values, beliefs and social setting • Delivery of knowledge • Readiness for change • Politics • Development of the individual and the group	1. What are the key components in schools' infrastructures (school culture) that impact literacy development in disadvantaged primary schools in urban Ireland?	Interviews with • Principal • FS Reading tutor • PDST advisor • Classroom teacher Department of Education and Educational Research Centre Reports on DEIS schools (Weir and Denner, 2013).
The Change Factors • Stimuli for change (internal/external) • Capacity • Leadership • Negotiation of the initiative and group dynamics • Professional autonomy • Accountability • New language of productivity (Pring, 2000, p.155)	2. What are the key components in schools' infrastructures (change factors) that impact literacy development in disadvantaged primary schools in urban Ireland?	Interviews with • Principal • FS Reading tutor • PDST advisor • Classroom teacher The three year DEIS strategic plan Journal Entries of First Steps Reading tutor

		Standardised student assessment DES Publications/Circulars
Contexts for Learning for all Stakeholders • Modes of learning • Context • Forum • Leadership • Location of knowledge (internal/external) • Power sources	3. What professional development do DEIS educators practice in the implementation of DEIS literacy initiative?	Interviews with • Principal • FS Reading tutor • PDST advisor • Classroom teacher Journal Entries of First Steps Reading tutor The three year DEIS strategic plan
Catalysts of Change	4. What stimulates DEIS educators to engage in literacy development?	Interviews with • Principal • FS Reading tutor • PDST advisor • Classroom teacher Journal Entries of First Steps Reading tutor The three year DEIS strategic plan Standardised student assessment DES Publications/Circulars

Appendices

Appendix C: Schedule for Semi-Structured Interviews

Research Questions	Semi-Structured Interview Questions	Exploration Factors
Context school factors that support and hinder learning	**Description:** • What changes have happen in literacy in your school? • How did you decide what aspect of literacy to improve at the beginning? • Who leads the changes in literacy? • What opportunities did teachers have for CPD in the area of literacy in your school? **Analysis:** • How was literacy identified as an area to be addressed in the school? • How was First Steps Reading/literacy initiatives introduced in your school? • How are decisions made in your school? • First Steps is in your school for the last 2 years, how has the experience been for you? • Why did you introduce changes in your class and what was your motivation to change?	Role of the leaders Whom led the literacy developments in the DEIS school? Type of reviews Methods of problem solving and agreeing resolutions
Whilst introducing the First Steps Reading	How was the First Steps Reading/literacy coordinator tutor chosen?	

Research Questions	Semi-Structured Interview Questions	Exploration Factors
resource as part of the DEIS initiative in primary schools, which process dynamics support or hinder your school to improve?	Who supported the introduction of FS Reading? (leadership) How did they as leaders support the introduction of First Steps Reading? How were decision made to progress work? Who was involved in implementing First Steps reading? Structures? (collaboration, support) What experiences while implementing First Steps Reading were negative/positive (if any) at classroom and school level? How did national/global policy influence you when implementing First Steps Reading on your school? e.g. DEIS Review 2011/ PISA Report 2009	Implementation phase The systems of learning in place Influence of global and national policy
What type of learning processes	To promote the use of First Steps Reading, what type of teacher involvement was promoted in your school? - Who promoted it? - What structures were in place in your school to support your learning of First Steps Reading and embedding in your practice in the classroom? What internal supports supported your learning in First Steps Reading? supported/distracted	Modes of learning Types and processes of professional development

Research Questions	Semi-Structured Interview Questions	Exploration Factors
	What external supports supported your learning in First Steps Reading? supported/distracted What professional development experiences had the most impact? What can be learnt from your professional development experiences? What would you do differently if you could start again?	Who drove the initiatives? Internal and external support Embedding practices/styles of professional development
What are the driving forces throughout the process of knowledge productivity?	Why have you implemented FS Reading? How do you feel about FS Reading now that you have it implemented? What helped you and your school keep First Steps Reading to the fore? What helped your school to keep First Steps Reading to the fore of staff development? How do you know if First Steps Reading has improved the learning experiences for your students?	The stimulants: • DES publications • Support services • Motivation • Evaluation (internal and external)

Appendix D: Brochure

Research in Urban
DEIS Primary Schools

The Aim of the Study

What stimulates teachers in
DEIS schools to engage in
continuing processional
development to improve the
teaching and learning
experiences for pupils?

**This research study is affiliated
with The University of Lincoln.**

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What is this research about?

With this research project, the researcher would like to explore the changes that have happened in DEIS schools since the DEIS initiative started in 2005. There have been many programmes, both in literacy and numeracy implemented in DEIS schools. First Steps Reading is one of the literacy programmes. The researcher has a particular interest in literacy and would like to discuss with you, the main changes that have taken place in literacy in your school since the introduction of First Steps Reading.

First Steps Reading

The researcher would like to discuss with you the implementation of First Steps Reading in your school. We would explore what supported you and your school with First Steps Reading. We would also discuss the challenges that faced both you and your school in literacy.

What will this study require of me?

- Elizabeth would like to interview you about literacy practices in your classroom and your school.
- Elizabeth will contact you to arrange a suitable time and venue for the interview.
- The interview will take approximately one hour.
- The interview, with your permission will be recorded.
- At any point during the interview, you can refuse to answer a question or stop it.

What will happen after my interview?

- Elizabeth will transcribe your interview, changing your name with a coding system.
- Following transcription, your recorded interview will be destroyed.
- All interviews will remain confidential.
- Elizabeth will follow the Data Protection Amendment guidelines 2003.

How will this research help my school?

- This study will give you and your school an opportunity to reflect on the changes that have occurred in literacy in your school over the past few years.
- It will support you to engage in the School Self-Evaluation process in literacy (DES, 2012) .
- The study provides for you an opportunity to discuss the relationship between literacy improvement and challenges that may well support the school's DEIS strategic plan..
- The interview process creates a critical and reflective learning environment for you.
- The interview will provide an opportunity for you to discuss literacy practices in your classroom: what has stayed the same and what has changed.

Appendix E: Knowledge Productivity in Literacy Framework

Knowledge Productivity in Literacy Framework			
Aim of Research Study: *The focus of the study is to investigate the process of implementation of DEIS literacy initiatives in disadvantaged primary schools in urban Ireland and its impact on schools' infrastructures, and on DEIS educators.*			
Research Question: What are the key components in schools' infrastructures that impact literacy development in disadvantaged primary schools in urban Ireland?		**Research Question:** What professional development do DEIS educators practice in the implementation of DEIS literacy initiatives?	**Research Question:** What stimulates DEIS educators to engage in literacy development?
Key components in DEIS schools' infrastructures		**Professional Learning and Development**	**Stimulants for Engagement**
Knowledge Building	School Climate Collaborative Professionalism Resources • Expertise • Allocating Time • Sharing Ideas	Keeping Up-to-Date	Evaluation Trends and Patterns Planning and Goals Standardised Testing The Inspectorate
Moral Purpose	Values Purposeful Collaboration	Changing Practices	School Culture Cultivating a Learning Environments Collaborative Culture Effective Leadership • Resources • pace • innovation
Change Process	Vision Planning Process	Experimentation	Intrinsic Motivation Satisfaction of Event

	Delegation of Responsibilities		Achievement and Link with Self-Efficacy
Relationship Building	Literacy Leaders Parents Building Links and Relationships DES and the Inspectorate	Reflective Practices	